1996


Florida International University

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Florida International University

Member of the State University System
Miami, Florida

1996 - 1997 Undergraduate Catalog

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

Note: The programs, policies, requirements, and regulations published in this catalog are continually subject to review in order to serve the needs of the University's various publics and to respond to the mandates of the Florida Board of Regents and the Florida Legislature. Changes in programs, policies, requirements, and regulations may be made without advance notice. The programs and courses listed in this catalog are still under review to meet the state mandated course leveling requirements of SB 2330. For additional information, please contact the academic department.

The ultimate responsibility for knowing degree requirements and the requirements imposed upon students by State law rests with the students.

This document was produced at an annual cost of $34,867 or $0.996 per copy to inform the public about University Programs.

Fees given in this catalog are tentative pending legislative action.
ACADEMIC CALENDAR 1996-1997*

Fall Semester 1996

March 15
April 1
April 1 - 5
April 3
April 8 - 12
April 15 - May 3
May 31
July 8 - 9
July 10 - 11
July 12
July 15 - 16
July 17
July 18 - 19
July 22 - 26
July 24 - 25
July 29
July 29 - August 2
August 5 - 23
August 13 - 14
August 15
August 18
August 19 - 20
August 22
August 22 - 23
August 23
August 26
August 26 - 30
August 30

Last day for International Students to submit applications and all supporting documents for Fall Term admission
Registration Access Information available for student pick-up for Multi-Term Registration
Transfer Orientation Session
Official Multi-Term Registration for Degree Seeking Students Only, by appointment day and time.
Open Multi-Term Registration Week
Admission application priority consideration deadline (except international students).
Freshman Orientation Sessions (University Park)
Freshman Orientation Sessions (University Park)
Transfer Student Orientation Sessions (University Park)
Freshman Orientation Sessions (University Park)
Registration Access Information available for student pick-up.
Freshman Orientation (North Campus)
Short Term Tuition Loan Applications available for registering students.
Official Registration Week (Degree-Seeking Students only) by appointment time and day.
Open Registration.
Freshman Orientation Sessions.
Transfer Orientation Session.
Housing check-in (Freshman and Transfer Orientation Students only, 4 pm-8 pm)
Freshman Orientation Sessions.
Housing check-in (All returning students, 9 am-8 pm).
Transfer Student Orientation Sessions
Registration Days (See Class Schedule for registration times)
Deadline to register without incurring a $100.00 late registration fee.
Classes Begin.
Registration for State Employees using fee waivers
Deadline (by 5 p.m.) to complete Late Registration.
• Drop/Add Period ends at 5 p.m.
• Deadline (by 5 p.m.) to drop courses or withdraw from the University without incurring a financial liability.
• Deadline to change a grading option.
• Deadline (by 5 p.m.) to pay tuition and fees to avoid cancellation of enrollment.
• Last day for Financial Aid recipients to validate class schedules to retain registered courses.
• Last day for students to apply and to sign Short Term Tuition Loan promissory notes and validate class schedules.
• October 1st CLAST exam registration deadline.
Labor Day Holiday (University closed)
Rosh Hashanah**
Faculty Convocation
Yom Kippur**
Last day (by 5 p.m.) to withdraw from the University with a 25% refund of tuition less bonding fees.
CLAST Test
Deadline (by 5 p.m.) to drop a course with a DF grade.
• Deadline (by 5 p.m.) to withdraw from the University with a WI grade.
Veterans' Day Holiday (University closed)
Thanksgiving Holiday (University closed)
Deadline (by 5 p.m.) to apply for Spring 1997 graduation.
Classes End.
Official Examination Period
Housing check-out deadline at 12 pm.
Commencement Exercises
December 17
December 19
December 25

Grades due
Grades Mailed to Students.
Christmas Holiday (University Closed)

Spring Semester 1997
August 30
Last day for International Students to submit applications and all supporting documents for Spring Term admission.
September 27
Admission application priority consideration deadline (except international students).
November 4 - 8
Registration Information Access available for pick-up.
November 6 - 7
Freshmen Orientation (University Park and North Campus)
November 8
Transfer Student Orientation (University Park and North Campus)
November 11
Short Term Tuition Loan Applications available to students planning to register for Spring Term.
November 11 - 15
Official Registration Week (Degree-Seeking Students only) by appointment time and day.
Nov. 18 - Jan 3
Open Registration.
December 6
Last day (by 5 p.m.) to apply for graduation at the end of the Spring 1997 semester
January 1
New Year’s Day (University Closed).
January 2 - 3
Registration Days (see Class Schedule for registration times)
January 3
Housing check-in 9 a.m. - 8 p.m.
• Last day to register without incurring a $100.00 late registration fee.
January 6
Classes Begin.
January 6 - 10
Registration for State Employees using fee waivers.
January 10
Last day (by 5 p.m.) to pay tuition and fees to avoid cancellation of enrollment.
• Last day (by 5 p.m.) to complete Late Registration.
• Drop/Add Period ends at 5 p.m.
• Last day to change grading option.
• Last day (by 5 p.m.) to drop courses or withdraw from the University without incurring a financial liability.
• Last day for Financial Aid recipients to validate class schedules to retain registered courses.
• Last day for students to apply and to sign Short Term Tuition Loan promissory notes and validate class schedules.

January 20
Martin Luther King Holiday (University Closed).
January 14
Financial Aid Applications available for 1997-1998
January 17
Last day to register for the February 17th CLAST exam.
January 31
Last day (by 5 p.m.) to withdraw from the University with a 25% refund of tuition less bonding fees.

February 14 - April 19
Spring 1997 Mini-Semester
February 15
CLAST Test.
February 28
Last day (by 5 p.m.) to drop a course with a DR grade.
• Last day (by 5 p.m.) to withdraw from the University with a WI grade.
March 10 - 15
Spring Break.
April 22 - 23
Passover**
March 30
Good Friday**
April 28 - 29
Passover**
April 18
Classes End.
• Last day (by 5 p.m.) to apply for graduation at the end of the Summer 1997.
April 19 - 25
Official Examination Period.
April 26
Housing check-out deadline at 12 pm.
April 28
Commencement Exercises.
April 29
Grades due.
April 30
Grades mailed to students.
Complete Summer Semester 1997

January 31
Last day for International Students to submit applications and all supporting documents for Summer Term admission.

February 28
Admission application priority consideration deadline (except international students).

March 31 - April 4
Registration Access information available for pick-up.

April 7
Short Term Loan Applications available to students planning to register for Summer Term.

April 7 - 11
Official Registration Week (Degree-Seeking Students only) by appointment time and day.

April 14 - May 2
Open Registration.

April 18
Last day (by 5 p.m.) to apply for graduation at the end of the Summer 1997 semester.

May 1 - 2
Registration Days (See Class Schedule for registration times)

May 2
Last day to register without incurring a $100.00 late registration fee.

• Last day to register for the June 1st CLAST exam.

May 3
Housing Check-in 9 a.m. to 8 p.m.

May 5
Classes Begin.

May 5 - 9
Registration for State Employees using fee waivers.

May 9
Last day (by 5 p.m.) to pay tuition and fees to avoid cancellation of enrollment.

• Last day (by 5 p.m.) to drop courses or withdraw from the University without incurring a financial liability.

• Last day (by 5 p.m.) to complete Late Registration.

• Drop/Add Period ends at 5 p.m.

• Last day to change grading option.

• Last day for Financial Aid recipients to validate class schedules to retain registered courses.

• Last day for students to apply and to sign Short Term Tuition Loan promissory notes and validate class schedules.

May 26
Memorial Day Holiday (University closed).

May 30
Last day (by 5 p.m.) to withdraw from the University with a 25% refund of tuition less bonding fees.

May 31
CLAST Test.

June 22
Housing check-out at 12 pm for Summer Term A.

June 27
Last day (by 5 p.m.) to drop a course with a DR grade.

• Last day to withdraw from the University with a WI grade (by 5 p.m.)

July 4
Independence Day Holiday (University closed).

August 13
Classes End.

• Last day (by 5 p.m.) to apply for graduation at the end of Fall 1996 semester.

August 15
Grades due.

August 14
Housing Check-out deadline at 12 pm

August 18
Grades Mailed to Students.

Summer Term A

May 2
Last day to register for the June 1st CLAST exam.

May 1 - 2
Registration Days (Thursday 8 a.m. - 7 p.m. — Friday 8 a.m. - 5 p.m.)

May 3
Housing Check-in, 9 am - 8 pm.

May 5
Classes Begin.

May 5 - 9
Registration for State Employees using fee waivers.

May 9
Last day (by 5 p.m.) to pay tuition and fees to avoid cancellation of enrollment.

• Last day (by 5 p.m.) to complete Late Registration.

• Drop/Add Period ends at 5 p.m.

• Last day to change grading option.

• Last day (by 5 p.m.) to drop courses or withdraw from the University without incurring a financial liability.

• Last Day for Financial Aid recipients to validate class schedules to retain registered courses.

May 26
Memorial Day Holiday (University closed).

May 30
Last day (by 5 p.m.) to drop a course with a DR grade.

• Last day (by 5 p.m.) to withdraw from the University with a 25% refund of tuition less bonding fees.

• Last day (by 5 p.m.) to withdraw from the University with a WI grade.

May 31
CLAST Test.

June 20
Classes End.

June 22
Housing check-out deadline at 12 pm.

June 24
Grades Due.
June 25: Summer Term A grades mailed to students.
August 13: Last day (by 5 p.m.) to apply for graduation at the end of Fall 1997 semester.
August 18: Final grades and GPA calculation mailed to students.

Summer Term B

June 20 - 21: Freshmen Orientation (University Park and North Campus)
June 24 - 25: Freshmen Orientation (University Park and North Campus)
June 25: Registration Day.
  • Housing check-in 9 a.m. - 8 p.m.
June 30: Classes Begin.
June 30 - July 3: Registration for State Employees using fee waivers.
July 4: Independence Day (University closed).
July 7: Last day (by 5 p.m.) to pay tuition and fees to avoid cancellation of enrollment.
  • Last day (by 5 p.m.) to complete Late Registration.
  • Drop/Add Period ends at 5 p.m.
  • Last day to change grading option.
  • Last day (by 5 p.m.) to drop courses or withdraw from the University without incurring a financial liability.
  • Last Day for Financial Aid recipients to validate class schedules to retain registered courses.
July 25: Last day (by 5 p.m.) to drop a course with a DR grade.
  • Last day (by 5 p.m.) to withdraw from the University with a 25% refund of tuition less bonding fees.
  • Last day (by 5 p.m.) to withdraw from the University with a WI grade.
August 13: Classes End.
  • Last day (by 5 p.m.) to apply for graduation at the end of Fall 1997 semester.
August 14: Housing check-out deadline at 12 pm.
August 15: Grades Due.
August 18: Grades mailed to students.

Calendar dates are subject to change. Please contact appropriate offices for verification and updates.

**No examinations or major quizzes may be given during the designated hours.
Jewish holidays begin at 4 p.m. the day before the holiday and end at 7 p.m. the day of the holiday.
**Grades will be posted on transcripts. However, graduation will not be processed until the end of the Complete Summer Term, August 13.
General Information

State Board of Education

Lawton Chiles  Governor
Sandra B. Mortham  Secretary of State
Robert Butterworth  Attorney General
Robert F. Milligan  Comptroller
Bill Nelson  State Treasurer and Insurance Commissioner
Bob Crawford  Commissioner of Agriculture
Frank T. Brogan  Commissioner of Education

Florida Board of Regents

James F. Heekin, Jr.  Chairman, Orlando
Elizabeth G. Lindsay  Vice-Chairman, Sarasota
Andrea I. Anderson  Ft. Myers
Julian Bennett Jr.  Panama City
Frank T. Brogan  Commissioner of Education
Paul Cejas  Miami
Charlton B. Daniel, Jr.  Gainesville
Perla Huntman  Miami Lakes
Gwendolyn F. McLin  Okahumpka
Jon C. Moyle  West Palm Beach
Dennis Ross  Tampa
Steven J. Uhlfelder  Tallahassee
Welcom H. Watson  Fort Lauderdale
Charles B. Reed  Chancellor, State University System
Cornelia Sha' Ron James  Student Regent

History

Florida International University, a member institution of the State University System of Florida, was established by the State Legislature on June 22, 1965. Classes began at University Park on September 19, 1972, with nearly 6,000 students enrolled in an expanded undergraduate program. In 1980 the University added lower division classes for freshmen and sophomores, expanding its enrollment capacity. In 1984, the University received the right to begin offering degree programs at the doctoral level; these programs received Level IV accreditation from the Southern Association of Colleges and Schools (SACS) in 1986.

The Florida Board of Regents appointed Charles E. Perry as the first president of FIU in July of 1969. He was succeeded in June, 1976 by President Harold Brian Crosby. Gregory Baker Wolfe was named the third president in February, 1979. Modesto A. (Mitch) Maidique was named the fourth President of Florida International University on August 27, 1986. Maidique received his Ph.D. in Electrical Engineering from the Massachusetts Institute of Technology and was associated with MIT, Harvard, and Stanford for 20 years.

Goals

Florida International University (FIU), a comprehensive, multi-campus urban research institution, is committed to providing both excellence and access to all qualified students desiring to pursue higher education. FIU offers a comprehensive undergraduate liberal arts education structured around a rigorous core curriculum. The University also offers a number of highly-regarded master's and doctoral programs in six of its colleges and schools.

The University's academic programs are designed to achieve four major goals:

1. To provide an excellent university education for all qualified students, challenging and stimulating them at the lower-division level and preparing them to choose a major field in the upper division, leading to selection of a profession or occupation or further study at the graduate level. FIU encourages its graduates, as educated citizens, to pursue lifetime opportunities to contribute to the development of their community's cultural, aesthetic, and economic environments through participation.

2. To generate new knowledge through a vigorous and ambitious commitment to research in all academic disciplines and to encourage creativity by fostering an atmosphere conducive to the expression of ideas, artistic development, and communication with the external community.

3. To serve the University's external community, with special attention to Dade, Broward, and Monroe counties, enhancing South Florida's capacity to meet its cultural, economic, social and urban challenges as we move into the 21st century.

4. To foster greater global understanding as a major center of international education for the people of the Americas and the international community.

Campuses

The University operates two campuses in Dade County and two educational sites in Broward County.

The main campus is located at University Park in west Dade County, approximately 10 miles west of downtown Miami.

The North Campus is adjacent to Biscayne Bay, at Northeast Biscayne Boulevard and 151st Street.

The Broward County area is served cooperatively by FIU and FAU with locations on the campus of Broward Community College in Davie and the University Tower in downtown Fort Lauderdale. FIU also offers classes in South Dade on the Homestead campus of Miami-Dade Community College.

University Park

The University Park campus occupies 343 acres of land. Apartment-style residence halls, the Golden Panther Sports Arena, the Library, an environmental preserve and athletic facilities contribute to a pleasant college atmosphere. The university is currently in the midst
of an $185 million construction program - the largest in its history. Construction is underway on a $32 million five-story addition to the Library, a $16 million Performing Arts Complex, and a $7.5 million College of Education building. The university recently completed a new $10 million residence hall, a multi-million dollar expansion of the Graham University Center, a football and track stadium and a new baseball stadium. Last year, the National Hurricane Center moved its offices from Coral Gables to a $4 million facility on the University Park campus.

North Campus

The North Campus of Florida International University educates more than 7,780 students on 200 acres on Biscayne Bay. Academic programs in Hospitality Management, Journalism and Mass Communication, Nursing, and Urban and Public Affairs are headquartered on the North Campus. In addition, degree programs in Arts and Sciences, Business Administration, Education, and Health are offered on the North Campus.

North Campus is the hub for FIU's community outreach efforts. It serves as the host campus to the Elder's Institute, the HRS/Children and Families Professional Development Centre, the Institute of Government, the Institute for Public Opinion Research, the Roz and Cal Kovens Conference Center, and the Southeast Florida Center on Aging.

Students may apply for admission and financial aid, register for classes and receive academic advising at North Campus.

The North Campus is administered by the Office of the Vice President of North Campus and University Outreach. The office is on the Third Floor of the Library. Representatives from the Divisions of Academic Affairs, Business and Finance, Student Affairs and Public Affairs are also found there. Liaisons with personnel in other divisions and at University Park are coordinated through North Campus Administration and Operations.

FIU Broward

FIU faculty and administrators provide a comprehensive university presence in Broward County in cooperation with Broward Community College (BCC) and Florida Atlantic University (FAU). FIU offers a select number of full degree programs and a variety of supplementary courses at two Broward locations.

Undergraduate and graduate programs are held at the Central Campus of BCC, which is located in Davie. In concert with BCC, a "2+2" program permits students to enroll at BCC for the first two years of study and then to transfer to FIU for the completion of their undergraduate work, receiving a bachelor's degree.

The University Tower in downtown Fort Lauderdale serves as the administrative headquarters for the FIU Broward Programs and as a major instructional facility. It is utilized for graduate programs, research, administrative offices, and services. Both FIU Broward facilities are staffed to provide support services such as academic advisement, admissions, registration, and student activities.

General Academic Information

Florida International University offers over 200 academic programs at the bachelor's, master's, and doctorate degree levels which are designed to respond to the changing needs of the growing metropolitan areas of South Florida. Degree programs are offered in the College of Arts and Sciences, College of Business Administration, College of Education, College of Engineering and Design, College of Health, School of Hospitality Management, School of Journalism and Mass Communication, School of Nursing, and College of Urban and Public Affairs.

In 1995, U.S. News & World Report magazine ranked FIU as one of the top 150 national universities in the country in the annual survey of "America's Best Colleges." The magazine had previously recognized the University as a "best buy" in higher education. In addition, FIU was named one of the best ten public commuter colleges in the U.S. in "Money Guide", an annual report by Money magazine.

Accreditation and Memberships

All academic programs of the University are approved by the State Board of Education and the Florida Board of Regents. The University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 South-
Southeast Florida Educational Consortium

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

The overall objectives of the Consortium are to:

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

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

Academic Programs

College of Arts and Sciences

Bachelor of Arts in:
- Chemistry
- Dance
- Economics
- English
- Environmental Studies
- French
- Geology
- History
- Humanities
- International Relations
- Liberal Studies
- Philosophy
- Political Science
- Portuguese
- Psychology
- Religious Studies
- Sociology/Anthropology
- Spanish
- Women's Studies

Bachelor of Fine Arts in:
- Art
- Theatre

Bachelor of Music

Bachelor of Science in:
- Biological Science
- Chemistry
- Computer Science
- Environmental Studies
- Geology
- Mathematics
- Mathematical Sciences
- Physics
- Statistics

*Program is expected to be implemented for the Fall 1996 term. Contact the Department for program information.

College of Business Administration

Bachelor of Accounting

Bachelor of Business Administration with majors in:
- Finance
- International Business
- Management
- Management Information Systems
- Marketing
- Personnel Management

College of Education

Bachelor of Science in:
- Art Education
- Biology Education
- Chemistry Education
- Elementary Education

Emotional Disturbance (with a track in Varying Exceptionalities)
- English Education
- Health Education (with a track in Exercise Physiology)
- Health Occupations Education
- Home Economics Education
- Mathematics Education
- Mental Retardation (with a track in Varying Exceptionalities)
- Modern Languages Education (majors in French and Spanish)
- Music Education
- Parks and Recreation Management (with specializations in Leisure Service Management, Parks Management, and Recreational Therapy)
- Physical Education (programs in grades K-8 and grades 6-12)
- Social Studies Education
- Specific Learning Disabilities, (with a track in Varying Exceptionalities)
- Vocational Education (major in Vocational Industrial Education and a track in Organizational Training)

College of Engineering and Design

Bachelor of Design in Architectural Studies

Bachelor of Science in:
- Civil Engineering
- Computer Engineering
- Construction Management
- Electrical Engineering
- Industrial Engineering
- Interior Design
- Mechanical Engineering

College of Health

Bachelor of Science in:
- Dietetics and Nutrition
- Health Information Management
- Medical Technology
- Physical Therapy
- Occupational Therapy
- Prosthetics and Orthotics (suspended admission)

School of Hospitality Management

Bachelor of Science in Hospitality Management

School of Journalism and Mass Communication

Bachelor of Science in Communication
School of Nursing
Bachelor of Science in Nursing

College of Urban and Public Affairs
Bachelor of Science in:
Criminal Justice
Social Work
Bachelor of Health Services Administration
Bachelor of Public Administration

North Campus Programs

College of Arts and Sciences
Bachelor of Arts in:
English
Humanities
International Relations
Political Science
Psychology
Sociology/Anthropology
Visual Arts

College of Business Administration
Bachelor of Business Administration with a major in:
Marketing

College of Education
Foundations courses
FOCUS Program

College of Health
Bachelor of Science in Health Information Management

School of Hospitality Management
Bachelor of Science in Hospitality Management

School of Journalism and Mass Communication
Bachelor of Science in Communication

School of Nursing
Bachelor of Science in Nursing

College of Urban and Public Affairs
Bachelor of Science in:
Criminal Justice
Social Work

Bachelor of Health Services Administration
Bachelor of Public Administration

Broward County Programs

College of Education
Courses for Teacher Education (Broward Public Schools)
Courses in Vocational Education (Off-Campus)

College of Engineering and Design
Bachelor of Science in Construction Management (BC)

School of Hospitality Management
Bachelor of Science in Hospitality Management - (BC)

School of Nursing
Bachelor of Science in Nursing (RN to BSN) (BC)

Primary Location:
BC = Broward Program on BCC Central Campus - Davie
UT = Askew University Tower - Fort Lauderdale

Minors

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

To receive a minor, a student must also complete the requirements for a baccalaureate degree from the University. A minor is not interdisciplinary.

College of Arts and Sciences

Art History
Biology
Chemistry
Computer Science
Dance
Economics
English
French Language and Culture
General Translation Studies
Geology
Geography
History
Humanities
International Relations
Mathematical Sciences

Mathematics
Music
Philosophy
Physics
Political Science
Portuguese
Psychology
Religious Studies
Sociology/Anthropology
Spanish Language and Culture
Statistics
Theatre
Visual Arts

College of Business Administration
(for non-Business majors only)
Business Entrepreneurship

College of Engineering and Design
Retailing Management

College of Health
Medical Laboratory Sciences
Nutrition

School of Hospitality Management
Hotel/Lodging Management
Restaurant/Food Service Management
Travel/Tourism Management

School of Journalism and Mass Communication
Advertising
Journalism
Mass Communication
Public Relations
Television

College of Urban and Public Affairs
Criminal Justice
Health Services Administration
Public Administration
Social Welfare

Certificates

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

Successful completion of a Certificate Program is entered on the student's transcript and records. Two types of certificates are awarded:
Academic Certificate
Awarded to an academic unit to a student at the time of awarding a bachelor's degree, or upon completion of the appropriate coursework to a student who already has a bachelor's degree.

An academic certificate shall not be awarded to a student who does not possess either a bachelor's degree or does not complete a bachelor's degree program. An academic certificate is to be interdisciplinary in nature, to the greatest extent possible.

Professional Certificate
Awarded to an academic unit to an individual who completes the appropriate coursework in the area of concentration. The professional certificate does not need to be interdisciplinary or associated with a degree program.

For details and course requirements, refer to the appropriate section in each College or School.

College of Arts and Sciences
Academic Certificates in:
- Actuarial Studies
- African-New World Studies
- American Studies
- Consumer Affairs
- Environmental Studies
- Ethnic Studies
- Gerontological Studies
- International Studies
- Judaic Studies
- Labor Studies
- Latin American and Caribbean Studies
- Law, Ethics and Society
- Linguistic Studies
- Western Social and Political Thought
- Women's Studies

Professional Certificates in:
- Labor Studies and Labor Relations
- Legal Translation and Court Interpreting
- Translation Studies
- Tropical Commercial Botany

College of Business Administration
Banking
International Bank Management
Marketing

College of Education
The College offers a variety of Professional Certificate and Add-On Teacher Certification programs.

Refer to the College of Education program listing section.

College of Engineering and Design
- Professional Certificate in: Heating, Ventilation, and A/C Design

College of Health
- Clinical Chemistry
- Clinical and Medical Microbiology
- Haematology
- Immunohaematology
- Medical Record Coding

School of Hospitality Management
- Foodservice Management
- Lodging Management
- Travel and Tourism Management

School of Journalism and Mass Communication
- Professional Certificates in: Integrated Communications: Advertising and Public Relations
- Media Management
- Spanish Language Journalism
- Student Media Advising
- Television Production

College of Urban and Public Affairs
- Academic Certificate in Law and Criminal Justice

Evening and Weekend Degree Programs

College of Arts and Sciences
- Bachelor of Arts in: Economics
- English
- Liberal Studies
- Political Science
- Psychology
- Sociology/Anthropology
- Spanish
- Bachelor of Science in Computer Science

College of Business Administration
- Bachelor of Accounting
- Bachelor of Business Administration

College of Engineering and Design
- Bachelor of Science in: Computer Engineering
- Construction
- Electrical Engineering
- Mechanical Engineering

School of Hospitality Management
- Bachelor of Science in Hospitality Management

School of Journalism and Mass Communication
- Bachelor of Science in Communication

School of Nursing
- Bachelor of Science in Nursing

College of Urban and Public Affairs
- Bachelor of Science in Criminal Justice
- Bachelor of Health Services Administration
- Bachelor of Public Administration

For more information, call the Office of Adult and Student Information Services (OASIS) at (305) 940-5669; or the appropriate college or school.
Florida International University encourages applications from qualified applicants without regard to sex, physical handicap, cultural, racial, religious, or ethnic background or association.

**Application Process**

As part of the State University System (SUS) of Florida, FIU uses the common application form for undergraduates. The application and other related information can be requested from the Office of Admission, Charles E. Perry Building (PC 140), University Park, Miami, Florida 33199, (305) 348-2363 or on the North Campus, ACI-160, North Miami, Florida 33181, (305) 919-5760. In Broward, contact the Broward Program, 203 Liberal Arts Building, 3501 S.W. Davie Road, Davie, Florida 33314, (305) 475-4152.

All credentials and documents submitted to the Office of Admissions become the property of Florida International University. Originals will not be returned to the applicant or forwarded to another institution.

Applicants who are attending Florida high schools or a Florida community college may obtain the application form in school guidance offices.

A 20.00 U.S. dollars non-refundable application fee made payable to Florida International University must accompany the completed application form. In addition, the following supporting credentials are required.

**Freshman Applicants**

1. Official secondary school transcripts and appropriate test scores: Scholastic Aptitude Test (SAT) or the American College Test (ACT).

   Applicants whose native language is not English and have not taken any college level English courses, must present a minimum score of 500 in the Test of English as a Foreign Language (TOEFL).

   All official transcripts, test scores, and any other required credentials must be received directly from the issuing agencies. It is the applicant’s responsibility to initiate the request for credentials to the issuing agencies and to assure their receipt by the Office of Admissions.

2. Proof of graduation from an accredited secondary school must be submitted.

3. Nineteen academic units in college preparatory courses are required as follows:

   - English: 4
   - Mathematics: 3
   - Natural Science: 3
   - Social Science: 3
   - Foreign Language\(^1\): 2
   - Academic Electives\(^2\): 4

\(^1\)Two units in the same foreign language are required.

\(^2\)Academic Electives are from the fields of mathematics, English, natural science, social science, and a foreign language. The academic grade point average will be computed only on the units listed above.

   Grades in honors courses, International Baccalaureate (IB), and advanced placement (AP) courses will be given additional weight.

   Freshman admission decisions are made based on the student’s strong academic preparation. Competition for places in the freshman class is created by the quality and extent of the applicant pool.

   Applicants who do not meet the above criteria will be reviewed by the Admissions Review Committee. Those who show potential in areas not easily evaluated by standardized tests can be considered for admission under the exception rule.

   Students who are applying to majors in Theatre, Music, and Dance, in addition to meeting university academic standards, must meet the approval of the respective department through audition. Contact the department for audition dates.

**Transfer Applicants**

Degree seeking applicants with fewer than 60 semester hours of transfer credits must meet the same requirements as beginning freshmen. In addition, they must demonstrate satisfactory performance in their college work.

   Applicants who receive an Associate in Arts (A.A.) degree from a Florida Public Community College or State University in Florida, will be considered for admission without restriction except for published Limited Access Programs within the University.

   All other applicants from Florida Public Community Colleges or State Universities in Florida who do not hold an Associate in Arts degree (A.A.) must have completed 60 semester hours of transferable credit, have a minimum grade point average of 2.0, and must present College Level Academic Skills Tests (CLAST) scores before admission can be granted.

   Students transferring from independent Florida and out-of-state colleges into the University’s upper division must have maintained a minimum 2.00 grade point average based upon a 4.00 scale.

   All applicants must meet the criteria published for Limited Access Programs and should consult the specific college and major for requirements.

   Applicants who meet the above admissions requirements, but have not completed the general education requirements, or the prerequisites of their proposed major, may complete this college work at FIU, or at any other accredited institution. Students may also fulfill general education requirements through the College Level Examination Program (CLEP).

   Official transcripts from all previous post secondary institutions must be forwarded to the Office of Admissions. Students are responsible to initiate this request.

   Transfer applicants from a state community college are encouraged to review the current edition of FIU’s transfer student counseling manual available in all of Florida’s community colleges counseling offices.

   All students seeking admission to the University regardless of whether the student holds an A.A., must have completed two years of credit in one foreign language at the high school level or 8-10 credits in one foreign language at the college level (American Sign Language is acceptable). If a student is admitted to the
University without this requirement, the credits must be completed prior to graduation.

Students who can demonstrate continuous enrollment in a degree program at an SUS institution or Florida Community College since Fall Term, 1989 (continuous enrollment is defined by the state to be the completion of at least one course per academic year) can be exempt from this requirement.

Students holding an A.A. degree from a Florida Community College or SUS institution prior to Fall Term, 1989 will also be exempt.

Students who are applying to majors in Theatre, Music, and Dance, in addition to meeting university academic standards, must meet the approval of the respective department through an audition. Contact the department for audition dates.

Applicants whose native language is not English and have not taken any college level English courses, must present a minimum score of 500 in the Test of English as a Foreign Language (TOEFL).

Admission decisions will not be made before a completed application and all supporting documents are on file in the Office of Admissions.

Applications are kept on file for one year from the anticipated entrance date.

All credentials and documents submitted to the Office of Admissions become the property of Florida International University. Originals or copies of the originals will not be returned to the applicant or forwarded to another institution, agency, or person.

Admission to the University is a selective process and satisfying the general requirements does not guarantee acceptance.

Limited Access Program

A limited access program utilizes selective admission to limit program enrollment. Limited access status is justified where student demand exceeds available resources, such as faculty, instructional facilities, equipment, or specific accrediting requirements. Criteria for selective admission includes indicators of ability, performance, creativity or talent to complete required work within the program. Florida Community College transfer students, with Associate in Arts degrees are given equal consideration with FIU students. Admission to such programs is governed by the Articulation Agreement and the State of Florida Board of Regents rules.

The following programs have been designated as limited access:

- Accounting
- Art Education (1-12)
- Biology Education
- Chemistry Education
- Dietetics and Nutrition
- Elementary Education
- Emotional Disturbance
- English Education
- Finance
- French Education
- Health Education
- Health Occupations Education
- Home Economics Education
- Management
- Management Information Systems
- Marketing
- Mathematics Education
- Medical Technology
- Mental Retardation
- Music Education
- Nursing
- Occupational Therapy
- Personnel Management
- Physical Education (6-12)
- Physical Education (K-8)
- Physical Therapy
- Physics Education
- Social Studies Education
- Spanish Education
- Specific Learning Disabilities
- Vocational Industrial Education

Requirements for Admission to Undergraduate Teacher Education Programs

In the College of Education, all applicants for teacher education programs must score at or above the 40th percentile on a standardized college entrance test, (i.e., a total score of 960 or higher on the SAT, or a composite score of 20 or higher on the ACT). It is possible for an applicant who fails to meet this criterion to appeal to the College of Education.

Readmission

An admitted degree-seeking student who has not enrolled in any course at the University for one full academic year or more is eligible for readmission. The student must meet the University and program regulations in effect at the time of readmission. Students must contact the Office of Admissions to apply for readmission.

Priority Consideration

Application Dates

Summer

February 1 - Last day for international students to submit applications and all supporting documents for Summer Term.

Last day to submit applications for Summer Term.

Fall

April 1 - Last day for international students to submit applications and all supporting documents for Fall Term.

Last day to submit applications for Fall Term.

Spring

September 1 - Last day for international students to submit applications and all supporting documents for Spring Term.

Last day to submit applications for Spring Term.

International Students: If the application and documents are not received by the deadline date, the application for admission will have to be considered for the following term.

International Admissions

International student applicants must meet the admission requirements of the University as described in the previous sections and comply with the following:

Academic Records

Official transcripts, diplomas and/or certificates must be sent directly from each previous institution to the Office of Admissions. Documents in a language other than English must be translated by an official translation agency. Notarized translations are not acceptable.
A credentials and documents submitted to the Office of Admissions become the property of Florida International University. Originals or copies of originals will not be returned to the applicant or forwarded to another institution, agency or person.

**Proficiency in English**
Applicants who hold an undergraduate or graduate degree from an institution within the United States or other English speaking countries are not required to submit TOEFL.

**Declaration and Certification of Finances**
Upon receipt of the application for admission, the Declaration and Certification of Finances will be mailed to the applicant. It must be completed and returned to the Office of Admissions. A Certificate of Eligibility (Form I-20A) will be issued once the applicant has been found admissible to the University.

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

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

Refer to the Annual Estimate of Cost chart for more information. A married student should plan on an additional $5,000 in costs to cover the living expenses of a spouse.

A couple with children should anticipate further yearly additional costs of no less than $3,000 for each child.

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

**Required Entrance Tests**
All freshman applicants are required to submit the results of the Scholastic Aptitude Test (SAT) or the American College Test (ACT).

**Tuition**
An international student is considered a non-resident and is assessed non-resident fees. Immigration regulations require an international student to attend school each fall and spring semester at least two semesters within an academic year. An undergraduate student is required to take a minimum of twelve credit hours per semester. Please refer to the section on Student Fees and Student Accounts for more information.

**Full-Time Enrollment**
Non-immigrant alien students in F-1 visa status are required by United States immigration regulations to be enrolled full-time, except for the summer terms, and to make satisfactory progress toward the degree program in each term. Otherwise, the student's immigration status may be jeopardized. Full-time enrollment is defined as enrollment every term for a minimum of 12 semester hours (undergraduate), or nine semester hours (graduate).

The laws and regulations of the United States Department of Justice, Immigration and Naturalization Service state:

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

Granting official extension of stay is dependent upon the student's achieving normal academic progress toward the degree requirements.

**Employment**
The legal regulations governing F-1 student employment are complex, and advisors are available at International Student and Scholar Services to explain these regulations. International students must check with this office before engaging in any type of employment, either paid or unpaid. In general, however, employment is available only to students who maintain their legal status in the U.S. and is regulated under three categories:

a) on-campus employment. F-1 students may be employed on the FIU campus for a maximum of 20 hours per week during fall and

### Annual Estimate of Costs for Undergraduate International Students

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Student (30 sem hrs)</td>
<td></td>
</tr>
<tr>
<td>Tuition and Fees¹</td>
<td>$7,428</td>
</tr>
<tr>
<td>Maintenance²</td>
<td>$7,908</td>
</tr>
<tr>
<td>Books &amp; Supplies</td>
<td>$907</td>
</tr>
<tr>
<td>Medical Insurance³</td>
<td>$576</td>
</tr>
<tr>
<td>Total</td>
<td>$16,819</td>
</tr>
</tbody>
</table>

¹Tuition and fees are subject to change. Fees include the Student Health Fee ($30 per semester) and the Athletic Fee ($10.00 per semester). Amounts shown reflect 15 semester hours for undergraduate Fall and Spring terms only.

²Maintenance is estimated at $575.75 per month to cover room, board, clothing, transportation, and incidentals. This cost is for nine months.

³All international students are required to carry medical insurance.
spring semesters while school is in session, and full time during holidays, vacations, and summer. On-campus employment includes teaching and research assistantships for graduate students and hourly part time work. Students must contact individual campus departments to inquire about employment opportunities.

b) Off-campus employment: F-1 students may request off-campus employment under very limited conditions and only after maintaining F-1 status for at least one full academic year. Off-campus employment opportunities are not readily available, and students should not rely on off-campus employment as a source of income to finance their studies.

c) Practical training: F-1 students may request practical training employment to accept jobs related to their studies. Students usually pursue practical training employment after completion of degree requirements, although in some cases practical training may be authorized prior to completion of studies. Since practical training employment is limited to one year of full-time employment, students cannot rely on it as a source of income to finance their studies.

Note: An international student will not be granted admission to the University until all academic and non-academic requirements have been met. Under no circumstances should a student come to the University without having received the official Letter of Admission and the I-20A Form. All correspondence and document submissions should be directed to: Office of Admissions, Florida International University, 1140 University Park, Miami, Florida 33199 U.S.A.

Scholarships

FIU recognizes students who are academically, artistically, and athletically talented. The University awards full academic scholarships to students who are named National Merit Finalist, National Hispanic Scholars and National Achievement finalists. Semifinalists may also receive partial scholarships.

Advising for Major Fellowships

Counseling by designated faculty is available for students interested in applying for Churchill, Deutscher Akademischer Austauschdienst, Fulbright, Goldwater, Hertz, Luce, Marshall, Mellon, National Science Foundation, Rhodes, Rotary, and Truman scholarships or fellowships. All are awarded through national competition. Applications are made early in the fall of the senior year, except for Rotary fellowships, which are available for any year; Goldwater scholarships, which are only for sophomores, and Truman scholarships, which are only for juniors. Further information and the names of the designated faculty for each award are available from the Office of Undergraduate Studies at DM 368 or ACI-180.

Faculty Scholars Scholarships

Outstanding entering freshmen are selected each year to receive Faculty Scholars Scholarship awards.

To meet the eligibility criteria, applicants must have:

1. Outstanding high school performance: a minimum academic average of 3.5 in a college preparatory curriculum in high school.
2. A total score of 1270 on the SAT or a composite score of 28 on the ACT.

For more detailed information on these scholarships, applicants should contact the Office of Admissions, PC 140 - University Park, (305) 348-2363.

Student Right-to-Know Safety and Security Act

Under the Student Right-to-Know and Campus Security Act, Florida International University will, upon request, make available to students and potential students the completion or graduation rates of certification or full-time degree-seeking students for a one-year period. Also available, upon request, are University policies regarding a) procedures for reporting criminal actions or other emergencies, b) access to campus facilities, c) campus law enforcement, d) crime prevention programs, e) statistics concerning arrests and the occurrence on campus of certain criminal offenses, f) criminal activity of off-campus student organizations, and the use, possession, and sale of illegal drugs or alcohol.
Office of Undergraduate Studies

Academic Advising Center
Academic advising of students with fewer than 37 semester hours of earned credit is the responsibility of the Academic Advising Center in the Office of Undergraduate Studies. When admitted to the University, the student will meet with an advisor who will help plan the student’s academic program. At the completion of 30 semester hours of earned credits, the student can choose an intended major, and after 60 semester hours, a student should officially declare a major. Students with intended or declared majors will be advised by faculty members or professional advisors in their major department.

Before students are cleared to register for classes they are required to participate in an academic advising session or see an advisor in the Advising Center.

Academic information is available in PC 237, University Park, and ACI-180, North Campus.

Freshman Placement
All freshmen entering the University are required to complete placement tests prior to advising and registration. Tests are offered at orientation the semester before attending the University. The Freshman Testing/Placement Program includes computational skills and standards of written English.

 Newly admitted sophomore transfer students with fewer than 37 credits who have not met the Core Curriculum requirements in mathematics or English must participate in the Freshman Testing/Placement Program and the advising sessions before they will be allowed to register for English or math courses at the University.

College Level Academic Skills Test (CLAST)
The State of Florida has developed a test of college level communication and computation skills. The test is called the College Level Academic Skills Test (CLAST). The Testing Center at the University is responsible for administering and processing the CLAST.

The CLAST is designed to test the communication and computation skills that are judged by state universities and community college faculty to be associated with successful performance and progression through the baccalaureate levels. All students seeking a degree from a public community college or state university must take and pass all parts of the CLAST. This test is required by Florida statutes and rules of the State Board of Education.

The CLAST is administered once each semester and students are encouraged to participate in all pre-CLAST activities administered by the University Learning Center and the Testing Office during their first semester at the University. Students who do not take and pass CLAST will not be allowed to continue in upper division status in state universities in Florida. The CLAST requirements also apply to students transferring to state universities in Florida from private colleges in Florida and from out-of-state colleges.

Only admitted, degree-seeking students who have completed at least 18 semester hours or the equivalent, are eligible to sit for the CLAST.

Those taking the CLAST section of the Florida Teachers Certification Exam must register through the State of Florida Department of Education Teacher Certification Office. Information and Registration Bulletins may be obtained from FIU’s College of Education in DM 253 or call 348-2721.

Who Should not Register for the FIU CLAST? (1) Students who have earned an accredited bachelor’s degree or higher, (2) Students who have received an AA degree from a Florida institution or college prior to September 1, 1982, and who were admitted to upper-level status before August 1, 1984, (3) Students with an accredited bachelor’s degree who are enrolled in an undergraduate degree program.

Any student who has taken a subtest of the CLAST at least four times and has not achieved a passing score, but has otherwise demonstrated proficiency in coursework in the same subject area, may petition the CLAST Waiver Committee to recommend a waiver from that particular subtest. A waiver may be recommended to the president upon majority vote of the committee. If a waiver for a given subtest is approved, the student’s transcript shall include a statement that the student did not meet the requirements of the subtest waived and that a waiver was granted. The waiver application deadline is established each semester by the testing administrator.

CLAST and CLAST waiver applications, are coordinated by the Testing Office. The Testing Office of the University Learning Center is located in PC 315, University Park, 348-2840; and ACI-180, North Campus, 919-5754.

CLAST Alternatives
The State Universities have now been granted administrative authority to implement one of the CLAST alternatives (3) provided by recent legislation (Florida Statute 240.107(9)(c)). This means that students who meet certain conditions may be exempt from having to pass CLAST.

The Florida Administrative Code specifies that any student who achieves a passing score on the college placement test, and has a grade point average of 2.5 or above in postsecondary-level coursework, identified by the State Commission, shall be exempt from the requirement for passing the CLAST. Any university student who does not have College Placement scores must have achieved a score of 420 on the verbal and 440 on the mathematics portion of the SAT-I (recentered); or a score of 16 or above on the reading, English, and mathematics portion of the Enhanced ACT.

Students who are Education majors or plan to apply for teacher certification in Florida, must note that teacher candidates are still required to take and pass the CLAST.

Postsecondary Coursework
A cumulative GPA of 2.5 or above on a 4.0 scale in the following postsecondary coursework:

Communication
Exemption from the three communication sections of CLAST can be
achieved by obtaining a 2.5 GPA in two courses, minimum six semester hours
ENC 1102 English II or other equivalent college level English course

Computation
Exemption from computation section of CLAST by obtaining a 2.5 GPA in two courses, minimum of six semester hours, in one of the following three options

Computation Option 1: (any two of the following)
MAC _102 College Algebra
MGF _202 Finite Mathematics
STA _014 Statistical Methods

Computation Option 2: (any two of the following)
MGF _113 Topics in Mathematics I
MGF _114 Topics in Mathematics II
MGF _118 Mathematics CLAST Review

Computation Option 3
MGF _113 Topics in College Mathematics I
MAC _102 College Algebra

Students must contact the Registrar's Office and provide the appropriate documentation to meet the CLAST Alternative Requirement.

University Learning Center/ Academic Assistance Labs
The Center is equipped to help students improve their academic skills. Included among these skills are reading, writing, English, mathematics, statistics, and personal study skills. Special emphasis is given to those students who need or want assistance passing the College-Level Academic Skills Test (CLAST). The Learning Center is located in PC 318 at University Park, 348-2180, and in ACI-266 at North Miami, 919-5927.

Core Curriculum Requirements
The Core Curriculum requirements apply to all students entering the University with fewer than 37 semester hours. Students transferring with 37 semester hours or more must fulfill the University's General Education Requirements. All students subject to the Core are informed of additional policies governing these requirements in mandatory academic advising sessions provided by the Academic Advising Center of the Office of Undergraduate Studies (University Park PC 237, North Campus ACH180):

Freshman Experience (one course required)
SLS 1501 Freshman Experience Course

English Composition (two courses required 'C' or higher required)
ENC 1101 Freshman Composition
ENC 1102 Literary Analysis
(Prerequisite: ENC 1101)

ENC 1101 and ENC 1102 must be completed before enrolling in other Gordon Rule courses.

Mathematics (two courses required, 'C' or higher required)
One course must be from the following list:

Note: MAT - College Algebra and MAC - Trigonometry equal to MAC 2132

MGF 1202 Finite Math
MAC 2132 Pre-Calculus
MAC 2233 Calculus for Business
MAC 2311 Calculus I
MAC 2312 Calculus II

A second course may be chosen from the following list:
CGS 2060 Introduction to Microcomputers

Biological Science with Laboratory:
APB 2170 Introductory Microbiology (3)
APB 2170L Introductory Microbiology Lab (1)
BOT 1010 Introductory Botany (3)
BOT 1010L Introductory Botany Lab (1)
BSC 1010 General Biology I (3)
BSC 1010L General Biology I Lab (2)
BSC 1011 General Biology II (3)
BSC 1011L General Biology II Lab (2)
BSC 2023 Human Biology (3)
BSC 2023L Human Biology Lab (1)
EVR 3013 Ecology of S. Florida (3)
EVR 3013L Ecology of S. Florida Lab (1)
OCB 2003 Introductory Marine Biology (3)
OCB 2003L Marine Biology Lab (1)
PCB 2510 Introductory Genetics (3)
PCB 2510L Introductory Genetics Lab (1)
PCB 2700 Foundations of Human Physiology (3)
PCB 2700L Foundations of Human Physiology Lab (1)

Physical Sciences with Laboratory:
AST 2100 Solar System Astronomy (3)
AST 2100L Solar System Astronomy Lab (1)
AST 2201 Stellar Astronomy (3)
AST 2201L Stellar Astronomy Lab (1)
CHM 1032 Chemistry and Society (3)
CHM 1032L Chemistry and Society Lab (1)
CHM 1033 Survey of Chemistry (3)
CHM 1033L Survey of Chemistry Lab (1)
CHM 1045 General Chemistry I (4)
CHM 1045L General Chemistry Lab (1)
EVR 3011 Environmental Resources & Pollution (3)
EVR 3011L Environmental Resources & Pollution Lab (1)
GLY 1010 Introduction to Earth Sciences (3)
GLY 1010L Introduction to Earth Sciences Lab (1)
MET 2010 Meteorology & Atmospheric Physics (3)
MET 2010L Meteorology & Atmospheric Physics Lab (1)
PHY 2048 Physics with Calculus (5)
PHY 2048L General Physics Lab (1)
PHY 2053 Physics without Calculus (4)

Arts (1 course required)
ART 2050 Art History I
ART 2051 Art History II
ART 4470 Contemporary Art
ART 4710 History of Photography
ART 1202C 2D Design
ART 1203C 3D Design
ART 2150C Jewelry & Metals
ART 2401C Printmaking
ART 2510C Painting
ART 2702C Sculpture
ART 3110C Ceramics
ART 3163C Glassblowing
ART 3310C Drawing
ART 3331C Figure Drawing
CRW 2001 Introduction to Creative Writing
DAA 1100 Modern Dance Techniques I
DAA 1101 Modern Dance Techniques II
DAA 1200 Ballet Techniques I
DAA 1201 Ballet Techniques I-2
DAA 1500 Jazz Dance Techniques
DAA 2102 Modern Dance Techniques II
DAA 2103 Modern Dance Techniques II-2
DAA 1202 Ballet Techniques II
DAA 2203 Ballet Techniques II-2
DAN 2100 Introduction to Dance
PGY 3410C Photography
The 2000 Theater Appreciation
TPF 2100 Introduction to Acting

Permission of instructor and/or an audition are required for the following courses:
MUN 1011 Music Appreciation
MUN 1100 Golden Panther Band
MUN 1140 Symphonic Wind Ensemble
MUN 1210 Orchestra
MUN 1340 Sunblazer Singers
MUN 1380 University Singers
MUN 1430 University Brass Choir
MUN 1460 Chamber Music
MUN 1710 Studio Jazz Ensemble
MUN 2440 Percussion Ensemble
MUN 2450 Ensemble
MUN 2480 Guitar Ensemble
MUN 2490 New Music Ensemble
MUN 2510 Accompanying
MUN 2711 Jazz Combo Class

Modern Languages

Only intermediate levels can substitute for the Arts Requirement (2000-3000 level).

ARA 3210 Intermediate Arabic
CHI 3210 Intermediate Chinese
FRE 2200 Intermediate French
FRE 2420 Oral Communication Skills in French
FRE 2270 Foreign Study
GER 2210 Intermediate German
GRE 3200 Intermediate Classical Greek
HBR 2200 Intermediate Hebrew
ITA 2210 Intermediate Italian
JPA 3210 Intermediate Japanese
LAT 2200 Intermediate Latin
POR 2200 Intermediate Portuguese
RUS 2200 Intermediate Russian
SPN 2200 Intermediate Spanish
SPN 2230 Intermediate Reading in Spanish
SPN 2340 Intermediate Spanish for Native Speakers
SPN 2420 Oral Communication Skills in Spanish

Any other modern language courses above the first year level will also satisfy this requirement. Students entering the University without two years of foreign language in high school must complete two semesters of the same language at the beginners level, pass CLEP exam, or the SAT II Language proficiency test.

Historical Foundations of Western Civilization (one Gordon Rule course required, grade of 'C' or higher required)
AMH 2000 Origins of American Civilization
AMH 2002 Modern American Civilization

EUH 2011 Western Civilization: Early European Civilization
EUH 2021 Western Civilization: Medieval to Modern Europe
EUH 2030 Western Civilization: Europe in the Modern Era
LAH 2002 Latin American Civilization

Critical Inquiry (One course required, grade of 'C' required. These are Gordon Rule courses. Prerequisite: ENC 1102)
ENG 2012 Approached to Literature
PHI 2011 Philosophical Analysis
REL 2011 Religious Analysis
HUM 3306 History of Ideas
SSI 3240 World Prospects and Issues
HUM 3214 Ancient Classical Culture and Civilization

Comparative Culture & Gender Studies (one course required)
AMH 4560 History of Women in the U.S.
AMH 4570 African-American History
ANT 3241 Myth, Ritual, and Mysticism (SS)
ANT 3642 Language and Culture (SS)
ANT 4273 Law & Culture (SS)
ANT 4306 The Third World (SS)
ANT 4451 Racial & Cultural Minorities (SS)
CPO 4034 The Politics of Development & Underdevelopment (SS)
ECS 3003 Comparative Economic Systems (SS)
FOW 3540 Bicultural Writing
HUM 3225 Women, Culture & History (Completion of at least 24 credits is required to register for HUM 3191)
HUM 3930 Female/Male: Women's Studies Seminar
HUM 2450 Cultural Heritage & Cultural Change
HUN 3191 World Nutrition
INR 4024 Ethnicity & Nationality (SS)
INR 4283 International Relations, Development and the Third World (SS)
LIN 4651 Gender & Language
General Education Requirements

The Board of Regents has defined the General Education Requirements to consist of 36 semester hours. The University requires that all undergraduate students complete the 36 semester hours before graduation. For students entering the University with at least 48 semester hours, the requirement consists of six semester hours each in the areas of humanities, mathematics, natural science, and social science; and 12 semester hours of the Writing Requirement.

Only courses from the following list can fulfill the General Education Requirements at the University:

**State Board of Education Rule 6A-10.30 (Gordon Rule)**

The State of Florida requires all public community colleges and universities to include a specified amount of writing and mathematics in their curriculum to ensure that students have achieved substantial competency in these areas. This requirement must be fulfilled within the first two years of study.

**Writing Requirement: (12)**

Students must successfully complete twelve hours of writing courses with a grade of 'C' or better. Six hours must be in the composition courses (i.e., courses with the prefix ENC). The additional six hours must be taken in other courses in composition (with the ENC prefix) or in other approved courses each of which requires at least 6,000 words of written work. The only approved courses are listed below:

- **AMH 2000** Origins of American Civilization
- **AMH 2002** Modern American Civilization
- **ENC 1101** Freshman Composition (lower division students only)
- **ENC 1102** Literary Analysis (lower division students only)
- **ENC 1200** Business Letter and Reports
- **ENC 1930** Essay Writing
- **ENC 2210** Technical Writing
- **ENC 2301** Expository Writing
- **ENC 3211** Report and Technical Writing
- **ENC 3311** Advanced Writing and Research
- **ENC 3317** Writing Across the Curriculum
- **ENC 4240** Report Writing
- **ENC 4241** Scientific Writing
- **ENC 4930** Special Topics in Composition
- **ENG 2012** Approaches to Literature
- **EIH 2050** Western Civilization: Early European Civilization
- **EIH 2051** Western Civilization: Medieval to Modern Europe
- **EIH 2053** Western Civilization: Europe in the Modern World
- **HUM 3214** Ancient Classical Culture and Civilization
- **HUM 3306** History of Ideas
- **LAH 2011** Latin American Civilization
- **PHI 2011** Philosophical Analysis
- **REL 2011** Religious Analysis
- **SSI 3240** World Prospects and Issues

**Humanities (6)**

**Art**
- **ARH 2050** Art History Survey I
- **ARH 2051** Art History Survey II
- **ART 1201 C** 2D Design
- **ART 1203 C** 3D Design
- **ART 3310 C** Drawing (a 1000-level art course will be substituted for this course)

**English**
- **AML 2011** Survey of American Literature I
- **AML 2020** Survey of American Literature II
- **AML 3602** African-American Literature
- **ENG 2012** Approaches to Literature
- **ENG 2100** Introduction to Film
- **ENG 3138** The Movies
- **ENG 4121** History of Film
- **ENG 4132** Studies of Film
- **ENL 2011** Survey of British Literature I
- **ENL 2021** Survey of British Literature II
- **LIN 2002** Introduction to Language
- **LIT 2010** Introduction to Fiction
- **LIT 2030** Introduction to Poetry
- **LIT 2040** Introduction to Drama
- **LIT 2120** World Literature II
- **LIT 3200** Themes in Literature
- **LIT 3383** Women in Literature
History
AMH 2010 American History, 1000-1850
AMH 2020 American History, 1850-Present
AMH 3317 America and the Movies
AMH 4560 History of Women in the U.S.
AMH 4570 African-American History
HIS 3001 Introduction to History

Humanities
HUM 2512 Art and Society
HUM 3024 Introduction to Humanities
HUM 3214 Ancient Classical Culture
HUM 3232 Renaissance and Baroque
HUM 3246 The Enlightenment and the Modern World
HUM 3304 Values in Conflict
HUM 3306 History of Ideas
HUM 3432 The Roman World
HUM 3435 The Medieval World
HUM 3545 Art and Literature
HUM 3872 Perspectives of the Humanities
HUM 4392 Human Concerns
HUM 4406 Film and the Humanities
HUM 4431 The Greek World
HUM 4491 Cultural Heritages and Cultural Changes
HUM 4543 Literature and Philosophy
HUM 4544 Literature and the Humanities
HUM 4561 Ethics and the Humanities
HUM 4555 Symbols and Myths

Liberal Studies
LBS 4210 Women and work in the US

Modern Languages
FRE 3500 History of French Civilization
FRE 4501 Contemporary French Society
FPW 3200 Introduction to French Literature I
POP 3500 Luso-Brazilian Culture
SPN 3520 Spanish American Culture
SPN 4500 Spanish Culture
SPW 3820 Introduction to Spanish Literature

Music
MUH 1011 Music Appreciation
MUH 2116 Evolution of Jazz
MUH 3211 Music History I
MUH 3212 Music History II

Philosophy
PHH 3100 Ancient Philosophy
PHH 3200 Medieval Philosophy
PHH 3420 Early Modern Philosophy
PHH 3440 Late Modern Philosophy
PHH 4600 Twentieth Century Philosophy
PHI 2101 Philosophical Analysis
PHI 2100 Introduction to Logic
PHI 3500 Metaphysics
PHI 2600 Ethics
PHI 3762 Eastern Philosophical and Religious Thought
PHM 3200 Social and Political Philosophy

Religious Studies
REL 3101 Religious Analysis
REL 3100 Religion and Culture
REL 3131 New Religions in America
REL 3170 Religion and Ethics
REL 3302 Studies in World Religions

Theatre
ORI 3000 Basic Oral Interpretation
THE 2000 Theatre Appreciation
THE 4100 Theatre History I
THE 4111 Theatre History II
THE 4370 Modern Dramatic Literature
TPP 2100 Introduction to Acting
SPC 2600 Public Speaking
SPC 2602 Communication for Business

Mathematics
(Must be at or above College Algebra level, one course may be in a Computer Science programming course or in a statistic course.) A grade of "C" or higher shall be considered successful completion of this requirement.

Students subject to Rule 6A. 10.30 (Gordon Rule) need six credits of mathematics, three of which can be a computer programming or statistics course. Students who matriculated prior to 1983 need only three credits of mathematics but they must be in a mathematics or statistics course.

CGS 2060 Introduction to Microcomputers
CGS 2420 Programming for Engineers
CGS 3403 COBOL for Non-Computer Science Majors

COP 2172 Programming in Basic
MAC 1 Trigonometry
MAC 1 College Algebra
MAC 2132 Pre-Calculus
MAC 2233 Business Calculus
MAC 2311 Calculus I
MAC 2312 Calculus II
MGF 1202 Finite Mathematics
STA 1013 Statistics for Social Sciences
STA 2122 Introduction to Statistics
STA 3312 Business Statistics
STA 3163 Statistical Methods
QMB 3150 Application of Quantitative Methods in Business

Natural Science: (6)

Biological Sciences
APB 2170 Introductory Microbiology
APB 2170L Introductory Microbiology Laboratory
BOT 1010 Introductory Botany
BSC 1010 General Biology I
BSC 1010L General Biology I Laboratory
BSC 1011 General Biology II
BSC 1011L General Biology II Laboratory
BSC 2023 Human Biology
BSC 2023L Human Biology Laboratory
OCP 2003 Introductory Marine Biology
OCP 2003L Introductory Marine Biology Laboratory
PCB 2510 Introduction to Genetics
PCB 2510L Introduction to Genetics Laboratory
PCB 2700 Foundations of Human Physiology
PCB 2700L Foundations of Human Physiology Laboratory
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHM 1032</td>
<td>Chemistry and Society</td>
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<tr>
<td>CHM 1032L</td>
<td>Chemistry and Society Lab</td>
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<tr>
<td>CHM 1045</td>
<td>General Chemistry I</td>
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<td>CHM 1045L</td>
<td>General Chemistry I Lab</td>
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<td>CHM 1046</td>
<td>General Chemistry II</td>
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<td>CHM 1046L</td>
<td>General Chemistry II Lab</td>
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<tr>
<td>CHM 2200</td>
<td>Survey of Organic Chemistry</td>
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<td>CHM 2200L</td>
<td>Survey of Organic Chemistry Lab</td>
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<tr>
<td>GLY 2201</td>
<td>Principles of Nutrition</td>
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<td>GLY 3122</td>
<td>Nutrition and Culture</td>
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<tr>
<td>EVR 3010</td>
<td>Energy Flow and Man-made Systems</td>
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<tr>
<td>EVR 3011</td>
<td>Environmental Resources and Pollution</td>
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<tr>
<td>EVR 3011L</td>
<td>Environmental Resources and Pollution Lab</td>
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<tr>
<td>EVR 3013</td>
<td>Ecology of South Florida</td>
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<td>EVR 4312</td>
<td>Energy Resources</td>
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<td>GEO 2200</td>
<td>Physical Geography</td>
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<td>Physical Geography Lab</td>
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<tr>
<td>GEO 3510</td>
<td>Earth Resources</td>
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<tr>
<td>GLY 1010</td>
<td>Introduction to Earth Science</td>
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<td>GLY 1010L</td>
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<tr>
<td>GLY 1100</td>
<td>Historical Geology</td>
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<td>GLY 3030</td>
<td>Environmental Geology</td>
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<td>GLY 4450</td>
<td>Paleobiology</td>
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<td>OCE 3014</td>
<td>Physical Oceanography</td>
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<td>PHY 2053</td>
<td>Physics without Calculus I</td>
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<td>PHY 2054</td>
<td>Physics without Calculus II</td>
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<tr>
<td>ANTH 2000</td>
<td>Introduction to Anthropology</td>
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<tr>
<td>ECO 2013</td>
<td>Macro Principles</td>
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<td>ECO 2023</td>
<td>Micro Principles</td>
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<tr>
<td>CHD 3220</td>
<td>Child Development: Infancy and Early Childhood</td>
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<td>CHD 4210</td>
<td>Middle Childhood and Adolescent Development</td>
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<tr>
<td>CCJ 3011</td>
<td>The Nature and Causes of Crime</td>
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<td>FAD 2230</td>
<td>Family Life Cycle</td>
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<td>FAD 3232</td>
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<td>Family Development</td>
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<td>World Regional Geography</td>
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<td>GEO 3471</td>
<td>Political Geography</td>
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<td>Introduction to International Relations</td>
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<td>INR 3043</td>
<td>Population and Society</td>
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<td>INR 3081</td>
<td>Contemporary International Problems</td>
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<td>POS 2042</td>
<td>American Government</td>
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<td>CLP 3003</td>
<td>Personal Adjustment</td>
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<td>CLP 4144</td>
<td>Abnormal Psychology</td>
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<td>CYP 3003</td>
<td>Introduction to Community Psychology</td>
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<td>Human Growth and Development</td>
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<td>DEP 2001</td>
<td>Psychology of Infancy and Childhood</td>
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<td>DEP 3303</td>
<td>Psychology of Adolescence</td>
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<td>DEP 3402</td>
<td>Psychology of Adulthood</td>
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<td>DEP 4464</td>
<td>Psychology of Aging</td>
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<td>EAB 4794</td>
<td>Principles and Theories of Behavior Modification</td>
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<td>EXP 3304</td>
<td>Motivation and Emotion</td>
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<td>EXP 4605</td>
<td>Cognitive Processes</td>
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<td>INR 2002</td>
<td>Introductory Industrial/Organization Psychology</td>
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<td>PPE 3003</td>
<td>Theories of Personality</td>
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<td>Introductory Psychology</td>
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<td>SOP 2772</td>
<td>Psychology of Sexual Behavior</td>
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<td>SOP 3004</td>
<td>Introductory Social Psychology</td>
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<td>SOP 3015</td>
<td>Social and Personality Development</td>
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<td>SOP 3742</td>
<td>Psychology of Women</td>
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<td>SOP 3932</td>
<td>Psychology of Drugs and Drug Abuse</td>
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<td>SOP 4525</td>
<td>Small Group Behavior</td>
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<td>SOP 4645</td>
<td>Consumer Psychology</td>
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<tr>
<td>SOP 4834</td>
<td>Psychology of Health and Illness</td>
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<tr>
<td>SYG 2000</td>
<td>Introduction to Sociology</td>
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<tr>
<td>SYG 3002</td>
<td>Basic Ideas of Sociology</td>
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</table>

### Additional Policies and Requirements

1. A student who has recently graduated from a Florida public community college with an Associate in Arts degree will have met the University's General Education Requirements.
2. A student who has recently met the General Education Requirements of any institution in the State University System of Florida will have met the University's General Education Requirements.
3. A student who has taken the freshman and sophomore years in an accredited college other than a Florida public community college or an institution in the State University System of Florida may receive credit for courses meeting the University's General Education Requirements.
4. Students who have been admitted before completing an equivalent general education program must do so at the University prior to graduation.
5. Most departments require for admission to their degree programs certain freshman and sophomore courses in addition to the General Education Requirements. Applicants should consult the catalog.
section dealing with the program they wish to pursue to determine the nature and extent of the additional requirements.

**Foreign Language Requirement**

In addition to the above General Education Requirements, any student who was admitted with a foreign language deficiency must successfully complete 8-10 semester credits of instruction in one foreign language prior to graduation.

**Transfer Credit**

For purposes of clarity, transferability refers to the conditions under which the University accepts credits from other post-secondary institutions. Applicability of credit toward a degree refers to the prerogative of the respective academic division to count specific credit toward a student's degree requirements. Normally, collegiate work will be considered for transfer credit only from post-secondary institutions which are fully accredited by a regional accrediting association. The Office of Admissions will evaluate the acceptability of total credits transferable to the University. Transfer credit will be applied as appropriate to a student's degree program. The authority to apply such credit to the degree rests with the academic division of the student's intended major. If a student chooses to transfer to another academic division within the University, credit previously earned at another post-secondary institution will be re-evaluated and applied as appropriate to the student's new degree program.

A maximum of 60 lower division semester hours taken at a two- or four-year institution may be counted toward a degree at the University. A maximum of 30 additional upper division semester hours taken at a senior institution may be counted toward a degree at the University.

Lower division courses in excess of 60 semester hours may serve to meet specific course requirements for an FRI degree, but credit hours represented by these courses will not reduce the number of credit hours to be completed at the University.

A grade of "D" will be accepted for transfer. However, such a grade in coursework in this major field is subject to review and approval by the appropriate academic department. Credit from institutions not fully accredited by a regional accrediting association will not be accepted; however, when presented, it will be considered on an individual basis by the appropriate College or School. Credit from military schools will be transferred in accordance with the recommendations of the American Council on Education. Credit from foreign institutions will be considered on an individual basis.

**Acceleration**

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

**Credit For Non-College Learning**

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

**College Level Examination Program (CLEP)**

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

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

Not more than six semester hours will be transferred in each of the five areas of the General Examination (English, humanities, mathematics, natural sciences, and social sciences/history). The English examination must be with essay and will not count towards the English Composition requirement. It will count as elective credit.

For additional information on CLEP, contact the Office of Admissions.

**Core Curriculum CLEP**

The University awards credit for CLEP scores at the 50th percentile or higher. For students completing the Core requirements, only the following examinations will be recognized for credit. It is strongly recommended that CLEP examinations be taken prior to enrollment at the University.

**CLEP Subject Examinations**

American Literature, Analysis and Interpretation of Literature, Calculus, English Literature, General Biology, General Chemistry, General Psychology, Introduction to Psychology, Introduction to Sociology, Macroeconomics, Microeconomics, Modern Language.

**General Education CLEP**

The University awards credit for CLEP scores at the 50th percentile or higher. For students entering with more than 48 semester hours, the following CLEP general examinations may meet the General Education requirements:

**English Composition with Essay:** A student will be awarded up to six semester hours of credit for English, less hours previously earned in any college-level English course. These credits will only count toward elective credit.

**Humanities:** A student will be awarded up to six semester hours of credit if a satisfactory score is achieved.

**Mathematics:** A student will be awarded up to six semester hours of credit if a satisfactory score is achieved.

**Natural Science:** A student will be awarded up to three semester hours of credit in biology or physical science, or both, if a satisfactory score is achieved.

**Social Science:** A student will be awarded six semester hours of credit if a satisfactory score is achieved.

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

**Advanced Placement**

The University awards credit for Advanced Placement test scores of three, four, and five. For students completing the Core requirements,
only the following examinations will be recognized for credit.


**International Baccalaureate**
The International Baccalaureate (IB) program is a comprehensive and rigorous two-year program leading to examinations. Based on the pattern of no single country, it is a deliberate compromise between the specialization required in some national systems and the breadth preferred in others. Florida International University recognizes the quality of the IB program and will award 6 semester hours of college credit to those students who score a 5, 6 or 7 on each subject at the Higher level. Credit will not be awarded to subjects at the Subsidiary level.

**National Student Exchange**
National Student Exchange provides students with the opportunity to exchange to one of 120 colleges and universities in the United States and its territories for one semester or academic year, while paying in-state tuition. Full credit is given for work satisfactorily completed on exchange. NSE offers the student the opportunity to live in a different geographic setting, explore a particular academic interest, and, of course, make new and lasting friendships with other students from all over the United States.

In order to participate in the National Student Exchange, students must be enrolled full-time and have a 3.0 cumulative GPA. For further information, contact the Office of Undergraduate Studies in DM 368 at University Park, 348-4100; or in ACI 180 at North Miami, 919-5754.

**University Honors Program**
The University Honors Program, a four-year program, focuses on interdisciplinary studies. The Honors Program is committed to curriculum integration in its approach to topics, resources and classroom practices. Every term the program will offer one three-credit honors course toward fulfillment of the eight semester program. In their senior year, honors students are given the option of completing a thesis/project in lieu of taking the two senior-year seminars.

Students will be selected to participate in the University Honors Program on the basis of SAT or ACT scores, grade point average, and an application essay. For further information, contact the University Honors Program, DM 368, (305) 348-4100.

**Pre-Medical Advisement**
For their initial advisement, students interested in entering professional schools of medicine, dentistry, optometry, or veterinary medicine should contact either the Department of Biology, OE 246, (305) 348-2201, or the Department of Chemistry, OE 200, 348-2606, at University Park at the earliest possible time. Professor Zaide Morales-Martinez, in the Department of Chemistry, (305) 348-3084, is the coordinator of pre-medical advising. After completing a substantial portion of their professional courses or at the end of their junior year, and prior to the Fall Term in which they plan to apply to professional schools, students should contact the Chairperson of the Premedical Advisement and Evaluation Committee in the College of Arts and Sciences. The Committee provides additional advisement for students wishing to enter the health professions and prepares recommendations for those applying to professional schools.

**Pre-Law Advisement**
Students interested in receiving information on pre-professional education, on application procedures, testing, and references should contact the Department of Political Science or the Department of Philosophy in the College of Arts and Sciences or the Department of Criminal Justice in the School of Public Affairs and Services. A faculty advisor in these departments will advise students who plan to attend law school.
Office of the Registrar

The Office of the Registrar is responsible for directing the university registration activities, and establishing, maintaining, and releasing students' academic records. The office is also responsible for space and scheduling, enrollment certification, Veteran's Affairs, graduation, and the Student Academic Support System (SASS). The office produces the schedule of classes and the university catalog.

The University Park office is located in PC 130, 348-2392, the North Campus office is located in ACI-100, 919-5750, and the Broward Programs at Broward Community College, Central Campus, 475-4160 and University Tower, 355-5236.

Classification of Students

The University classifies students as follows:

Degree-Seeking Students

This category includes students who have been admitted to a degree program, but have not completed the requirements for degree.

Freshman - Students who have earned fewer than 30 semester hours.

Sophomore - Students who have earned at least 30 semester hours but fewer than 60 semester hours.

Junior - Students who have earned at least 60 semester hours but fewer than 90 semester hours.

Senior - Students who have earned 90 or more semester hours but who have not earned a baccalaureate degree.

Non-Degree-Seeking Students

These students may be either affiliated or unaffiliated in their status. Unaffiliated students are limited to taking one semester of courses at the University. Affiliated students must be approved by the appropriate College or School and must meet its specific requirements. Under no circumstances may more than 15 hours, taken as a non-degree-seeking student, be applied toward graduation requirements at the University, if the student changes from non-degree-seeking to degree-seeking status.

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

1. Students are not required to meet the usual admission requirements and are not officially admitted as regular students. Enrollment as a non-degree-seeking student does not imply a right for future admission as a regular, degree-seeking student. Credit earned will not be counted toward a degree at the University unless such students subsequently apply for regular admission and are accepted as undergraduate or graduate students.

2. Registration is permitted on a space-available basis and is determined at the time of registration. Non-degree-seeking students may not register during the official registration week for degree-seeking students.

3. No more than 15 undergraduate level semester hours earned as a non-degree-seeking student may be counted toward a degree. The appropriate Dean must approve the acceptance of such credit.

4. Non-degree-seeking students will not be allowed to register for more than one term without obtaining admission to a degree program at the University, obtaining admission into a formal certificate program, or acquiring affiliated status from the department in which they are registering.

5. Applicants denied admission to the University will not be allowed to register as non-degree-seeking students for a period of one year without obtaining admission into a formal Certificate Program or obtaining affiliated status from the appropriate academic department.

6. Immigration regulations prevent most foreign nationals from enrolling without being admitted into a formal degree or certificate program, depending on the visa type. Therefore, international students cannot enroll as non-degree-seeking students.

Affiliated Students

Students applying for affiliated status as non-degree-seeking students must be approved by the appropriate Dean in accordance with criteria approved by that College or School's Faculty Curriculum Committee.

Transient Students

This category includes students who are fully admitted and are actively pursuing a degree at another accredited two or four year institution. Such students need to present evidence of their status each semester before they will be allowed to register.

Certificate Students

This category includes students who have been accepted into a specific certificate program by the academic department responsible for that program. Certificate programs are subject to all University regulations.

College/Major Classification

Lower division students have a college designation of lower division with a major designation of their intended major (if indicated by the student). This does not imply subsequent admission to that degree program.

Degree-seeking upper division students admitted to an upper level degree program are classified according to the college or school and major of their degree program; and when applicable, to the college or school and major of their second major.

When admitted students reach a total of 60 or more credit hours (including transfer and current enrollment), they may apply for admission into an upper division major, provided they have passed the CLAST. All degree-seeking undergraduates must be admitted into an upper division major prior to completing 75 credit hours, including transfer hours.

Twelve semester hours are considered a full-time course load for undergraduate students.

Academic Degree Requirements

Bachelor's Degree

The University will confer the bachelor's degree when the following conditions have been met:

1. Recommendation of the faculty of the College or the School awarding the degree.
2. Certification by the Dean of the College or the School concerned that all requirements of the degree being sought have been completed.

3. A minimum of 120 semester hours in acceptable coursework is required for the Bachelor's degree.

4. Completion of the last 30 credit hours at the University. Exceptions (normally not to exceed six hours) may be made in advance by the appropriate Dean.

5. Completion of the General Education Requirements or, in the case of students admitted with fewer than 36 transfer hours, the Lower Division Core Curriculum.

6. Earned a cumulative GPA of 2.0 or higher at the University.

7. Earning the grade requirements for major, core courses, and course sequences established by the appropriate College or School.

8. Satisfactory completion of the College Level Academic Skills Test (CLAST) requirement.

9. Completion of 8-10 credits in one foreign language (American Sign Language is acceptable). Students who entered the University with a foreign language requirement deficiency, regardless of whether the student holds an A.A., must now complete 8-10 credits in one foreign language. Transfer credit is applicable to the requirement, and exemption by examination is available through the Testing Office. Also, students who completed two years of high school foreign language study in one language are considered to have met the requirement.

   a. Students who can demonstrate continuous enrollment in a degree program at an SUS institution or Florida Community College since Fall Term, 1989 (continuous enrollment is defined by the state to be the completion of at least one course per year) will be exempt from this requirement.

   b. Also exempt are students holding an A.A. degree from a Florida Community College or SUS institution prior to Fall Term, 1989.

Two Bachelor Degrees
Two bachelor degrees may be awarded simultaneously when the following conditions have been met:

1. Requirements for two majors have been completed as certified by the appropriate academic units.

2. A minimum of 30 appropriate semester hours in addition to the requirements of one degree has been earned.

   A graduate from an accredited four-year institution who applies for admission to work toward a second bachelor's degree must meet the requirements of the major department which shall include (but is not limited to) a minimum of 30 semester hours of coursework.

Two Majors for a Bachelor's Degree
Any undergraduate student who elects to do so may carry two majors and work to fulfill the requirements of both concurrently. Upon successful completion of the requirements of two majors, the student will be awarded one degree and a notation denoting both majors will be entered on the transcript. A Request for Second Major Form must be filled out in the Office of the Registrar to declare two majors.

Minors and Certificate Programs
Students who have completed an approved minor as part of their baccalaureate degree program will have this notation as a part of the degree comment on their transcript.

   Students who have completed an approved certificate program will have an appropriate notation placed on their transcript.

Associate in Arts
Students who satisfactorily complete 60 semester hours of acceptable college work with an overall GPA of 2.0 or higher, fulfill the Lower Division Core requirements, pass the College Level Academic Skills test (CLAST) and complete at least 20 credit hours in residence at the University may apply for the Associate in Arts degree. The degree will not be awarded after completion of the baccalaureate degree. A notation will appear on the student's transcript but no diploma will be issued.

Summer Enrollment
All students entering any university within the Florida State University System with fewer than 60 credit hours shall be required to earn at least nine credit hours prior to graduation by attending one or more summer terms at a Florida state university.

Academic Definitions
Program and Course Regulations
Credit Hour
The term credit hour as used refers to one hour of classwork, or the equivalent, each week for an entire academic term.

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

Electives
Students may usually select courses from any academic area to complement their area, or areas, of study or to meet their interests in order to fulfill the credit hour requirements for the bachelor's or master's degree. Prerequisite course requirements should be considered in selecting elective courses. Students should refer to their academic program requirements concerning electives.

Minor Program
A minor program is an arrangement of courses that enables students to develop some degree of expertise in one area of study. A minor is awarded upon completion of the bachelor's degree, but is not interdisciplinary in nature.

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

Change of College/School or Major
A fully admitted undergraduate student can change majors, provided he or she meets the entrance requirements of the new program, by submitting a Request for Change of College/School or Major form. The form and instructions are available in the Registrar's Office. The student
is subject to the program requirements in effect at the time of the change of major.

Registration
The following registration information is subject to change and students must verify the dates with the Office of the Registrar, PC 130, University Park; or ACI-100, North Campus; or at the Broward Program, ECC Central Campus, 475-4160 and University Tower, 355-5236. All students, degree and non-degree-seeking, registering for more than 18 credit hours during one semester must obtain the approval and the signature of the Dean of their College or School.

Registration for courses is as follows:

Registration Week is held during the preceding semester (check the Academic Calendar for the dates) and ends one week later. Degree seeking students are given an appointment day and time based on their classification, GPA, and credit hours completed. Students may add/drop at this time.

Open Registration is held following Registration Week and lasts until the end of the first week of classes. There is no appointment day and time and registration is on a first-come, first-serve basis. All students who have not yet registered are encouraged to do so at this time. Students who have already registered may also add or drop courses during this period.

Registration Day is held prior to the beginning of the term. Students who have not registered should do so at this time to avoid a late registration fee. (Check the Academic Calendar for the date.)

Telephone Registration
All students are able to find out their grade, registration appointment time, and day, registration holds (if any), and register, add and drop courses using a touchtone telephone (305) 348-1500, or the on-campus kiosks.

To use the Telephone Registration System or the kiosks, students are given an access code by the Office of the Registrar. The access code must be requested in person. Call (305) 348-2320 for information.

Immunization
To register for courses, students, under the age of 40, must provide the University Health Clinic, (Student Health Center, University Park; HM 110, North Campus) with documentation of immunization against measles and rubella. Students should contact the Health Clinic for more information at 348-2401 or at 919-5620.

Late Registration Fee
Any student, degree-seeking or non-degree-seeking, who initiates registration after Registration Day is assessed a $100.00 late registration fee. Students may initiate late registration during the first week of classes.

Dropping and Adding Courses
The Official Drop/Add period runs throughout the first week of classes (Check Academic Calendar for specific dates). During this period a student may add courses or register with a late registration fee. Students may also drop courses or withdraw from the University with no records kept of the courses and without a tuition fee liability. Students must submit a drop/add card to the Office of the Registrar to officially drop a course. If the tuition fee has already been paid, a refund will be generated by the Cashier's Office and mailed to the local address on file.

Late Adds
Students may add courses with appropriate authorization and signatures until the end of the second week of classes. No course can be added after this deadline.

Late Drops
Courses officially dropped after Drop/Add period and through the eighth week of the term (summer terms have different deadlines Check the Academic Calendar for specific dates) dropped courses are recorded on the student's transcript with a grade of 'DR' (dropped). The student is financially liable for all dropped courses. Students must submit a Course Drop Form to the Office of the Registrar to officially drop a course. Non-attendance or non-payment of courses will not constitute a drop.

A student may appeal the deadline for a late drop by submitting the Appeal for Late Drop Form. A drop after the deadline will be approved only in cases where circumstances beyond the student's control make it impossible for the student to continue. The student must provide appropriate documentation. The instructor will designate whether the student was passing or failing the course at the time of the appeal to drop. A 'WP' grade indicates the student withdraw from the class with a passing grade. A 'WF' grade indicates the student withdrew from the class with a failing grade. The 'WF' grade is calculated in the students term and cumulative GPA. The deadline to submit this appeal is the last day of classes of the term.

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

The transcript of a student who withdraws before or during the Drop/Add (first week of classes) period will contain no reference to the student being registered that semester and no tuition fee will be assessed. If the tuition has already been paid, a refund will be generated by the Cashier's Office and mailed to the local address on file. If a student withdraws from the University prior to the end of the fourth week of classes, a 25 percent refund, less a bonding fee, will be made.

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

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

A student may appeal the deadline for a late withdrawal by submitting the Appeal for Late Withdrawal Form. A withdrawal after the deadline will be approved only in cases where circumstances beyond the student's control make it impossible for the student to continue. The student must submit appropriate docu-
Grading System

<table>
<thead>
<tr>
<th>Grade Points Per</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades</td>
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<tr>
<td>Credit Hour</td>
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<td>A</td>
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<td>A+</td>
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<td>DF</td>
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<td>NR</td>
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<td>EM</td>
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</tbody>
</table>

Grading Options

The Academic Units make the determination of the grading option of each course. A course may be offered for a letter grade as listed above or Pass/Fail; or for an optional grade in which the student has a choice of either receiving a letter grade or pass/fail; or the student may choose to audit a course and an 'AU' grade will be recorded on the student's records. The grading option must be indicated at the time of registration. The grading option cannot be changed after the Drop/Add period (first week of classes). There are no exceptions to this deadline.

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

Incomplete Grade

An Incomplete grade is a temporary symbol given at the discretion of the instructor for work not completed because of serious interruption not caused by the student's own negligence. An incomplete must be made up as quickly as possible but no later than two semesters or it will automatically default to the grade that the student earned in the course. There is no extension to the two semester deadline. The student must not register again for the course to make up the incomplete.

Students who receive an incomplete grade and have applied for graduation at the end of that term, must complete the incomplete grade by the end of the fourth week of the following term. Failure to do so will result in a cancellation of graduation. The student will need to reapply for graduation.

Forgiveness Policy

The forgiveness policy is a way in which students may repeat a limited number of courses to improve their grade point average (GPA) by having only the grade received on the last repeat used in its calculation. Under the University's forgiveness policy, students must file a Repeated Course Form with the Office of the Registrar. There is no time limit on the use of the forgiveness policy for grades; however, the forgiveness policy cannot be used once a degree is posted. All courses taken with the grades earned will be recorded on the student's transcript. The repeated course form will not be processed if the first or repeated grade received is 'DR', 'DP', 'WF', 'WP', 'AU', 'NR', or 'EM'. Repeated courses will be appropriately designated (T: attempted; R: last repeat).

Undergraduate students may use the forgiveness policy a maximum of three times for the purpose of improving the GPA. The same course may be repeated up to three times or the student may use the three opportunities to apply to three different courses. Only the final grade for the three courses repeated under the forgiveness policy will be counted in computing the student's GPA. In order for a course to be considered repeated and adjusted in the GPA, the course must be the same and must be repeated at the university. Students who have used their three options under the forgiveness policy may still repeat courses; however, both the original grade and any additional grades received through repetitions of the course will be used in computing the GPA.

A course taken on a letter grade basis must be repeated on the same basis. Students will not be allowed additional credit or quality points for a repeated course unless the course is specifically designated as repeatable (independent study, studio courses, etc.). Students not using the forgiveness policy may still repeat a course. All attempts will apply to computation of the GPA but credit for one attempt will apply toward graduation. Students must check with the appropriate academic department to determine whether there are additional restrictions on repeating courses.

Departmental Credit by Examination

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

Awarding departmental credit by examination is the prerogative of each academic unit. To receive credit by examination, a student must be a regular degree-seeking student, register, and pay for the courses. Once the student is awarded the departmental credit by examination, an 'EM' grade will be recorded on the transcript.
Magna Cum Laude
To graduate Magna Cum Laude, a student must have earned a cumulative FIU GPA of 3.70 - 3.899.

Cum Laude
To graduate Cum Laude, a student must have earned a cumulative FIU GPA of 3.50 - 3.699.

To graduate with the above honors, the student must have completed a minimum of 40 semester hours at the university for which grade points are awarded.

Academic Warning, Probation, and Dismissal

Warning
An undergraduate student whose cumulative GPA falls below 2.0 will be placed on warning, indicating academic difficulty. The warning will appear on student’s end-of-term grade report but not on the official transcript.

Probation
An undergraduate student on warning whose cumulative GPA falls below 2.0 will be placed on probation, indicating serious academic difficulty. The College/School of the student on probation may indicate the conditions which must be met in order to continue to enroll.

Dismissal
An undergraduate student on probation whose cumulative and semester GPAs fall below 2.0 will be automatically dismissed from his or her program and the University. An undergraduate student will not be dismissed prior to attempting a minimum of 20 semester hours of coursework. The student has ten working days to appeal the dismissal decision. This appeal must be made in writing to the Dean of the College or the School in which the student is enrolled. The dismissal from the University is for a minimum of one year. After one year, the student may apply for readmission (see Readmission to the University in the same or a different program, or register as a non-degree seeking student.

Dismissed students applying for admission or registering as non-degree seeking students are placed automatically on academic probation.

Student Records
Florida International University assures the confidentiality of student educational records in accordance with State University System rules, state, and federal laws including the Family Educational Rights and Privacy Act of 1974, as amended. Student academic records are maintained in the Office of the Registrar and in the academic department of the student’s major. All currently enrolled and former students have the right to review their records to determine their content and accuracy. Parents of dependent students, as defined by the Internal Revenue Code, and who give evidence of the dependent status, have the same rights. For the cost of photocopying, students may generally have copies of any documents in their file, except for other institutions’ transcripts.

Release of Student Information from Educational Records

The disclosure or publication of student information is governed by policies of Florida International University and the Board of Regents of the State University System of Florida within the framework of State and Federal Laws, including the Family Educational Rights and Privacy Act of 1974.

A student’s consent is required for the disclosure or publication of any information which is a) personally identifiable and b) a part of the educational record. However, certain exceptions to that generality, both in types of information which can be disclosed and in access to that information, are allowed within the regulations of the Family Educational Rights and Privacy Act. The following persons and organizations may have access to personally identifiable information without a student’s prior consent:

1. Faculty, administrators, staff and consultants employed by the University or the Board of Regents whose work involves:
   a. Performance of administrative tasks which relate to students;
   b. Performance of supervisory or instructional tasks which relate to students;

2. Performance of services which benefit students.

A student’s prior consent is not required for disclosure of portions of the educational record defined by academic institutions in order to develop financial aid programs and programs of assistance to students.
the institution as Directory information. The following Directory information may be released by the University:

1. Name, local and permanent address and telephone number(s);
2. Date and place of birth, and sex;
3. Classification and major and minor fields of study;
4. Participation in officially recognized activities and sports;
5. Weight and height of members of athletic teams;
6. Dates of attendance, degrees and awards received;
7. The most recent previous educational agency or institution attended by the student; and
8. Photographic image.

The information above, designated by the University as Directory Information, may be released or published by the University without a student’s prior written consent unless permission is made in writing by the student or the parents of a dependent student.

In order to prevent access to or release of Directory Information, students or the parents of dependent students, must notify the Registrar (PC 130), in writing prior to the first class meeting day of the semester. Access to, or release of Directory Information will be denied until further written instruction is received from a student, or the parents of a dependent student.

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

For complete information regarding the policies outlined above, please contact:

University Registrar
Florida International University
University Park - PC 130
Miami, Florida 33199
email: Registrar@fiu.edu

Student Social Security Numbers

FIU expects all students to have a valid social security number. Enrolled students who do not have one will have three months to provide the Registrar’s Office with proof of a valid social security number.

Transcripts

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

Students must request their transcript in writing. There is a 3-5 working days processing period. The transcript will not be released if the student has a University financial liability and/or a defaulted student loan. There is $5.00 charge per transcript.

Class Attendance

The University does not have an attendance policy. However, individual faculty may establish attendance criteria in classes where deemed necessary. Academic units may establish their own attendance policies with the approval of the Provost.

Policy Statement with Reference to Religious Holy Days

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

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

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

Veterans Information

The Office of Veterans Affairs assists all veterans and their dependents who wish to receive VA educational benefits. The office also provides personal counseling, fee deferments, tutorial assistance, and work-study jobs. The VA Office is located in PC 130, University Park; and in ACI-100, North Campus.

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

Training Status

| Full time | 12 Credits |
| 3/4 time | 9 Credits |
| 1/2 time | 6 Credits |
| Less than 1/2 | 5 Credits |

Rate of Payments

Number of Dependents

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

For additional information regarding other Veterans Educational Programs, contact the Office of Veterans Affairs at University Park, PC 130, 348-2838.

Enrollment Certification

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

Enrollment Status

Undergraduate:

Full time: 12 credits or more.
Half time: 6 - 11 credits.
Less than half time: 5 credits or less.

The above enrollment status is for continuous enrollment for the semester that the student is attending. Reduction of course load will reflect the student’s status. See certification office for further details.

Florida Residency Information

Florida Student Definition

For the purpose of assessing registration and tuition fees, a student shall be classified as a Florida or non-Florida Resident.
To qualify as a Florida Resident, the student must:

1. Be a U.S. Citizen, Resident Alien, paralee, Cuban National, Vietnamese Refugee, or other legal alien so designated by the U.S. Immigration and Naturalization Service.

2. Have established a legal residence in this State and have maintained that legal residence for twelve months immediately prior to the start of the term in which the student is seeking Florida resident classification. The student’s residence in Florida must be as a bona fide domicile rather than for the purpose of maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education, and should be demonstrated as indicated below (for dependents students as defined by IRS regulations, a parent or guardian must qualify).

3. 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:

a. 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:

   (1) Declaration of Domicile
   (2) Proof of purchase of a home in Florida which the student occupies as his or her residence
   (3) Proof that the student has maintained residence in the state for the preceding year (e.g., rent receipts, employment record)

b. Documentation establishing bona fide domicile in Florida which is not temporary or merely incident 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 conclusive evidence of domicile (these documents must be dated at least one year prior to the first day of classes of the term for which resident status is sought):

   (1) Declaration of Domicile
   (2) Florida Voter’s registration
   (3) Florida Driver’s license
   (4) Proof of real property ownership in Florida (e.g., deed, tax receipts).
   (5) Employment records or other employment related documentation (e.g., W-2, paycheck receipts), other than for employment normally provided on a temporary basis to students or other temporary employment.
   (6) Proof of membership in or affiliation with community or state organizations or significant connections to the State.
   (7) Proof of continuous presence in Florida during the period when not enrolled as a student.
   (8) Proof of former domicile in Florida and maintenance of significant connections while absent.
   (9) Proof of reliance upon Florida sources of support.
   (10) Proof of domicile in Florida of family.
   (11) Proof of admission to a licensed practicing profession in Florida.
   (12) Proof of acceptance of permanent employment in Florida.
   (13) Proof of graduation from high school located in Florida.
   (14) 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.

c. No contrary evidence establishing residence elsewhere.

d. Documentation of dependent/independent status (IRS return or affidavit)

A student can also qualify for Florida residency by one or more of the following criteria:

1. Become a legal resident and be married to a person who has been a legal resident for the required twelve-month period, or
2. Be a member of the Armed Forces on active duty stationed in Florida, or a spouse or dependent, or
3. Be a member of the full-time instructional or administrative staff of a state public school, state community college or state university in Florida, a spouse or dependent, or
4. Be a dependent and have lived five years with an adult relative who has established legal residence in Florida, or
5. Be a former student at a public institution of higher education who was properly classified as a resident who re-establishes domiciliary status and re-enrolls within a period of twelve months, or
6. Make a statement as to the length of residence in Florida and qualification under the above criteria.

Term Courses Are Offered

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

The University adheres to the philosophy that a student is entitled to a college education regardless of his or her financial condition. The Financial Aid Program at the University includes scholarships, grants, loans, and employment.

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

- Grants are awards based on financial need which do not have to be repaid.
- Scholarships are non-repayable awards based either on merit, special talent and/or financial need.
- Student loans are available to students and/or their parents at low interest rates (5 to 11%) with the option to defer repayment until after graduation or after the student drops below half-time.
- Student employment allows students to earn money toward their education by working part time while attending school.

Applying for Assistance
Applying for financial aid is a lengthy process, therefore it is important to begin early. Applications for financial assistance are available in January for the following academic year which begins in August. Financial Aid applications are not reviewed until ALL documents required to complete the file are received in the Financial Aid Office.

Completing your financial aid forms correctly and getting them all in by the published deadline increases your potential to receive the maximum financial aid for which you are eligible.

Admissions: To be eligible for most financial aid programs, you must be admitted to a degree program. However, you should not wait until you are admitted to apply for assistance. Students pursuing or enrolled in qualified Certificate Programs are only eligible for Federal Family Education Loans.

Summer Assistance: Most financial aid funds are exhausted after students are awarded assistance for the Fall and Spring semesters. Typically, Federal Family Education loans are the primary source of assistance for Summer enrollment.

Transfer Student Procedures: Generally, financial aid cannot be transferred from one post-secondary institution to another during the academic year. If you plan to transfer in mid year, apply to both your current institution and Florida International University to insure consideration for all applicable financial assistance.

Eligibility Criteria
To qualify for most need-based financial assistance you must meet the following basic eligibility requirements:

- Demonstrate financial need;
- Be a U.S. citizen or eligible non-citizen;
- Be registered with Selective Service, if required;
- Not be in default on a loan, or owe a repayment on Title IV aid received at any institution;
- Be enrolled at least half-time in an eligible program of study; and,
- Maintain satisfactory academic progress.

Additional requirements may apply depending on the aid programs awarded to you.

Determining Financial Need
Financial need is defined as the difference between the estimated cost of attendance and the amount you and your family can reasonably be expected to contribute towards your educational expenses. Need analysis is a federally mandated formula which measures, in an equitable and systematic way, how much individual students and their families can afford to pay towards their education. Income, assets (other than your primary residence), family size, number of family members attending college, and other items are evaluated to give a complete assessment of a family's financial strength.

Awarding Procedures
Students who complete their files by the priority deadline of March 15 have the greatest opportunity of being considered for those financial aid programs they requested and are qualified to receive for the academic year. Files are processed according to the completion date.

A financial aid package may consist of a combination of gift-aid (grants) and self-help (loans, work) funds. Other sources of assistance such as merit awards and private and institutional scholarships will be taken into consideration when preparing the award.

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

Academic Merit Assistance: The University's commitment to academic excellence is highlighted through programs which honor students who are recognized as National Merit, National Achievers and National Hispanic Scholars. Additional awards for outstanding high school seniors include the Faculty Scholars, Valedictorian and Salutatorian Scholarships. For detailed information regarding these programs, contact the Office of Admissions at (305) 348-3671.

Minority Aid: The Office of Minority Student Services administers the Academic Opportunity Program Scholarship for matriculating freshmen of African descent. Information on this program can be obtained by contacting the office at (305) 348-2436.

Financial Aid Services
Walk in Services
Financial Aid personnel are available Monday through Friday to answer general questions, distribute/accept application materials and provide information concerning application procedures and program requirements.

Financial Aid Counseling
A Financial Aid Administrator is available without an appointment during regular office hours to assist students with special problems, technical questions, exceptions, etc.

For additional information and application materials contact the Financial Aid Office: University Park, PC 125, Miami, FL 33199; North Campus, 3000 NE 145 St, ACC 160, Miami, Florida 33181-3600, VRU (305) 348-1500.
Student Fees and Student Accounts

Fees
Registration and tuition fees are established by the Board of Regents as required under the Florida Legislature. These fees are subject to change without notice. The currently authorized fees are:

<table>
<thead>
<tr>
<th>Credit Hour Fees</th>
<th>Florida Resident</th>
<th>Non-Florida Resident</th>
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</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>$59.43</td>
<td>$234.27</td>
</tr>
<tr>
<td>Graduate, Thesis or Dissertation</td>
<td>$114.99</td>
<td>$385.73</td>
</tr>
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</table>

Student Fees
- Athletic: $10.00
- Health: $36.00

Registration fees for course audits are the same as the above fees, except that no assessment will be made for the out-of-state portion.

A schedule of registration and tuition fees for all programs is published prior to each semester and can be obtained at the Office of Registration and Records. Since fees often change in the fall semester, the above fees should be used for information purposes only. The schedule of classes will contain the most accurate fee information.

Fee Waivers
Students using a fee waiver for part of the fee payment must present the original and the student copy to the Cashier’s Office at the time of payment, on or before the last day to pay fees. Students who are responsible for a portion of their fees in addition to the fee waiver will be required to pay their portion before the fee waiver is applied.

University and State employees using the State employee fee waiver to pay their fees must register on or after the day established in the official University calendar for State employee registration. A properly completed and approved waiver form must be presented at the Cashier’s Office by the date published for the last day to pay fees. Fee Waivers will be processed only for those courses shown on the approved fee waiver request form presented at the time of registration. A course override card will not be accepted with the tuition waiver program. Only one fee waiver form per employee will be accepted.

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

Senior citizens fee waivers are available to persons 63 years of age or older who meet the requirements of Florida residency as defined in this catalog. The fee waiver allows qualified individuals to attend credit classes on an audit basis. Senior citizens using the fee waiver must register during the first week of classes.

Florida law requires that State employee fee waivers and senior citizen fee waivers be granted on a space available basis only; therefore, individuals using these waivers must comply with the procedures outlined in the schedule of classes for each semester.

Refunds will not be processed for employees who have registered and paid prior to the State Employee Registration Day and wish to use the fee waiver.

Fee Payment
Fees may be paid at the Cashier’s Office at University Park, PC 120, or at North Campus ACI 140. Broward students may pay by mail or at the Cashier’s Office at University Park or North Campus. Night drop boxes outside the Cashier’s Offices are available 24 hours a day for fee payments by check or money order through the last day to pay fees. Payment is also accepted by mail. The University is not responsible for cash left in the night drop or sent through the mail. Failure to pay fees by the established deadlines will cause all courses to be canceled. See Fee Liability below.

Late Registration Fee
Students who register after the established deadline for registration will be subject to a $100 late registration fee.

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

Florida Prepaid Tuition Plan Students
All students planning to register under the Florida Prepaid Tuition Plan must present their FPTP identification card to the Bursar’s Office, PC 115 on the University Park Campus or at the Cashier’s Office ACI 140, on the North Campus before the published last day to pay fees. The portion of the student fees not covered by the plan must be paid by the student prior to the published last day to pay fees to avoid cancellation of classes.

Financial Aid Students
All financial aid recipients must come to the Cashier’s Office and pay the difference between their financial aid or scholarship awards and their final fee assessment and have their class schedule validated at the Cashier’s Office prior to the published last day to pay fees. Failure to have the schedule validated will result in the cancellation of all classes for the semester. The validation process cannot be handled through the night drop or by mail, but must be done in person.

Fee Liability
Students are liable for all fees associated with all courses in which they are registered at the end of the drop/add period. The fee payment deadline is published in the official University calendar. If fees are not paid in full by the published dates, all courses will be canceled and any money paid will be lost.

Registration is not complete until all fees are paid in full.

Reinstatement of Classes
Appeals for reinstatement of registration for classes canceled for fiscal reasons must be filed in writing on the prescribed form with the Cashier’s Office by the time specified on the cancellation notice. Each request will be evaluated by the Reinstatement Appeals Committee. Reinstatement will be considered for all classes on the class schedule at
the end of the drop/add period. Reinstatement cannot be requested selectively for certain classes. The decision of the committee is final and all reinstatement activity, including fee payment, must be completed prior to the end of the fourth week of classes. All students whose registration has been reinstated will be assessed a late payment fee. If the late registration fee is applicable it will also be assessed.

Application Fee
A non-refundable fee of $20 shall accompany each application for admission to the University.

Vehicle Registration Fee
A non-refundable annual or semester vehicle registration fee is applicable to all persons operating or parking a motor vehicle on the University's Campuses. Upon payment of the applicable fee and registration of the vehicle at the Department of Parking and Traffic, each vehicle will be assigned a parking decal which must be permanently affixed to the outside of the vehicle. The decal is required for all vehicles parking on campus. Parking and traffic regulations are strictly enforced.

Other Fees
Library Fines
- Per book per library hour .25
- Maximum fine per book $5.00
- Lost book fine $51.15

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

Checks
The University will accept personal checks for amounts due to the University. These checks must be in the exact amount due only. The Cashier's Office will not accept checks above the amount due, third party checks or checks for cash. State law requires that a service fee of $15 or 5% of the amount of the check (whichever is greater) be assessed on a check returned unpaid by the bank for any reason. Checks returned by the bank can be redeemed only by cash, cashier's checks, or money orders. A personal check will not be accepted to replace a dishonored check.

Returned checks will be assigned to an agency for collection if not promptly paid. When an account has been assigned the collection agency fee will be added to the University charges for collection at the current contract rate. Returned checks on student accounts will result in cancellation of classes and will require petition for reinstatement. See reinstatement of classes above.

The Cashier's Office will not accept a check on any student's account which has had two previous dishonored checks.

Refunds
Refunds will be processed and mailed to the address shown on the Registrar's file to all students whose fee accounts show an overpayment after the last day to pay fees. Students due a refund will not be required to submit a refund application to receive their refund, it will automatically be calculated. If there is an amount due in the accounts receivable system, that amount will be deducted from any refund due.

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

Any student attending the University for the first time who completely withdraws from all of his/her classes is entitled to a prorated refund up to 60% of the semester. This only applies to first time students.

In the following exceptional circumstances, a full refund of total fees paid will be made upon presentation of the proper documentation:
- Death of a student or immediate family member (parent, spouse, child or sibling). Death certificate required.
- Involuntary call to military service. Copy of orders required.
- Illness of student of such severity or duration to preclude completion of courses. Confirmation by a physician required.

Processing of refunds will begin after the end of the last day to pay fees.

Appeals for tuition refunds must be submitted in writing to the Office of the Registrar within two years after the end of the term for which the refund is requested. There are no exceptions to this policy.

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

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

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

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

The Office of Academic Affairs oversees the planning and administration of the instructional programs of the Colleges and Schools of the University. Matters affecting faculty, curriculum, and the development of undergraduate and graduate degree programs fall within its purview. Consequently, both the Office of Undergraduate Studies and the Office of Graduate Studies report to the Office of Academic Affairs.

This office also supervises academic support programs, such as Information Resource Management, Continuing Education, the Libraries, Instructional Media Services, Sponsored Research and Training, FAA/FAU Joint Center for Environmental and Urban Problems, Latin American and Caribbean Center, Institute for Judaic Studies, Institute for Public Policy and Citizenship Studies, The Art Museum, Multilingual-Multicultural Studies Center, Southeast Florida Center on Aging, and the Women's Studies Center.

Responsible for all the academic units, the chief academic officer is the Provost and Vice President for Academic Affairs. The Provost and Vice President also serves as liaison to the Florida Board of Regents for academic matters. As a member of the University Executive Staff, the Provost and Vice President leads in the overall academic planning and direction of the University.

(For detailed information on the University's academic Centers and Institutes, refer to the Center and Institute Section.)

Office of Undergraduate Studies

Fernando Gonzalez-Reigosa, Dean
Yvonne Baccarisse, Associate Dean
Glenda Bealton, Associate Dean
Joe Wisdom, Associate Dean
William Beesting, Assistant Dean

The Office of Undergraduate Studies is responsible for undergraduate program activities that span more than one academic unit. Included in these activities are the Academic Advising Center, offering advising for freshmen, undecided majors, students changing majors, and non-degree seeking students, and monitoring of Core Curriculum and General Education requirements; the University Learning Center, providing CLAST counseling and academic preparation, national test administration, and assistance in improving academic skills; the Faculty Scholars and Invitational Scholars awards and the University Honors Program; Academy for Art of Teaching; and ROTC. The office is located in DM 368, University Park, 348-2099; and ACI-180, North Campus, 940-5754.

Office of Graduate Studies

Richard L. Campbell, Dean
Ruben D. Jaen, Associate Director

The Office of Graduate Studies is under the administration of the Dean of Graduate Studies.

The Graduate Dean is assisted by an Associate Director, who has responsibility for all requests for candidacy certification, assists with minority student recruitment and admission, and also assists the Dean of Graduate Studies in other matters.

The Office of Graduate Studies is responsible for the implementation of the Graduate Student Grievance Policy; the development and compliance with University graduate policy, procedures, and planning; graduate financial aid distribution; University clientele linkages for development support and productivity.

Academic Deans and Department chairs within academic units have the responsibility for detailed operations of all graduate programs.

The Graduate Dean works with the Graduate Council in the formulation of new graduate policies and procedures. The Graduate Council is a subcommittee of the Faculty Senate and consists of members who also represent their respective colleges/schools on the Council. The Graduate Council reviews curricula changes proposed by academic units and endorsed by the University's Curriculum Committee.

Another committee in the Office of Graduate Studies is the Advisory Committee for Graduate Studies. This Committee makes recommendations to the Graduate Dean on the implementation of graduate policies and procedures on all programs that offer graduate degrees. The Dean of Graduate Studies serves as Chair of this Committee. Generally, the members on this Committee are assistant and associate deans who have responsibility for graduate education in their respective academic units.

Human Research Committee. Dr. Bernard Gerstman, Professor of Physics, Chairs the University Research Council which, among other things, is in charge of making decisions and giving approval to the use of human subjects on projects and research conducted by University professors and students. In addition, the Committee makes recommendations for fostering University wide research productivity.

Graduate students seeking information on general graduate policies and procedures, or instructions on preparing and filing the thesis or dissertation, should contact the Office of Graduate Studies in PC 520, University Park, or call (305) 348-2455 for an appointment.

Information Resource Management (IRM)

All computing and telecommunications activities on FIU campuses are under the direction of the Associate Vice-President for Information Resource Management (IRM). The three major units of IRM are University Computer Services (UCS), the Southeast Regional Data Center (SERDAC), and Telecommunications.

University Computer Services (UCS)

University Computer Services (UCS) provides instructional and research computing support to the faculty and students of all FIU academic departments on the University Park, North Campus, and Broward campuses. Computer hardware accessible to students includes a DEC Alpha 7620 super minicomputer running Open VMS, a SUN SPARCServer 690MP and SPARCServer 390 running Solaris, and numerous IBM-compatible and Macintosh microcomputers, X terminals, and Unix.
workstations. Services of most interest to students include: introductory seminars and workshops on the most widely used equipment and software; comprehensive documentation libraries; open access X terminal labs; dial-up and direct VAX/SUN access; open microcomputer labs; a discount microcomputer store; assistance with micro-to-larger-system data communications; and peer and professional consultation on various other computer-related problems, within the limits defined by the academic departments.

In addition to instructional computing support, UCS, through its Application Systems and User Services Groups, provides support for the administrative functions of the University, including Admissions, Registration, and Financial Aid and Cashiers.

**Lab Use:** Students are required to have a valid FIU picture ID card to use UCS terminal and micro labs. Occasionally, during the peak periods before midterm and final exams, lab hours are extended to meet increased demand. Nevertheless, users are advised to complete assignments early; time limits may be imposed during periods of high demand. Ethical computing practices are enforced. The University Park student lab facility is located in PC 411, PC 413, PC 414, PC 415, PC 416, PC 419, PC 422, PC 322, BA 150, BA 160, and GC 111. The North Campus combined micro and terminal lab is located in AC-293. For a recorded message with current student lab hours, call 348-2174. Please direct other University Park inquiries to the staff offices in PC 413A, 348-2568. Call 940-5589 for information concerning the North Campus facility.

**Part-time Student Employment:**
Each semester, University Computer Services employs over 35 part-time, student user consultants. Although primarily responsible for maintaining a good working environment and flow of users through lab facilities, these consultants also diagnose and resolve system and equipment malfunctions, and train other students to use the tools and computing resources available in the labs. Given the many different disciplines of the lab users, exposure to a large variety of hardware and software, and direct training by UCS professional staff, working as a user consultant for several semesters provides an excellent career experience and reference. Students with better than average interpersonal and computer skills are invited to apply.

**Southeast Regional Data Center (SERDAC)**
The State University System’s Southeast Regional Data Center provides primary academic computing services to Florida International University via an Ethernet network which connects student and faculty workstations to the Data Center’s SUN/Unix and DEC VMS cluster services.

SERDAC computers allow convenient access to the internet and BITNET international computer networks. Information on these services may be obtained by calling 348-2700.

SERDAC’s word processing facility offers a multitude of services, from the high volume generation of personalized letters and envelopes, to the electronic scanning of most printed materials. For information concerning this facility, please call 348-3069.

Primary operations and dispatch services for faculty, student, and administrative printout are located in University Park, PC-436. Please call 348-2109 for information concerning this facility.

SERDAC offers personal computer/workstation maintenance to the University community. Currently, the SERDAC Maintenance Facility has been designated as a factory-authorized service center for Zenith, and Apple personal computers. Please call 348-2117 for information.

**Telecommunications**
This organization is responsible for providing voice and data communications services to the University community. Faculty and staff are the primary users of the University telephone system, and they share with students several intercampus data communications networks. These provide users access to all University computing resources, and gateways to statewide, national, and international computer networks.

FIU Telephone Operators are on duty seven days a week. They are responsible for servicing incoming information calls for the University Park (348-2000) and North Campus (940-5500) Campuses.

Since FIU Operators can notify the proper authorities in case of off-campus emergencies, they may also be reached by dialing "0" at University Park and ext. 5500 at North Campus. However, in an emergency, direct contact should also be made with Public Safety by dialing ext. 2911 at University Park and ext. 5911 at North Campus.

**International Education, Programs and Activities**

**Dennis Gayle, Director**
The University Office of International Education, Programs and Activities coordinates all international programs and activities within Florida International University. The staff work with students, as well as with faculty who are interested in international exchange opportunities at cooperating universities in other countries, or in other forms of education abroad, such as internships and study abroad. This Office develops agreements with foreign universities and governments, in order to extend the range of such opportunities. The staff provides information concerning student Fulbright programs and National Security Education Fellowships, and the like. This Office proposes international initiatives, in consultation with Colleges and Schools, assesses current international programs, develops long-term plans for international activities, and secures external funds for program development. In addition, the International Office encourages the further internationalization of the University’s curriculum, and interacts with local as well as international interest groups, in support of FIU’s international mission, while also collecting and disseminating information about the international activities of faculty and students. Located in PC 538, University Park, 348-1913.
Libraries

Lawrence Miller, Director
Antonia Downes, Associate Director

The University Libraries are housed in the Athenaum (AT) at University Park, and in a new Library building (LIB) on the North Campus.

The total library collection comprises more than a million volumes, in addition to substantial holdings of federal, state, local, and international documents; maps; microforms; music scores; newspapers; institutional archives; and curriculum materials. The Library subscribes to 7,025 scholarly journals and other serials.

A computerized catalog of library holdings provides a listing of materials in both FUI Libraries, and other libraries in the State University System and throughout the world. The bulk of the collection is housed in open stacks.

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

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

Consortium Library Privileges

Currently registered students, faculty, and staff may use the libraries of any of the other campuses of the State University System. For access to libraries in the southeast Florida region, students, faculty and staff should check at the circulation desk concerning SEFUI library privileges.

A state-of-the-art system of interlibrary loan links the libraries with others throughout North America. It includes the use of telefacsimile for time-critical requests.

Instructional Media Services

Blanca Riley, Director

Instructional Media Services specializes in the development, production, and utilization of various types of audiovisual and communication media for educational purposes. The services offered are listed below.

The Centers For Instructional Technology are do-it-yourself media and graphic arts production labs, providing technical assistance to faculty, staff, and students in the creation of visual aids such as slides, overheads, flyers, posters and charts for classroom presentations, papers or projects. Professional help and instruction is available on the premises in the use of Macintosh computers, letter machines, copystand cameras, overhead-makers, laminators, etc. While consumable items such as films, posterboard and transparencies are to be provided by students, there is no fee for either the help provided or the use of the facilities.

Multimedia and Interactive Software development services are available for faculty to use for instructional and/or scholarly presentations. (OE 164 at University Park; LIB-150 at North Campus).

Photography Services provides still photographic support and services to faculty and staff for educational, training and informational purposes. (OE-167 at University Park; services available to all FUI campuses).

Instructional Graphics prepares artwork, graphs, illustrations, charts and posters for faculty and staff. (OE 169 at University Park; serves other campuses through fax and inter-office mail).

Instructional Television (VH-245 at University Park) provides technical, creative, and professional services in the production of video and multimedia programs for instructional, research and general information/training purposes. This area provides a wide range of video services, including: the design and production of educational and training programs; the documentation of classroom guest speakers and special presentations; and programs for individual or group instruction.

Equipped for studio productions or taping at remote locations, post-production facilities may be used to produce a finished edited program. In the field of distance learning, the department will provide the means of transmitting live interactive classes to remote locations. Three electronic classrooms (two at University Park and one at the North Campus) offer faculty the opportunity to expand the walls of the traditional classroom to reach students throughout South Florida. The department also arranges for satellite teleconferences (both uplink and downlink), schedules and maintains video conference equipment on both campuses to allow two-way audio and video for classes, meetings and conferences, and assists in interactive video projects. Available to faculty and staff only.

Equipment Distribution and Scheduling provides a large variety of educational audiovisual equipment for use by faculty and staff. Services are available to students for classroom use and when sponsored by professors. (PC-236 at University Park; ACI-193 at North Campus). (These services are available to students, as well as faculty and staff.)

Other services available are consultation on the purchase, rental, and installation of audiovisual equipment; and professional guidance on a wide range of audiovisual instructional topics and technology. For more information, contact 348-2811, OE 165, University Park; or 919-5929, LIB-150, North Campus.

Consortium Media Privileges

Faculty, staff and students can use the audiovisual services on any campus of the Consortium. AV materials and equipment cannot be borrowed.

Sponsored Research and Training

Thomas A. Breslin, Vice Provost
Catherine F. Thurman, Director

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

Among the major goals of the Division of Sponsored Research and Training are the following: to help stimulate faculty and staff interest in research and training projects; to assist the faculty and staff in obtaining funds for research and training projects; and to provide technical assis-
tance to faculty and staff who manage contract and grant programs for the University. For more information, contact 348-2494.

The Art Museum

Dahlia Morgan, Director

The Art Museum at Florida International University has served the South Florida community for the last 19 years presenting exhibition and art lectures at local, national and international importance. Exhibitions include student shows, self-curated exhibitions from both the University's collections and from institutions and organizations outside the University, and national traveling shows. The Art Museum is supported by the University community, local, state and federal agencies and Friends of the Art Museum.

The Art Museum serves Miami's multi-cultural community year round, free of charge. The Museum is home to Carol Gables' Metropolitan Museum and Art Center Collection, The Cintas Foundation of Contemporary Hispanic Art, a permanent collection of works by North and South American and Florida artists, and the site of the Martín Z. Margulies Family Collection. One of the world's most important international outdoor sculpture collections, includes works by Calder, De Kooning, Miro, Nevelson, Serra, and other well-known artists.

The Art Museum provides a unique experience to a very broad audience including children, students, teachers, senior citizens, minorities and the disabled. Besides serving two campuses and two centers, its programs extend to surrounding counties outside of Dade including Broward, Palm Beach and Monroe Counties.

The Art Museum has been recognized for its excellence by the grants it has received, most recently the National Endowment for the Arts; The Institute for Museum Services; The National Endowment for Humanities, The Florida Endowment for the Humanities; The Dade County Council of Arts and Sciences; The Metropolitan-Dade County Cultural Affairs Council and the Florida Arts Council.

The Art Museum, which occupies a 5,000 square foot area on the University Park campus, opened with an internationally acclaimed exhibition, Contemporary Latin American Drawings, in April, 1977. Since then, many important exhibitions have been presented, including: Alberto Giacometti, Draftsman and Sculptor; Mira, Mira, Mira: Los Cubanos de Miami; Adolph Gottlieb: Paintings and Works on Paper; Marcel Duchamp: Louise Bourgeois; The Phillips Collection in the Making: 1920 – 1930; Imágenes Líricas: New Spanish Visions; CUBA-USA: The First Generation; Antoni Tapies in Print; Agustin Fernandez: A Retrospective, Miro/Noguchi; and the annual American Art Today series featuring contemporary artists exploring traditional themes including Still Life, The Figure in the Landscape, The Portrait, Narrative Painting, The City Surface Tension, Clothing as Metaphor and Images from Abroad.

The Art Museum has continued to enhance its exhibitions with the Critics' Lecture Series, which has included many of the exhibiting artists, scholars, museum curators and art historians, including: Susan Sontag, Robert Hughes, Hilton Kramer, Michael Graves, Peter Plagens, Tom Wolfe, Germaine Greer, Dore Ashton, Carlos Fuentes, Michael Brenson, Frank Stella, Richard Serra, Helen Frankenthaler, Kirk Varnedoe, David Ross, Michael Kimmelman, and Anne d'Hornoncourt.

The Museum is operated by the Director, the Assistant Director, the Office Manager, the Registrar/Preparator, the Community Relations/Education Coordinator, and the Program Assistant plus a staff made up partially of University students working through an internship program.
Business and Finance


Auxiliary Services

Auxiliary Services supervises the bookstore and food services operations on both University Park and the North Campus, which includes the Cafeteria, Gracie's Grill and all vending operations.

Auxiliary Services also oversees the operations of Duplicating Services, which includes a Print Shop, Convenience Copiers and a Total Copy Reproduction Center.

A recent addition to the Auxiliary Services portfolio is Parking and Traffic Services, which is a unit that enforces all University Parking and Traffic Rules and Regulations.

Controller's Office

This area is primarily responsible for maintaining accounting records, controlling budgets, coordinating financial activities, and reporting on financial data. Typical functions of the Controller's Office are the payment of invoices to vendors, collection of fees and other revenues, contract and grant accounting, payroll, disbursement and collection of student loans, and the reconciliation of accounting ledgers.

The Controller's Office is a service oriented unit assisting the University community in most aspects of financial operations. Questions concerning the use of State funds, internal control procedures or methods to pay a vendor or employee are normally addressed to this unit. Guidance is provided to travelers pertaining to the State requirements for the reimbursement of travel expenses. Assistance is provided to employees in the interpretation of accounting ledgers and fiscal reports.

The following sections operate within the Controller's Office: General Accounting, Accounts Payable, Travel, Construction and Property, Accounting, Contracts and Grants, Disbursement, Student Loan and Accounts Receivable, Payroll, and the Cashier's Office at all campuses.

Environmental Health & Safety

The Department of Environmental Health & Safety & Risk Management Services provides the leadership and direction necessary to assure identification, implementation and effective administration of programs designed to promote hazard recognition, avoidance, reporting and control, as well as compliance with various federal, state and local safety regulations.

In addition to programs necessary for regulatory compliance, the department takes a proactive approach on many issues. Among the programs and activities managed by the department are: investigation and initial processing of liability claims against the University; review of risk management concerns related to special events planned by student organizations and University employees and presentations to student groups; and indoor air quality investigations.

The primary component of the department's mission is service. This mission is accomplished by working in close coordination and cooperation with other departments, and the University community in general. At University Park, the department is located at CP 183, 348-3021/2262. Services are provided at the North Campus from the Facilities Operations complex, 501 115, 919-5225.

Equal Opportunity Programs

This office provides leadership and direction in the administration of the University equalization programs for women and minorities in several ways. It prepares the University's annual Affirmative Action Plan and the State Equity Accountability Plan, assists University units in implementing and monitoring affirmative action procedures, provides a channel for employee and student grievances regarding discrimination, or issues indicating a need for additional affirmative actions; administers implementation of the Policy to prohibit Sexual Harassment; coordinates University compliance with the Americans with Disabilities Act and with Title IX of the Education Amendments of 1972, and promotes effective relationships between the University and community organizations. Equal Opportunity Programs also administers the State University Systems scholarship programs funded for the purpose of increasing minority enrollment. In addition, the Office maintains a liaison relationship with State and Federal agencies dealing with EEO and affirmative action. The Office is located at University Park, PC 215.

Americans with Disabilities Act (ADA)

The Assistant Vice President for Equal Opportunity Programs is the University's ADA Coordinator, and has responsibility for ensuring access to employment, academic and public programs for persons with disabilities. The Office administers a central budget used to fund the costs of reasonable accommodations for University employees and applicants for employment. The Office also works closely with the Office of Disability Services for Students in the provision of auxiliary aids and services to ensure access to academic programs, and with all University offices in the provision of access to University public events.

HIV/AIDS Policy

Students and employees of the University who may become infected with the HIV/AIDS virus will not be excluded from enrollment of employment or restricted in their access to University services or facilities unless individual medically-based judgments establish that exclusion of restriction is necessary to the welfare of the individual or other members of the University community. The University has established an HIV/AIDS Committee which includes representatives from major University divisions and other staff as appropriate. The Committee, which meets regularly, is responsible for monitoring developments with regard to HIV/AIDS, acting upon and administered the University's Policy
on HIV/AIDS in specific cases, and coordinating the University’s efforts in educating the University community on the nature of the disease. In addition, the Committee will meet as needed to consider individual occurrences of the disease which require University action.

Persons who know or suspect they are sero-positive are expected, to seek expert medical advice and are obligated, ethically and legally, to conduct themselves responsibly for the protection of others.

The University has designated HIV/AIDS counselors who are available to provide further information on this subject. Contact one of the following offices at University Park, Assistant Vice President for Equal Opportunity Programs, PC 215; Counseling Services, GC 340; and Student Health Services, OE 115. North Campus contact, Counseling Services, SC 261 or the Student Health Clinic, TC 110.

Sexual Harassment / Educational Equity

All members of the University Community are entitled to study and work in an atmosphere free from illegal discrimination. Florida International University’s equal opportunity prohibits discrimination against students and employees on the basis of their race, color, creed, age, disability, sex (including sexual harassment), religion, marital status, or national origin. Under the policies, it does not matter whether the discrimination was intended or not; the focus is on whether students or employees have been subjected to intimidation, hostile or offensive environment as a result of their belonging to a protected class or having a protected status. Sexual harassment includes unwelcomed physical contact of a sexual nature, overt or implied threats to induce performance of sexual favors, verbal harassment, use of sexually suggestive terms, or display or posting of sexually offensive pictures.

Any employee, applicant, or student who believes that he or she may be a victim of unlawful discrimination, may file a complaint with the Office of Equal Opportunity Programs, PC 215 at University Park (348-2785) in accordance with this procedure.

Facilities Management

Facilities Management provides professional support to planning, designing, construction, maintenance, and operations of facilities on all campuses, to accommodate all aspects of the University mission as defined in the Campus Master Plan. This department is separated into three major areas of supervision which are Facilities Development, Facilities Operations and Utilities Support Services.

Facilities Development is responsible for all design and construction projects. These activities include building programs, design coordination, construction administration and occupancy coordination.

Facilities Operations is responsible for the operations and logistics of physical resources including building and grounds maintenance, custodial, landscaping, roads and parking lots.

For routine and emergency maintenance services, please contact the Customer Service Center at 348-4600 at University Park and 919-5700 at North Campus.

Utilities Support Services oversees the University’s utility systems including air conditioning, water, sewage, electrical power and solid waste management. In addition, Utilities Support Services works together with Environmental Health & Safety to assure that all toxic (biological or chemical) wastes are disposed of properly.

Human Resources / Personnel Relations

The Office of Human Resources/Personnel Relations provides human resources management services for staff members and employees of all academic and administrative departments including student employees, research or graduate assistants, college work study and OPS employees on University Park, North and Broward campuses. All services provided by the office are in compliance with applicable federal and state regulations, and include six major human resources’ areas - Employment and Recruitment, Classification and Compensation, Employee Benefits, Personnel Records, Employee Assistance and Labor Relations.

In addition to the above mentioned human resource management areas, the Office of Human Resources and Personnel Relations is responsible for the Volunteer Program, Faculty Convocation and Employee Recognition Awards, the Presidential Holiday Affair, American Red Cross Blood Drives, Customer Service Employee of the Month/Year and Savings Bond Campaigns.

The University Park office is located in PC 224, 348-2181; the North Campus office is located at 322-A Library Building, 919-5545.

Legal Services

Legal services are provided to the University under a contract with the law firm Gunster, Yoakley, Valdes-Fauli and Stewart, P.A. The Office of Legal Affairs provides representation and advice to university administrators, faculty and staff concerning legal issues affecting the University.

Office of the Inspector General

The Office of the Inspector General assists all levels of management in accomplishing their goals and objectives by furnishing them with independent appraisals, recommendations and pertinent comments concerning the activities reviewed. The independent appraisal activity includes evaluation of financial results, legal compliance, program results, economy and efficiency, and internal accounting control procedures.

Public Safety

Public Safety is a full service law enforcement organization dedicated to assuring an environment conducive to living and learning in a University community. The department’s members include Law Enforcement Officers who are fully certified and sworn, and have full police authority to enforce state, local and University regulations.

Purchasing Services

Purchasing Services is organized to support the students, the instructional and research efforts of the faculty, staff, and all University science departments. Purchasing involves the acquisition of equipment,
furnishings, supplies, construction services, preventive maintenance services, contractual services, and lease of space for the University.

Purchasing Services is responsible for a number of functions in addition to the primary function of centralized university purchasing. These other functions include Central Stores, Central Receiving, Property Control, Surplus Property and Campus Mail.

The office is located at University Park, PC 519 and can be reached at 348-2161.

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Training and Development

The Department of Training and Development offers a variety of training and career development programs for University staff.

These programs are carefully designed and planned to cover relevant and timely topics. Program length and presentation techniques vary according to the objectives of each course, although time for exercises, practice, feedback, and questions is always provided. Programs being offered are listed in the Training and Development Calendar. Upon request, programs can be individually scheduled for departments or special interest groups. The programs are tailored to meet the specific need of the department requesting the training.

The career development programs for targeted employee groups are designed to enhance professional growth and provide promotional opportunities for participants.

The Department of Training and Development also provides internal consulting services in organizational development/ transformation and instructional design. Call 919-5783 for more information.
North Campus and University Outreach

North Campus

The North Campus of Florida Interna-
tional University educates more than
7,700 students on 200 acres on Bisc-
cayne Bay. Academic programs in
Hospitality Management, Journalism
and Mass Communication, Nursing, and
Urban and Public Affairs are
headquartered on the North Cam-
pus. In addition, degree programs in
Arts and Sciences, Business Adminis-
tration, Education, and Health are
offered on the North Campus.

North Campus is the hub for FIU's
community outreach efforts. It
serves as the host campus to the E-
lders Institute, the HRS/Children
and Families Professional Develop-
ment Centre, the Institute of Govern-
ment, the Institute for Public Opinion
Research, the Roz and Cal Kovens
Conference Center, and the South-
est Florida Center on Aging.

Students may apply for admis-
sion and financial aid, register for
classes and receive academic ad-
vising at North Campus. The North
Campus Library occupies 57,000
square feet and has a seating ca-
capacity for 600. The current collec-
tion houses 244,000 volumes and
receives more than 3,100 subscrip-
tions. It is a Federal Government
Document Depository and a Florida
State Government Document De-
pository. The Library has its own
local area network for CD-ROMS and
serves as the focus for the FIU Librar-
ies PantherNet, a prototype remote
dial-in system that allows telephone
access to CD-ROMs, electronic jour-
nals, electronic reserves, library pub-
lcations and provides support for
Distance Learning.

Apartment-style residential hous-
ing on North Campus accommod-
ates 552 students. Student life is
enhanced through the provision of
programs and services offered in
the Wolfe University Center, the lo-
cal point of social and cultural inter-
action out of the classroom. The
Wolfe Center houses the cafeteria,
University Bookstore, Student Gov-
ernment offices, an Olympic-size
pool, computer lab, vending ma-
Chines, automatic banking facilities,
a post office, a 300-seat theater, a
meeting room, a ballroom and
game room. Student development

programs in Recreational Sports, Ca-
Reer Services, Disability Services, In-
ternational Student Services,
Minority Student Services, Orienta-
tion, Student Activities, Student
Counseling, Student Health and
Wellness, Victim Advocacy, the Vol-
unteer Action Center and the
Women's Center are also provided on
the North Campus.

The North Campus is adminis-
tered by the Office of the Vice Presi-
dent of North Campus and
University Outreach. The office is on
the Third Floor of the Library. Repre-
sentatives from the Divisions of Aca-
demic Affairs, Business and Finance,
Student Affairs and Public Affairs
are also found there. Liaisons with
personnel in other Divisions and at
University Park are coordinated
through North Campus Administra-
tion and Operations, 919-5490.

University Outreach

Programs

The mission of University Outreach is
to develop and implement quality
educational programs and services
in partnership with the academic,
business, and professional communi-
ties. The instructional and academic
resources of the University will be ex-
tended through innovative ap-
proaches including distance
learning, alternative scheduling,
and community-based academic
credit and non-credit programs.
State-of-the-art technological capa-
bilities offer a high-quality learning
environment through the Kovens
Conference Center or at a cus-
tomer's location. A professional and
courteous team is dedicated to the
highest standards of customer satis-
faction. Local, state, national, and
international communities will be
served with consistent, cost-effec-
tive, high-quality and distinctive pro-
grams and services.

University Outreach carries out its
mission to extend lifelong learning
opportunities to adult and nontradi-
tional students by providing in-
creased access to University
programs. Courses of instruction are
developed and offered in a variety of
formats. These include profes-
sional development seminars, short
courses, workshops, lecture series,
and career training.

Academic Credit Programs

Degree programs and courses for
academic credit are scheduled to
meet student needs by offering
them at times and locations that will
increase learning opportunities.
More than 200 courses for aca-
demic credit are offered annually
off-campus in Dade and Monroe
Counties. Weekend degree pro-
grams for working professionals
are offered in collaboration with the
University's thirteen colleges and
schools. Instruction using telecom-
 munications is offered between
campuses, public schools, and
other locations with the proper
equipment.

An individual, employer, public
agency or professional organization
may request that a specific course
or degree program be offered, and
may contract with the University to
provide credit courses and degree
programs at the worksite to benefit
a designated group of individuals.
Study Abroad courses are also avail-
able in several academic disci-
plines in Europe, Asia, Africa, Latin
America and the Caribbean.

Students may register for Out-
reach credit courses through the
traditional registration process at
North Campus or University Park.
Special registration arrangements
are made for students who meet at
off-campus sites. For more informa-
tion on Academic Credit Programs
call 919-5669 in Dade County, or 1-
800-310-5548 from other locations.

Distance Learning

Distance Learning coordinates
credit & non-credit courses through
state-of-the-art technology. Stu-
dents are linked with professors
electronically through television,
computers, videotape, satellite tele-
conferencing, and other initiative
technologies. Instruction can occur
in the home, in offices, in the com-

munity, or at school centers conven-
tent to the learner.

Distance Learning may occur
anytime during the day at the con-
venience of the learner. Some in-
struction occurs at specific times
and in specific locations on- and off-
campus. Instead of taking time to
travel to and from campuses, stu-
dents with job and family responsi-
bilities may now tailor their
academic work to their own busy schedules.

Each Distance Learning course is the equivalent of an on-campus section of the same course as to learning objectives, course content, and transferability. Students must meet stated prerequisites or assessment scores where applicable. Distance Learning courses provide the student a higher degree of scheduling flexibility.

For more information about Distance Learning and course offerings, call (305) 919-5217.

Professional Development
Non-credit instruction includes career change and retraining programs, and seminars/workshops for professional development or personal enrichment. Outreach offers career certificate programs for legal assistants, law office administrators, professional travel agents, and applied computer training and total quality management. Professional Development programs are taught by University faculty or professional experts in a specific discipline. A business, agency or professional organization may also contract to have courses or a degree program offered for employees at a specified location. Continuing education units (CEUs) may be awarded to eligible participants in non-credit instruction applicable to professional licensing requirements.

Students may register for professional development courses by mail, fax (919-5484), at the first class meeting on a space available basis, or through the traditional registration process at North Campus or University Park. Special registration arrangements are made for students who meet at off-campus sites. Course payments may be made by check, money order, Visa, or Mastercard. A catalog of Outreach programs is published each semester and may be requested by calling (305) 919-5669 in Dade and Monroe counties, or 1-800-310-5548 from other locations.

Roz and Cal Kovens Conference Center
The Roz and Cal Kovens Conference Center at Florida International University supports the teaching, research, and public service mission of the University by offering an outstanding conference and meeting environment. Conference Center staff deliver quality meeting planning support services, and programs that meet or exceed the expectations of all internal and external clients of the Center. Whether it is an academic symposium, a government assembly, a civic gathering, a professional seminar, an industrial/technological conference or a multinational corporate meeting, the Kovens Conference Center has a full array of University resources, faculty and staff available.

The Center is fully equipped with state-of-the-art telecommunications resources including computer labs, video-conferencing, audio/visual services, and case study rooms. Conference have access to uplink/downlink satellite transmission enabling them to transmit to and from locations throughout the world. Simultaneous translation capabilities for up to three languages are also available. This exceptional array of communications services can satisfy the needs of the most demanding clientele. For more information call the Kovens Conference Center at 305-919-5000.

Conference Services
Kovens Conference Center staff are available to help you transform your program ideas into successful conferences, workshops, seminars, institutes, meetings and other related educational activities. Before the program, staff can help with program planning and concept design, coordinate bid preparations, coordinate promotional activities, and coordinate all other meeting logistics.

During the program, staff will provide all program support services including directional signs, registration, arrange for required audiovisual, telecommunications, simultaneous translation, computer needs, and issue Continuing Education Units. After the program, staff will wrap-up all conference logistical details, process payment of all invoices, tabulate evaluations, and prepare final financial statements.

For more information, contact Florida International University’s Kovens Conference Services staff at (305) 919-5000.

University Outreach Development
Outreach Development is responsible for providing leadership in obtaining financial support for the achievement of University Outreach goals and objectives. This office develops internal and external relationships with key community, legislative, business and professionals in the community at large to ensure the success of North Campus Outreach initiatives. Program personnel coordinate and support the efforts of the University Outreach Development Council, a select group of community volunteers committed to identifying financial resources for Outreach functions. Persons interested in more information on Outreach Development should call 919-5703.

University Outreach Marketing
Outreach Marketing is responsible for promoting lifelong learning programs, and Kovens Conference Center activities. This office provides professional creative and artistic means of publicizing programs and services, including the development and distribution of publications, advertising, and public information. For more information on Outreach Marketing call 919-5772.
Student Affairs

The Division of Student Affairs seeks to educate a diverse body of students by supporting their personal and academic growth. We promote cross-cultural outreach and understanding, create an environment which fosters the development of the ‘whole’ student, promote cultural learning and pluralism, provide programs and services which enhance intellectual, social, cultural, physical, emotional, and spiritual development, support civic awareness and service learning, and prepare students to become contributing members of the community.

The Division is comprised of the following departments and programs: Admissions, Campus Ministry, Career Services, Community College Relations, Disability Services, Financial Aid, Greek Organizations, Health and Wellness Center, International Student Services, Minority Student Services, North Campus Recreation, Orientation, Precollegiate Programs, Registrar, Student Activities, Student Counseling Center, Student Government, Student Judicial Affairs, University Centers, Student Newspaper, Student Omnibusman, University Housing, Victim Advocacy, Volunteer Action Center, and Women’s Center.

Student Affairs offices are located at University Park in Graham Center, the first floor of Charles Perry Building, the Golden Panther Arena, the Modular Building on the west side of campus, and the Health and Wellness Center. On the North Campus, offices are located in the Wolfe University Center, the Health Center, and the third floor of the Library.

Career Services

Career Services is user friendly and assists students with information about majors, jobs, and careers. To help students in these areas, Career Services (CS) has four programs: Career Advisement, Career Counseling, Career Placement, and Experiential Education (Co-op, Internships and career related volunteer work).

CS is highly automated to provide students and alumni with up-to-date information regarding the World of Work and networking opportunities. The offices have a 24-hour Golden Panther Jobline which offers students and alumni an opportunity to listen to employers describe actual job vacancy announcements. For students who register with CS, there is a resume referral system which automatically refers students’ resumes to interested employers; and a PhoneMaster system which calls students at home with specific career-related information; and opportunities to sign up with employers interviewing on campus from any computer lab. A videoconferencing interactive video interviewing system is available for students to interview with employers unable to visit the University.

CS offers numerous workshops and seminars, networking forums Career Fairs, and Low/Graduate School days. The Office houses a comprehensive Career Library, a www homepage and provides evening hours at University Park.

Location: GC 340, University Park, 348-2215; SC 265, North Campus, 940-5609, or 940-5610, and 956-5247.

Disability Services for Students

Disability Services for Students provides information and assistance to students with disabilities who are in need of special accommodations. Individual services are available to students with visual, hearing, speech, physical, and learning disabilities, chronic health problems, psychological disorders, and temporary disabilities. Services include counseling, classroom accommodations, adapted equipment, note-takers, readers, interpreters, adapted testing, priority registration, and referrals. Support and assistance in overcoming architectural, academic, attitudinal, and other barriers encountered is provided. Requests for services must be made prior to the beginning of each semester and current documentation of disability is required to receive services.

Location: GC 190, University Park, 348-3532; Wolfe Student Center 139, North Campus, 919-5305; Bldg. 9, Room 224, Broward Program, 948-6793; TTY/TDD 348-3852.

Office of Admissions

The Office of Admissions is responsible for the recruitment and admission of undergraduate applicants. Staff provides information to prospective students, guidance counselors, and the general public to inform them of the academic and other educational programs offered by the University. The department also collects and processes official application materials for all graduate admissions. For specific information on the application process and requirements for admission please refer to the General Information section of this catalog.

Location: PC 140, University Park, 348-2363; ACI 160, North Campus, 919-5760; Trailers, Broward Program, 475-4150.

Office of Financial Aid

The Office of Financial Aid is responsible for the administration of financial aid programs that assist students in their pursuit of a higher education. Financial Aid includes scholarships, grants, loans and campus employment. Financial assistance based on need is determined on an individual basis using a standard formula provided by the U.S. Department of Education. For specific information on types of assistance, eligibility criteria, application procedures and other requirements, please refer to the General Information section of this catalog.
International Student and Scholar Services

International Student and Scholar Services provides assistance on matters regarding immigration regulations and procedures related to non-immigrant legal status. The staff provides counseling and advisement on academic, personal and financial concerns, and serves as a liaison to academic and administrative departments throughout the University. An orientation program is offered each semester as well as international and inter-cultural programs to assist students in adapting more effectively to the University community and to living in Miami.

An active International Student Club on each campus collaborates with the department in organizing various social activities. Club programs enable students to participate in the international dimension of the University and provide opportunities for involvement in the greater Miami educational community.

Location: GC 217, University Park, 348-2421; WUC 255, North Campus, 919-5813.

Minority Student Services

Minority Student Services provides minority students with personal, academic, social, and cultural support needed for the achievement of educational goals. Staff provides orientation, leadership development, counseling, career and academic advisement, financial assistance and tutorials; and serves as a liaison to academic units and student support services university-wide. This department also collaborates with student groups in coordinating traditional cultural celebrations, and other activities for minority students' physical, mental and social well-being.

Location: GC 216, University Park, 348-2436; North Campus, 919-5817.

Orientation

Panther Preview, FIU's Orientation program, is designed to introduce students and parents to Florida International University. Orientation sessions are scheduled prior to the Fall and Spring terms. The mandatory two-day program for freshmen includes placement testing, advising, question and answer sessions, and a taste of campus life. The one-day parent program introduces parents to FIU, as well as assists them in preparing for the challenges and changes of parenting a college student. Transfer students are strongly encouraged to attend a half-day Orientation that includes advising, question and answer sessions, and a campus tour. Information about Orientation and related services is mailed to newly admitted undergraduate students prior to the first term of enrollment.

Location: GC 340, University Park, 348-3828; WUC 363, North Campus, 919-5804.

Pre-collegiate Programs

Pre-collegiate Programs provides academic enrichment, career planning and scholarship opportunities to promising minority students at the high school level. Pre-collegiate programs also expose high school students to the university environment and facilitate their transition to college.

Location: GC 216, University Park, 348-2619.

Student Activities

Student Activities provides learning opportunities for students to practice and develop leadership, communication, problem-solving, program planning, organization, implementation, and evaluation skills. Activities are co-curricular and cover all aspects of the educational experience. Over 125 registered student organizations exist to enrich campus life and contribute to the social, cultural, and academic growth of students. Students may organize additional groups that promote the University's educational mission.

Student Activities is also responsible for new student Orientation, Student Handbook, Student Government Association, Student Organizations Council, Student Programming Council, the Volunteer Action Center, and student media.

Location: GC 340, University Park, 348-2137; WUC 363, North Campus, 919-5804; LA building, room 203, Davie, 236-1518; University Tower, room 506, Broward, 355-5279.
Student Counseling Center
The Student Counseling Center focuses on enhancing the emotional and cognitive well-being of students. The following services are provided:

1. Individual, couple, and group counseling for problems associated with anxiety, depression, interpersonal relationships, coping skills, and self-esteem.
2. Relaxation techniques and biofeedback training.
3. Psychological testing when appropriate.
4. Educational workshops on mental health and wellness issues.

The Student Counseling Center also offers a structured, supervised training program for graduate level students who are specializing in the mental health field.

The Student Counseling Center is staffed by licensed psychologists and mental health counselors with expertise in dealing with student concerns and development. All services are provided to students free of charge. Complete confidentiality is assured.

Location: GC 211, University Park, 348-2434; HM 110, North Campus, 919-5313.

Student Health Services
The Student Health Service provides affordable, quality, professional primary health care for routine, non-emergency illness and injuries. The department promotes health education, wellness programs, and preventive medicine. The Health Center stimulates student awareness of holistic health behaviors which may be integrated into lifestyle practices to maintain optimal physical and mental health.

Medical services include routine office visits; physical examinations; family planning; HIV testing; immunizations; laboratory testing; limited pharmacy services; nutrition counseling; exercise testing; and private consultations with a physician or nurse practitioner. Referrals are made to local hospitals, pharmacies, and physicians for services not provided at the Health Clinic. Appointments are required. In case of an emergency on campus, Public Safety should be immediately called 24 hours a day.

Office visits are free to students who present on FIU identification card valid for the current semester. Laboratory, immunizations, and pharmacy services are provided for a nominal fee. In addition, the student is responsible for the cost of all services rendered at off-campus medical facilities. Therefore, the University strongly recommends that all students have adequate health insurance coverage. Brochures describing low group-rate health insurance coverage exclusively for students may be obtained at the student Health Center on both campuses.

Students may participate in many health educational programs that stress proactive prevention, including Student Health Advocates of Peer Education (SHAPE), and the Student Health Advisory Council (SHAC), fitness testing, EMPOWER motivational diet groups, running/walking club, AIDS peer educators, and many others.

The Wellness Center features a library of health educational resources including textbooks, journals, audiotapes, videotapes, computer interactive software programs, CD-ROM programs, and laser videodiscs. All of these resources are available for student, faculty and staff use within the Wellness media room, upon presentation of a valid FIU I.D.

Please see the Student Handbook for more detailed information on Student Health Services.

Location: Student Health & Wellness Center:
University Park
Appointments and Information 348-2401
Administration 348-3080
Immunization 348-2688
Health Education/Wellness Center 348-4020

North Campus
Appointments 919-5620
Immunization 919-5675
Wellness Center 919-5307

Student Judicial Affairs
The Office of Student Judicial Affairs is established to ensure that the policies and procedures regarding student rights and responsibilities and the Code of Conduct, which supports these rights, can be freely exercised by each student without interference by others.

As members of the University community, students are expected to honor and abide by the policies and regulations of the University and the Florida Board of Regents as well as Federal and State laws and local ordinances.

Infringements of an academic nature, should be directed to the Office of the Provost. All other complaints that are non-academic should be directed to Judicial Affairs. The University reserves the right to review the case of any student who has been implicated in a criminal offense prior to admission, to determine the student’s eligibility for admission and participation in extra-curricular activities.

The “Student Handbook” provides specific information regarding the “Student Code of Conduct.” Location: GC 214A, University Park, 348-3939.

University Centers
The University Center on each campus provides direct services to students and the University community. The Graham Center (GC) at University Park and the Wolfe Center (UC) at North Campus are the focal
University Housing

University Housing offers three residential accommodations: one apartment complex at North Campus; one apartment complex at University Park; and a brand new residence hall facility at University Park.

The new residence hall will open Fall 1996. This 410-bed, fully furnished residence hall consists of two-bedroom suites with a private bath. The new residence hall has a computer lab, study lounges, common area lounges, recreation facility, game room, common area kitchen facilities, and laundry facilities.

The apartment style units include bedrooms, kitchens, private or semi-private baths, and basic furnishings. Apartment styles include studios, efficiencies, one bedrooms, and two bedrooms.

Prices vary depending on the type of unit and campus location. Semester rates include all utilities (electric, telephone, cable TV, and water). All housing agreements are issued for the academic year with summer assignments available. A $100 deposit is required at the time of application.

Each residential facility provides easy access to the library, classroom buildings, athletic events, and a variety of on-campus recreational, social, and cultural activities. Students have the benefit of 'going home' between classes.

University Housing also serves as a liaison between commuter students searching for housing and community members seeking renters. Current rental listings are available in the University Central Housing Office.

Director: Jim Wassenaar; Location: University Housing Office; Phone: 348-4190; Fax: 348-4295.

Victim Advocacy Program

The Victim Advocacy Center provides emergency crisis intervention, ongoing support, advocacy, and resource referral to students who have been victims of crime or abuse. The Center provides awareness and prevention workshops and educational programs. All services are free and confidential.

The Victim Advocacy Center deals with, but is not limited to, the following types of victimization: sexual violence, relationship abuse, stalking, assault and battery, hate crimes, sexual harassment, and indecent exposure. Support is also available to survivors and their families of murder victims. Persons who have experienced incidents of violence, harassment, or abuse are encouraged to seek assistance from the Victim Advocacy Center.

Location: GC 195, University Park; (305) 348-1215; UC 257, North Campus, (305) 919-5324; Crisis Response Line, 24 hours (305) 348-3000.

Volunteer Action Center

The Volunteer Action Center (VAC) is the central office for community service and volunteer activities on campus. The center encourages students to realize their potential to impact their community and effect social change through the power of service-learning, advocacy and volunteering. VAC organizes monthly volunteer projects, alternative break programs and serves as a clearing house for volunteer opportunities.

Location: GC 331, University Park, 348-2149.

Women's Center

The Women's Center offers various programs and services related to the intellectual, social and professional growth of women within the student body. Through collective efforts, the Center advocates for systematic changes that will improve the lives of women and men. Programming focuses on the particular needs of the female student population at the University and encourages women to learn more about themselves, other women, and the environment in which they live.

Workshops, guest speakers and films are some examples of Center programming. The Center offers a Common Room for students to hold meetings, a library of books, journals and articles focusing on women, and various opportunities for internships. Location: GC 318, University Park, 348-3692.
University Advancement and University Budget

The Division of University Advancement and University Budget is responsible for the operation of all University programs relating to external relations and institutional advancement, the University Budget, and Athletics.

University Advancement

University Advancement is responsible for the operation of all University programs relating to external relations, and institutional advancement. Activities are centered in three departments:

Alumni Affairs

The Office of Alumni Affairs seeks to maintain contact and encourage communication with and participation in special events with the more than 55,000 FIU alumni of record. Alumni participation is stimulated through activities by the FIU Alumni Association and through programs sponsored by this office, including publications, alumni social events, collegiate marketing projects and alumni benefits.

Development

The Development Office coordinates the University's efforts to raise funds in support of the University and its programs from alumni and other individuals, corporations, foundations, and other private sector organizations. The Office develops and implements numerous programs to raise funds annually from alumni and others through the Fund for FIU, and works closely with the Board of Trustees of the FIU Foundation and other volunteers to increase private support for the University and its students.

The Vice President for University Advancement serves as the principal University liaison to the Board of Trustees of the FIU Foundation, Inc., a group of leading South Florida business and community leaders dedicated to securing community support and private funds for the University.

University Relations

The Office of University Relations comprises four units providing professional staff and services to support the University's public relations and advancement activities.

- **Public Relations** plans and administers community-oriented public relations activities and projects, including those directed to the local and national Hispanic communities.

- **Publications** produces effective and informative publications to advance the University's mission. It provides services including design/graphics, electronic typesetting and desktop publishing, mechanicals and production supervision. In conjunction with the typesetting auxiliary, this office produces internal and external university publications, forms and letterheads, promotional collateral and advertisements.

- **University Communications** facilitates communications to FIU's internal audiences and alumni community, and provides specialized public relations and editorial services to the division and executive staff. The office also manages the editorial contents of Inside, the University's quarterly publication, FIU NOW, the biweekly faculty/staff newsletter, the FIU Alumni News, and the FIU Magazine.

- **University Events** strengthens ties between the University and community through planning and coordinating major community held on the FIU campuses. The office hosts special campus visitors and manages events including Commencement, Convocation, dedications, and recognition activities.

Intercollegiate Athletics

FIU is a member of the National Collegiate Athletic Association (NCAA), and the Trans America Athletic Conference (TAAC) for men and women. The University has competed at the Division I-AA level since September of 1987, having competed successfully at the Division II level since 1972. Programs and services in Intercollegiate Athletics provide an opportunity for student-athletes to develop as skilled performers in an educational setting. Much emphasis is placed on the student as a student-athlete to ensure intellectual, emotional and social well-being.

Athletics

Athletic team membership is open to all full-time students. Women's programs consist of basketball, volleyball, soccer, golf, tennis, track and cross country. Men's programs consist of basketball, soccer, baseball, golf, tennis, indoor and outdoor track and cross country. To be eligible for intercollegiate competition, the University requires each student-athlete to be in good academic standing and make satisfactory progress toward a degree. Team membership is determined in a manner which does not discriminate based on race, sex, national origin, marital status, age or disability.

Financial assistance is available to both freshmen and transfer students recruited for all 16 athletic teams. Assistance may include grants, scholarships, loans or self-help programs. To be eligible for financial assistance, each student-athlete must be in good academic standing and make satisfactory progress toward a degree.

Campus Recreation

Campus Recreation offers a variety of intramural sports and recreation activities designed to improve physical fitness and develop appreciation for the value of physical exercise.

Active sport clubs include Softball, and Boxing. Intramural sports include bowling, basketball, flag football, golf, soccer, softball, and volleyball. Events such as powerlifting competitions, golf, soccer, rac-
quetball and tennis tournaments, deep sea fishing trips, and other recreation interests are featured each semester.

**Athletic and Recreational Facilities**

The Golden Panther Arena is a multi-purpose facility which serves as the base for University programs in physical education, athletics, and recreation. The Arena has a seating capacity of 5,000. It contains racquetball courts, basketball courts, an auxiliary court area, and meeting rooms. The arena is open to students, faculty, staff, and alumni with valid University identification cards. FIU students are admitted to all regular season home athletic events free of charge upon presentation of a valid University identification card.

The Baseball and Soccer stadiums are lighted and each have a seating capacity for 1,500 spectators.

Fitness Centers at University Park and North Campuses are equipped with a complete line of Nautilus machines and locker rooms. The Centers are available at no cost to currently enrolled students with valid identification cards. There is a $50 semester fee for faculty, staff, and alumni.

The Aquatic Center on the North Campus overlooks the bay and is fully furnished to provide an environment for conversation, study and/or sun-bathing. The multipurpose design of the 50 meter x 25 yard pool and diving well allow for recreational and instructional use.

The Racquet Sports Center at University Park has 12 lighted tennis courts and eight lighted racquetball courts. The Racquet Sports Center at North Campus has six lighted tennis courts, along with a sand volleyball court. Both campuses have two full-sized basketball courts near their Racquet Sports Centers.

For additional information or hours of operation call:

Campus Recreation: 348-2951
University Park, 948-4571 North Campus

Fitness Center: 348-2575, University Park, 946-5478, North Campus.

GPA Open Recreation: 348-2900

Racquet Sports Center: 348-2763, University Park, 919-4572, North Campus

Aquatic Center: 919-4595.
Centers and Institutes

Center for Accounting, Auditing, and Tax Studies

The Center for Accounting, Auditing, and Tax Studies (CAATS) conducts and sponsors innovative research. Major ongoing projects focus on the audit impact of emerging technology and on detection of fraud.

CAATS builds bridges to practitioners by turning ideas into products; it enhances the value of accountants' services to clients and to the public by contributing to audit efficiency and effectiveness. CAATS' international commitments relate to the accounting issues confronting the less developed nations, particularly in the Middle East and Latin America.

CAATS also conducts seminars and short courses designed to provide educational opportunities to South Florida public accountants, internal auditors, and management accountants. CAATS strives to be self-supporting. Net fees earned by providing educational opportunities to accountants, together with contributions received from the public, are applied to research and to the enrichment of graduate instruction. In this way, CAATS provides the margin of excellence which enriches the entire educational experience.

All CAATS activity is dedicated to advancing accounting, auditing, and tax knowledge. CAATS is located in BA 245B, University Park, 348-2581.

Center for the Administration of Justice

The Center for the Administration of Justice (CAJ) was founded at Florida International University, a member of the State University System of Florida, in 1984 to engage in research, training and public education about the administration of justice in Latin America. With offices in Miami and San Jose, Costa Rica, CAJ has become a unique international resource at the forefront of justice sector reform in Latin America.

CAJ employs a multidisciplinary and international staff of specialists, including lawyers, political scientists, public administrators and public policy analysts. Many are former justice sector officials with experience and skills in justice sector issues.

Giving special emphasis on support to local efforts to strengthen and invigorate fair and independent justice systems, the CAJ regularly works with public officials, scholars and practitioners in Latin America.

The CAJ has become a leading source of information and leadership on justice sector reform issues in Latin America. Its assessments have been widely disseminated and have been critical in public policy decision-making throughout the region.

Center for Advanced Technology and Education (NSF-CATE)

The NSF-funded Center for Advanced Technology and Education - CATE provides a computing environment capable of engaging researchers as well as facilitating classroom and laboratory-based instruction in critical technology areas such as image processing and computer vision, neural networks, distributed and parallel processing, visual programming and 3-D modeling. CATE constitutes an infrastructure that is viable for cutting-edge research activities providing an environment that facilitates state-of-the-art educational and research activities. The ONYX parallel machine, confocal microscope, high-speed motion analyzer, roving robot, and several (24) SGI workstations provide the potential for: (a) parallel and distributed processing, (b) high performance 3-D rendering and modeling, (c) real-time processing capability, (d) operating systems and graphics that meet current standards, and (e) high-speed data acquisition, playback, analysis, and communications links.

Center for Banking and Financial Institutions

The College of Business Administration at Florida International University has a long tradition of preparing students for careers in the banking and financial institutions. The Center for Banking and Financial Institutions was established to provide additional services to banks and financial institutions located in the Southeast United States and in Latin America and the Caribbean.

Associates of the Center for Banking and Financial Institutions are a select group of highly qualified functional specialists in the areas of accounting, finance, information systems, marketing, and human resource management, who are interested in the application of their functional specialties in solving contemporary organizational problems in banks and financial institutions.

The Center for Banking and Financial Institutions at FIU meets the demands of the banking and financial service sector through four major activities:

Education: The Center for Banking and Financial Institutions along with the Department of Finance, co-sponsors the Banking Certificate program. Upon completion of a four-course sequence of banking and financial institution courses, students are awarded a Certificate in Banking from the College of Business Administration. The Center also supports educational opportunities for bank and financial institution employees and other individuals who wish to continue their education in the area of banking and financial institutions, through other off-campus programs.

Management Development: The Center for Banking and Financial Institutions develops and conducts high-quality training programs and conferences on topics that are of interest to and demanded by banks and financial institutions. The Center also offers custom in-house training programs for those institutions who desire a more focused or specialized program.

Research: The Center for Banking and Financial Institutions supports theoretical and applied research on
Institute on Children and Families at Risk

The Institute on Children and Families at Risk was established by the School of Social Work at Florida International University in 1991. The Institute promotes research, demonstration projects, training, and technical assistance to address the needs of children, youth, families, and the social networks and systems that support them. With an emphasis on prevention, early intervention and major reforms in crisis and out-of-home care, the Institute has generated a series of multi-cultural, multi-generational and multi-modal initiatives. These include training and instructional design for child welfare workers in South Florida.

Research and capacity-building functions of the Institute encompass a range of family support strategies including family-support villages, refugee, immigrant and migrant service initiatives, services and systems integration, consumer-driven practice and policy, community campaigns for culturally-responsive services and missions, and refinancing strategies. The Institute also designs and evaluates improvements in ‘helping’ technologies for all service systems supporting at-risk children, families and communities.

Emphasizing partnerships at the local, state and national level, the Institute collaborates with a number of institutions, organizations and sectors to promote technology transfer, joint demonstration projects and capacity-building efforts. Special emphasis is on the link between universities, public sector social health services and public schools. The Institute provides consulting services both nationally and internationally with a focus on the training and technology transfer between states and nations on techniques and strategies to better organize services and supports for at-risk children, families and communities.

The Institute also serves as the research and development arm of the School of Social Work and provides research opportunities for master's and doctoral-level students. Its cross-systems endeavors also depend on the leadership and expertise of faculty and students in other disciplines at Florida International University, at several other universities in the South Florida area and the staff of the State of Florida's Department of Health and Rehabilitation Services staff.

Drinking Water Research Center

The Drinking Water Research Center (DWRC) was established by the Florida Legislature in 1977, and charged with the responsibility for applied research on the state's drinking water. Since that time, the Center has responded to state, national and global environmental concerns by expanding its research focus to cover a wide spectrum of water-related environmental issues.

Water Treatment—evaluating treatment processes; evaluating alternative disinfectants and their effect on water quality; researching the use of high energy electrons in water, wastewater and hazardous waste treatment.

Surface Water Quality—studying treatment of domestic, industrial and hazardous wastes since improper disposal can affect surface water quality.

Ground Water Quality—studying ground water movement; investigating water management modeling of the Everglades Basin.

Marine Environment—oil spill shoreline protection and countermeasures; studying blooming disease of corals.

While the Center has a complete array of instrumentation for the water quality analyses necessary in the course of its research projects, time and staff constraints do not permit routine testing of water for individuals.

The DWRC does not conduct academic classes. However, qualified students often have an opportunity to work as a research assistants in the DWRC laboratories or carry out independent research projects. Cooperation and interchange with other departments in the University is stressed.

The Center is part of the College of Engineering and Design and is located in VH 326, University Park, 348-2826.
Center of Economic Research and Education

The Center of Economic Research and Education is a Type II Center approved by the Board of Regents of the State University System. The purpose of the Center is to foster a greater understanding of economics. The Center represents an important link between the University, business, and education communities. As part of its activities, the Center undertakes research projects, sponsors conferences and seminars, provides courses in economic education for teachers, and disseminates economic data and information.

Established in 1982 as one of eight centers located throughout the State University System, the Center is located in DM 314, University Park. Its phone number is 348-3283.

Center for Educational Development

The Center for Educational Development (CED) is a multidisciplinary unit based in the College of Education whose mission includes: (1) planning, technical assistance, training and research in support of educational systems development internationally and domestically; (2) increased minority group access to and achievement in educational systems; (3) acquisition of state and external resources for development of educational systems; and (4) multi-institutional collaboration in educational development projects and research.

The Center is governed and supported jointly by Florida International University, Miami Dade Community College, and the University of Miami. It is comprised of two specialized institutes: the International Institute of Educational Development and the Urban Educational Development Institute.

For more information call 348-3418, or write to Dr. Miguel A. Escotet, Director, International Institute of Educational Development, College of Education, University Park Campus, Miami, Florida 33199. E-mail: iide@solix.fiu.edu

Center for International Executive Education (CIEE)

The CIEE, located at University Park BA 332, was founded with the mission of bridging the resources of the College of Business Administration with the mission of bridging the resources of the College of Business Administration with the interests of the International Business Community. The core strategic focus of the CIEE is to increase the competitiveness of organizations by providing training that results in the development of a global management perspective and an understanding of the impact of the global economic and political forces on the Americas.

The Graduate Diploma Series (GDS) programs offered by the CIEE, the Graduate Diploma in International Business (GDIBM), Graduate Diploma in International Marketing (GDIM), and the Graduate Diploma in International Finance (GDIF) facilitate the achievement of this mission by providing a structured program of study to participants who wish to sharpen their global management skills without enrolling in a graduate degree program.

These programs are designed to provide participants with the competencies and skills necessary to assume responsibilities in the international sales and marketing, management, and finance functions of their organizations. These programs have been structured for participants who have an undergraduate degree in business or engineering.

Non-business majors who wish to update their international business, marketing or finance skills by enrolling in the programs are encouraged to first enroll in an international business course which will expose participants to the fundamental concepts in the field. This course is offered every summer before the commencement of the GDS programs.

In addition to these programs, the CIEE pursues its mission by sponsoring the Global Manager Program, a 3-week executive development program, in partnership with the business community, that is designed for middle to senior level executives who have to grapple with the challenges of the global economy.

The Center also offers The New Entrepreneur in the Americas, an intensive six-week business and language program, where participants from around the world will meet in a dynamic university environment to strengthen their entrepreneurial business expertise and to develop their English language communication skills.

The North American Management Seminar (NAMS), a four week program for students from around the world. It is a seminar about the various agreements that exist nowadays (Natica, Pacto Andino, Mereco, Cumber de las America, etc.), agreements of great impact for better commerce among the nations of the Americas.

Elders Institute

The Elders Institute, a continuing education unit within the Southeast Florida Center on Aging, serves the educational needs of the senior adults of the University’s North Campus. The Institute’s mission and scope is to initiate, plan, design, and manage non-credit short courses, lectures, seminars, and workshops for older learners. Programs are offered during daytime hours, and are held primarily on campus. The courses offered are primarily in the humanities, the behavioral sciences and the social sciences. Workshops and seminars provide opportunities to develop new skills and to explore methods and means for personal growth and self-improvement. The Institute’s instructional staff are community experts, University faculty and retired seniors. The participants are motivated learners who seek knowledge, new information and skills for intellectual stimulation and personal growth.

The Elders Institute at Coral Gables presents continuing education courses at the Biltmore Hotel (old museum building) 1200 Anastasio and at the Coral Gables Congregational Church. Half the courses are offered in Spanish; half in English. The Institute is located in Conference Center 301, North Campus, 919-8910.
English Language Institute

Since 1978, the English Language Institute (ELI) has offered non-credit English language instruction to non-native speakers of English in the community and from abroad.

Intensive English Program: Classes in reading, grammar, writing, and conversation are taught at five levels of proficiency. Language laboratory facilities are available in which students can increase their listening comprehension and speaking skills under the guidance of an instructor. Students normally take a full, three-course load, but it is also possible for fully admitted University students to take a course in a single skill.

Testing and Placement: The English Language Institute offers proficiency testing of both written and oral proficiency in English as a support service for academic units throughout the University. Evaluative procedures are designed to fit the needs of individual programs or schools, to assist them in the identification of individual students' level of proficiency in English, and to place students in appropriate programs of study when needed. In addition, the Institute regularly administers the Test of English as a Foreign Language (TOEFL).

Community Outreach Program: The English Language Institute offers non-credit courses in the evening and on Saturday for non-native speakers of English.

Accent Reduction: Accent reduction classes are available for non-native speakers of English who wish to improve their pronunciation.

Other Programs: Business English, Super Intensive (Immersion), Summer Institute

The English Language Institute is located in LC 204, University Park, 345-2222.

FAU-FIU Joint Center for Environmental and Urban Problems

Florida's environmental and urban problems derive in large part from the state's rapid growth and development. Recognizing the need to address these problems through effective growth management, the Florida Legislature established the Joint Center for Environmental and Urban Problems at Florida International University and Florida Atlantic University in 1972. In the many years since then, most of Florida's growth management laws and policies have taken shape, and the Joint Center has been a frequent and important contributor to policy formation at the state, regional, and local levels. The Joint Center has made its contribution by taking an interdisciplinary approach to these complex and interrelated areas of study.

The Joint Center functions as an applied research and public service facility that carries out programs supportive of government agencies, educational institutions, and non-profit organizations. The Center is active in the following program areas: (1) research projects, with public and private agencies that address environmental and urban problems; (2) community service projects; (3) production, in conjunction with FIU media services, of video documentaries concerning urban and environmental issues; (4) workshops, assemblies, conferences and lectures; and (5) publication of the Joint Center's quarterly journal, Environmental and Urban Issues.

The Joint Center maintains offices at FIU's University Park Campus, at FAU's Broward Campus at University Tower in Fort Lauderdale, and at FAU Boca Raton campus.

The FIU office is staffed by an associate director, senior research associate, secretary, and several research assistants. University faculty specialists from the School of Design, Environmental & Urban Systems, Environmental Studies, and several other programs frequently work with Joint Center staff on specific projects.

Research and Service: Research at the Joint Center focuses on the development and implementation of public policy in the areas of growth management, sustainable development and integrated community, urban, and regional planning. The Joint Center is committed to assisting government agencies and communities in these areas. Recent research topics have included economic development for central Miami neighborhoods; energy-efficient urban design; military environmental policy; affordable housing and community development strategies in the nonprofit sector; and transportation and land use.

Research clients have included the U.S. Army Environmental Policy Institute, the Florida Department of Community Affairs, Homes for South Florida, Homestead Habitat for Humanity, the City of Homestead, the City of Miami, and the Metro-Dade Planning Department.

Through in-house research and through collaboration with FIU faculty, the Joint Center will continue to link university resources to communities and to the region, and will focus interdisciplinary expertise on the problems of South Florida's urban, agricultural, and natural landscapes.

The Center has recently expanded its scope with international linkages to Latin America and South Africa. In 1994, The Joint Center and the FIU School of Design collaborated in the formation of the FIU Ecotourism Research Council. The Council provides a forum for faculty members to pursue multidisciplinary applied research on environmentally sensitive development. The Council's initial efforts are proceeding under an agreement between FIU and the Nicaraguan Ministries of Natural Resources and Tourism.

Working with the South African Institute of Town and Regional Planners, the Joint Center has developed an internship program for recently graduated South African planners. The program was initiated in late 1993. The experience gained from this, and the opportunities created by the post-apartheid era, have led to a commitment to expand the program and explore collaborative research opportunities in the field of sustainable development.

Future Aerospace Science and Technology Center for Cryoelectronics (FAST)

FAST is one of five centers created by the Air Force as part of its minority university enhancement program, providing research and experience opportunities for undergraduates and graduate students in the area of Electrical Engineering.

The FAST Center evaluates novel applications of space-based cryoelectronics, initially studying new systems for reduction in losses.
of feed and phase shift networks in phased array transmitter systems. This involves development of low-loss active integrated low-noise phased array or post-processed phased array down-converter receiving systems, high gain-low loss, low noise micro (and later millimeter) wave circuits and systems for space based applications. Of particular interest is the ability to design and fabricate integrated systems which could be used as "steerable" phased array antennas with some frequency-agility as well.

Current research is focused on issues relating to: integration and hetero-epitaxy of the buffer and dielectric layer with the GaAs semiconductor and 123 high Tc superconductor layers: obtaining good ohmic GaAs contacts at low temperatures, tailoring the surface morphology of the high Tc superconductor to achieve a designed Q value for the passive elements, package design and testing with respect to microwave and thermal cycling consideration, and the identification and minimization of noise source.

The FIU Institute of Government
Since 1982, the Institute of Government, as part of the College of Urban and Public Affairs has provided training, technical assistance, consulting services, policy forums and executive leadership development programs to municipal, county, and state administrators, staff members, appointees, and elected officials in Dade, Monroe, and Broward Counties. This program draws the university together with the community in which it resides, and couples ideas and skills from many disciplines with working governments.

The Institute is primarily funded through a state grant with the Florida Institute of Government located in Tallahassee. There are 15 Institutes of Government affiliated with state universities and community colleges around the state.

Upon request, the Institute develops and delivers specialized training for governmental units to address specific needs they have identified. The training is developed in consultation with the clients and can be delivered at their site or at the University. The Institute offers a work-shop series for career development for governmental staff as well.

The Institute also holds conferences and workshops as a forum for community discussion about and analysis of policy issues of concern to local governments and state departments in the South Florida area.

Technical assistance and applied research services are also provided for a wide variety of units and divisions within state and local governments. Issues which may be addressed include public management, public policy analysis, and service delivery systems.

The Institute and the Department of Public Administration conduct the Executive Development Program for mid-level career public and voluntary sector managers. This certificate program emphasizes problem solving and decision making in government and the voluntary sector, personal growth, career development and state of the art management tools. Community and government leaders as well as FIU faculty serve as Adjunct Faculty in the Program and participate in panel discussions relating to the aforementioned topics. Participants in the program are also linked with upper-level public administrators and elected officials to provide personal and professional growth and mentoring.

The Institute arranges technical assistance and consulting services when governments feel they would benefit from outside support. They might, for example, be seeking to solve an internal problem, to gather and analyze research data pertinent to their operation, or to carry out an evaluation of some segment or all of their operation.

Topics in the past have included "Right-Sizing Government", "The Homeless Problem", "Decision Making in the Aftermath of Hurricane Andrew", and "Florida Sunshine Laws''.

The Institute holds conferences and workshops as a forum for community discussion about and analysis of policy issues of concern to local governments in the South Florida area.

The Institute develops and carries out executive leadership development through a number of programs, such as, the annual Executive Leadership Development Mentoring Program. This program links upper-level public administrators and elected officials with less-experienced administrators and officials. In a year-long program starting each fall, to provide personal and professional growth for each individual.

The HRS/Children, and Families Professional Development Centre
The HRS/Children, and Families Professional Development Centre (PDC) at FIU is responsible for providing Florida Health and Rehabilitative Services (HRS) Children and Families (C&F) program staff with a functional knowledge base as well as a set of practical skills for working with children and families. Located on FIU’s north campus, the PDC is staffed by a credentialed and experienced group of instructors who provide training to child welfare workers throughout a geographical catchment area from Vero Beach to Key West.

The PDC provides a foundation of child welfare knowledge and skills to ensure that new staff have competencies in the practices, policies, and procedures that are essential to the mission of the C&F program. In addition, the PDC offers specialty inservice training to increase and develop specialized competencies for experienced C&F staff and the staff from private child welfare service providers.

The stated purpose of the focused PDC training is to enable child welfare workers in general to make better casework decisions that result in improved service outcomes for Florida’s children and families.

Hemispheric Center for Environmental Technology (HCET)
The Hemispheric Center for Environmental Technology was established by Florida International University and the United States Department of Energy’s Office of Science and Technology (OST) to research, develop, and demonstrate innovative environmental technologies and to establish alliances to facilitate the implementation of these technologies.
HCET's research and development (R&D) activities focus on the decontamination and decommissioning of nuclear facilities and the management and reduction of radioactive and hazardous wastes. These R&D activities support the Department of Energy's Environmental Management programs in the areas of waste characterization, monitoring, and sensor technology; underground storage tank remediation; and decontamination and decommissioning.

HCET's mission is to develop and market technologies to solve environmental problems and foster sustainable development throughout the Americas. To achieve this end, HCET will perform research and development, gather and disseminate market and technology assessment data, facilitate technology transfer, and form partnerships with industries and governments throughout the Americas. HCET targets its technology development organizations and industrial users of environmental technologies.

The foundation for HCET's technological capabilities has successfully been built within Florida International University's College of Engineering and Design. HCET has the capability and resources to develop innovative technologies as well as assess and demonstrate technologies that have been developed or modified both in-house and by other vendors. HCET also has the expertise to certify emerging technologies and pursue, organize, and facilitate technology transfer from suppliers to consumers.

Institute of Judaic Studies
The Institute of Judaic Studies (US) brings the University and the community together in a mutual effort to nurture teaching and research in academic areas which stand as the cornerstones of Western Civilization. Contemporary issues and problems provide focal points for study, dialogue, exchange and travel.

The objective of the Institute is to infuse Jewish content into the curriculum of the University at all appropriate levels. The Institute fosters scholarship and inquiry into Jewish themes leading to the development of course offerings within existing academic departments. For more information, call 348-3225.

Center for Labor Research and Studies
The Center for Labor Research and Studies, established in 1971 is the only labor center in Florida and one of the most dynamic in the nation. It serves students, faculty and administrators throughout the State University System as well as labor, business, community organizations, academics, policy makers, and journalists, nationally and internationally, through a series of diverse activities.

Accredited through the University and College Labor Education Association (UCLEA), the Center is one of 51 accredited labor centers in the United States. Its broad mission is to provide services to workers and their organizations. This broad mission translates into three specific objectives: 1) provide comprehensive, statewide labor education service; 2) provide programs designed to support faculty research in labor relations, the changing nature of work, and labor education issues; and 3) offer a multidisciplinary credit and non-credit curriculum in labor studies at the University.

As a Type I Center of the Florida State University System, the CLR&S has major responsibility at the University for research and curriculum development on labor relations and the changing nature of work in Florida. This responsibility can be met, in part, by following the University's mandate as described in its mission statement: (10) serve the broad community, with special concern for greater Miami and South Florida, enhancing the metropolitan area's capacity to meet its cultural, economic, social and urban challenges.

Since it was founded, the CLR&S has become recognized for its innovative national and international non-credit education programs. These programs have educated labor and management participants in areas including labor relations, pension fund administration, dispute resolution, labor history, dynamics of worker participation and international labor issues.

The Center's non-credit classes for Florida's labor-management practitioners include open enrollment single courses; individualized courses for particular unions, as well as the two certificate programs, the Workplace Issues Certificate and the Union Leadership Academy Certificate. The credit program, offered through the College of Arts and Sciences, includes a Bachelor's Degree in Liberal Studies with a concentration in Labor Studies and two related Certificate programs.

The Center houses various projects which serve to carry out its research and training functions including non-credit programs and conferences, applied and theoretical research projects, and publications including Latin American Labor News, Labor Studies Forum and an Occasional Paper Series. In addition, three related institutes, the Immigration and Ethnicity Institute, the Human and Labor Rights Institute, and the Institute for Comparative Studies on Work and Society, are housed at the Center. The Center is located in the Labor Center building at the University Park Campus, (305) 348-2271, Fax: (305) 348-2241.

Latin American and Caribbean Center
The Latin American and Caribbean Center (LACC) promotes advanced education and research on Latin America and the Caribbean, a region of intense interest to the United States. It offers undergraduate and graduate certificate programs to both degree and non-degree seeking students, combines research in the social sciences and humanities, graduate and undergraduate instruction and offers publications, and public education activities that address the full range of issues affecting hemispheric relations. A new M.A. in Latin American and Caribbean Studies has been approved by the Board of Regents for implementation in the Fall 1996 semester. This multidisciplinary master's program builds on FIU's strong and growing resources in area studies, most notably the more than 100 faculty members who are recognized nationally and internationally for their expertise in the region, with special emphasis on the disciplines of economics, history, international relations, modern languages, political science, and sociology/anthropology. For more information about the M.A. in Latin American and Caribbean Studies see the College of Arts and Sciences section in the Graduate Catalog.

Since it was founded in 1979, LACC has become one of the country's leading programs in contempo-
LACC regularly places students in foreign study programs and local internships. More information is available in DM 353 University Park, 348-2894.

Center for Management Development

The Center for Management Development, located in the College of Business Administration, was created by the Board of Regents in 1980.

Contract Training: Management training and executive development programs are provided in the community and on campus. Programs are created to meet the unique training needs of each client. Faculty/trainers use highly interactive, practical, and industry-specific activities aimed toward developing job-related competencies. Certificates, Continuing Education Units (C.E.U.'s), and Nursing Contact Hours may be earned.

Certificate Programs: Professionals who desire to advance their careers by upgrading their knowledge and skills will benefit from participating in the appropriate certificate program. Certificates may be earned in:
- Human Resource Administration
- Training & Human Resource Development
- Managing Quality Health Care Systems

Technical Assistance and Consultation: The Center is a clearing house for matching a variety of faculty resources to complex and specialized needs of the community. It draws on a variety of disciplines in the College of Business Administration to serve the private and public sectors.

The Center is located in BA 332, University Park Campus, (305) 348-4237.

The Family Business Institute: The Family Business Institute was created to provide an on-going series of small, personal, in-depth seminars focusing on challenges faced by mature family business owners, their family, and their non-family staff. A newsletter augments the educational programs. The following corporate sponsors are partners dedicating their resources toward supporting health family businesses: Arthur Andersen LLP, Bankers Trust Co. of Florida, Steel Hector & Davis, and The Equitable Musibay/Chiappy Agency.

The Family Business Institute is located in BA332, University Park Campus, (305) 348-4237.

Manufacturing Research Center (MRC)

The Manufacturing Research Center (MRC) is being developed with a grant from the Advanced Research Projects Administration and is a fully integrated manufacturing system from concept, through prototyping, to finished hardware or manufactured tool and die assemblies. With the rapid movement of industry to reduce time to market from product concept, the Center has been designed to support local industry in the South Florida region and provide an environment for advance manufacturing research. The Center contains a design and rapid prototyping front-end, integrated into a CNC machining facility through to a back-end injection molding machine with injection mold fabrication and part fabrication, both in plastic and metal by spin casting. The Center contains: a rapid prototyping system, a mill-turn machining center, a vertical machining center, a coordinate measuring machine, a material handling system, and injection molding equipment, supporting CAD/CAM and cell control software.

Concurrent Engineering: Under the support of ARPA, the MRC has developed an integrated product/process concurrent engineering system. It is a feature-based engineering system for concurrent product and process design, and focuses on the development of unified product information model, an innovative product modeling technique, a manufacturing resources database and various engineering applications to demonstrate the feasibility of the concurrent engineering concept.

Production Planning & Scheduling: Funded by the Defense Logistic Agency, this project is to improve the practice of apparel production planning, scheduling, and control, with its focus on development and implementation of a practical computer integrated system for the apparel manufacturing industry. The system will accurately estimate time-phased plant capacity, generate production plans, prepare resource requirements, assign workers to workstations, respond to order inquiries and change, and control
shop floor activities. It will be built upon an open system architecture with a set of production engineering tools for master production planning, capacity planning, learning and skill prediction, material requirements planning, plant loading, worker assignment, and shop floor monitoring and control.

Intelligent Cell Engineering and Control: The purpose of this research (funded by NSF) is to design and develop a neural network based decision support system for use in design and configuration of advanced manufacturing cells and cell control systems. This project also explores an intelligent shop floor framework for on-line scheduling and control of flexible manufacturing systems.

Knowledge-Based Data Screening & Analysis for Shuttle Operations: Sponsored by NASA, this project is to design and develop a knowledge-based tool for the shop floor modeling, analysis and reporting.

Center for Multilingual and Multicultural Studies

The Board of Regents established the Center for Multilingual and Multicultural Studies as a center of excellence in order to improve the quality of foreign language, bilingual education, linguistics, and multicultural programs offered in the State.

The main purpose of the Center is to develop, plan and coordinate research and training programs in the areas of foreign languages and literature, linguistics, bilingual education, multicultural approaches to the humanities in international and domestic contexts, and international studies. Its primary research programs focus on language policy, migration, and ethnicity.

The Center houses several projects which serve to carry out its research and training functions. Among these are the African-New World Studies initiative and the documentary project Living History, A Reflection on the Cuban Nation and Exile.

Cuban Exile History and Archives Project: The Cuban Exile Archives collects rare imprints, manuscripts, audiovisuals, ephemeral artifacts, recorded oral testimonies and machines readable records illustrating and documenting the Cuban-American heritage. It seeks to disseminate them through historical research by members of the University, other area institutions, and the general public. The resulting research is published in Cuban Heritage: A Journal of History and the Humanities which appears quarterly. The preservation of the Cuban community's living testimony through the techniques of oral history is also one of the Project's main concerns. The Project encourages the donation of historically significant materials to the Cuban Exile Archives or to other appropriate repositories.

National Policy and Resource Center on Nutrition and Aging

The National Policy and Resource Center on Nutrition and Aging was established under the federal Administration on Aging Nutrition/Malnutrition Initiative to reduce malnutrition and food insecurity among America's elders. The Center works with the Administration on Aging to provide national leadership in Aging and Nutrition Networks by placing food and nutrition services in the mainstream of home and community-based social, health and long-term care delivery systems serving elders. Reflecting national cost containment trends, the Center is dedicated to (1) risk-based outreach to serve the most nutritionally needy elders, (2) expansion of nutrition services in aging programs to reduce malnutrition, and (3) multidisciplinary nutrition care management to improve quality of life, promote independence, and decrease early nursing home admissions and hospitalizations. The Center collects and disseminates information, and trains nutrition and aging providers. The Center can be reached at (305) 348-1517; fax (305) 348-1518 or e-mail nutrelrc@fiu.edu.

Institute for Public Management and Community Service

The Institute for Public Management and Community Service was re-established by the College of Urban and Public Affairs at Florida International University in 1994. The Institute administers a multi-faceted municipal development and democratic institution-building project in South America through a grant from the United States Agency for International Development. The project's primary focus is on Chile and Paraguay. In support of this project, the Institute has developed a close working partnership with the senior management of Metropolitan Dade County by drawing on their expertise and experience in local governance issues.

The project's Paraguayan program, its most elaborate component, involves activities at the national, departmental, and municipal levels of government with the goal of strengthening that country's young democratic institutions through a variety of strategies. The Institute is very much involved in helping Paraguayan policy makers identify means to promote governmental decentralization, citizen participation, and the enhancement of local government capacity. Project staff assist high-level Paraguayan officials through resource identification and as advisors.

The Institute has provided both financial and intellectual assistance to Chilean non-governmental organizations and public officials through the funding of conferences and seminars on decentralization, privatization and municipal finance. Drawing on the wide-ranging expertise of scholars and practitioners across the Western Hemisphere, the Institute successfully provides educational opportunities for the practitioners of local government in Latin America.

Institute staff have published various articles and monographs, served as resources to visiting international dignitaries to the Metropolitan Dade County area, have consulted around the world, and were active in the organization of the Summit of the Americas, held in Miami in 1994.
Institute for Public Opinion Research

The Institute for Public Opinion Research (IPOR), a research arm of the School of Journalism and Mass Communication, conducts public opinion polls from its survey research lab on the North Campus. The Institute was founded in 1983 and was quickly recognized by public and private organizations throughout South Florida as a valuable survey research resource. IPOR’s primary function is to provide decision-makers with timely and relatively inexpensive information on how a scientifically-selected cross-section of the public stands on various issues. Ways in which IPOR is fulfilling this function include:

1. The annual FIU/Florida Poll which is the most comprehensive public opinion survey conducted in the state. The FIU/Florida Poll asks Floridians about the important issues facing them - crime, education, transportation, health, taxes, politics, etc. - and asks many of the questions year after year, providing valuable longitudinal information not available elsewhere. The publication of the results in book form and on computer disk of the FIU/Florida Polls provides public officials, academics, businessmen, and the general public with a ready reference resource about opinion in the state. The information provided in the FIU/Florida Poll books is unique in the United States, and gives planners and decision makers in Florida an additional valuable information resource.

2. IPOR provides survey research expertise to members of the FIU community seeking such expertise in conjunction with their official duties at the university. This includes assistance in the preparation of research proposals which call for survey research, provided that the survey research part of the project, if funded, is conducted under subcontract by IPOR in cooperation with the director of the funded project.

3. IPOR’s staff and facilities are available in support of instructional activities at the graduate and undergraduate level involving public opinion research and survey research methodology.

4. IPOR continues to seek external funding in support of its long-standing interest in the area of public-policy communication. That may, for example, include the development of an annual South Florida survey, development of a standard metropolitan area assessment instrument which would be readily available to major cities and counties in the state, or development of a standard instrument by which state and local legislators can quickly and inexpensively gauge the sentiments of their constituents on policy issues.

5. IPOR, in cooperation with the Central American Journalism Project of the SJMC, involves itself in the development of affordable and scientifically acceptable survey research methodology usable in the developing democracies of Latin America and the Caribbean.

IPOR is located in ACI, Room 266, on the North Campus. For more information call 940-5991.

Institute for Public Policy and Citizenship Studies

The Institute for Public Policy and Citizenship Studies was founded in 1985 to offer students, faculty, and the community alternative learning opportunities in public policy and citizenship development. Four key objectives have guided the Institute’s programs:

1. To provide non-traditional educational opportunities to the student body on the responsibilities and opportunities of citizenship.

2. To assist students and faculty in understanding the impact that public policy has on their daily lives and in their career pursuits.

3. To promote interdisciplinary research efforts among faculty on local and national policy matters.

4. To encourage joint university and community efforts on local policy issues.

The Institute sponsors the Student Honors Mentor Program, a semester-long opportunity for students to meet and interact with peers and faculty members from other academic disciplines. The Mentor Program encourages participants to examine a public policy issue in a small group setting through discussions, research, or innovative projects. In providing an alternative mode of learning, the Institute hopes to give students practical experience in community decision-making and problem-solving.

The Institute also sponsors and supports the annual intergenerational Public Policy Summer Institute which teams elder civic activists with high school students, many of whom are at-risk.


The Institute also works in cooperation with other FIU centers, including the Women’s Studies Center, The Center on Aging, The Labor Center, and The Latin American/Caribbean Center.

In addition, the Institute sponsors conferences and events focusing on key policy issues that are salient within our local community. Nationally known speakers and University faculty are invited to present their research findings and perspectives on a variety of issues ranging from citizenship education in Dade County to the ethical implications of an aging society to the impact of government regulations on the fishing industry. The conferences are designed to offer the public and University community additional resources in understanding the policy problems that we, as a community, face on a daily basis.

The Institute is located in LC 220, University Park, 34/2977.

Small Business Development Center

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

The Small Business Development Center is a basic services center. It disseminates business management
General to Development an is, 1982, gerontological provides commerce, promoting Southeastern tract assistance are SBDC ASSISTANCE business, Miami assists analyses information, and the public. The Center consists of three components:

Research: Focus on applied public policy research, as well as promotion of research involving faculty from a variety of disciplines within the University. There is an emphasis on potential applications of research findings by policy makers and health and social sciences practitioners.

Education and Training: Organization, in close collaboration with the academic departments, of credit and non-credit certificate programs for undergraduate and graduate students and for practitioners in the field of aging. Delivery of training seminars and workshops both at the University and at locations throughout Southeast Florida.

The Elders Institute, a continuing education program, offers a broad array of continuing education courses for the older learner and is exploring development of additional educational and cultural opportunities for older persons.

Program Development and Technical Assistance: Design of innovative concepts and programs that further public policy objectives through expansion of opportunities for older people and improvement of the delivery of health and social services to them. The Center provides assistance and support for agencies and organizations serving older people throughout Florida.

The Center is located in ACI 384, North Campus, 919-5550.

Southern Technology Application Center STAC
The Southern Technology Application Center (STAC) serves nine southeastern states and is part of a national network of technology transfer resources and expertise. STAC’s mission is to help increase U.S. competitiveness and spur economic development in the southeast through the transfer of critical knowledge. One of the programs STAC operates in the Southeast Regional Technology Transfer Center to help companies acquire and commercialize technology developed by NASA and other federal laboratories. It provides assistance in every phase of technology development and commercialization.

STAC’s assistance spans from identifying and locating technologies, to analyzing markets, to bringing together experts from government, academic and industry to address complex technical questions. STAC is supported by the State of Florida University System and NASA’s Office of Space Access and Technology, Commercial Technology Division.

Women’s Studies Center
The Women’s Studies Center, established in 1982, is a university program with a multipurpose mission that focuses on the development and coordination of academic women’s studies courses and the support of research on gender. In addition, the center coordinates extracurricular programming on gender issues for faculty, staff, students, and the general community.

The center offers an academic interdisciplinary certificate program in Women’s Studies, which was established to provide an opportunity for the study of the historical, political, economic, literary, social, and cultural roles of women and the function of gender in diverse societies and cultures. The courses are coordinated through various university departments, and are open to women and men alike, as a balance to traditional education. In Women’s Studies classes, students explore the range of women’s expe-
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 to 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." Description of the content of courses are referred to as "course equivalency profiles."

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 that year in which 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 1010. A student who has successfully completed SYG 1010 at the community college is guaranteed to receive transfer credit for SYG 1010 at the state university if the student transfers. The student cannot be required to take SYG 1010 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 transfer 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 institutions 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 con-
tent 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:

1. Courses in the _900-_999 series (e.g., ART 2905)
2. Internships, practical, clinical experiences, and study abroad courses
3. Performance or studio courses in Art, Dance, Theater, and Music
4. Skills courses in Criminal Justice
5. 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 Gabriel Yarn in the Registrar's Office at (904) 488-2389, 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 telephone number (904) 488-4402 or FAXcom 278-4402.
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College of Arts and Sciences
College of Arts and Sciences

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

The College is composed of 20 departments, in addition to the School of the Computer Science, and several interdisciplinary programs.

Undergraduate Programs

The College offers departmental programs of study leading to Bachelor's degrees in biological sciences, chemistry, computer science, dance, economics, English, environmental studies, geology, history, international relations, mathematical sciences, mathematics, modern languages (French, German, Portuguese, and Spanish), music, philosophy, physics, political science, psychology, religious studies, sociology and anthropology, statistics, theatre, and visual arts. The College also offers interdisciplinary programs of study leading to Bachelor's degrees in humanities and liberal studies. A labor studies concentration is available in the liberal studies program.

Minor programs of study are offered in art history, biology, chemistry, computer science, dance, economics, English, French language and culture, general translation studies, geology, geography, history, humanities, international relations, mathematical sciences, mathematics, music, philosophy, physics, political science, Portuguese, psychology, religious studies, sociology and anthropology, Spanish language and culture, statistics, theatre, and visual arts.

Certificate Programs


lation and Court Interpreting, Linguistic Studies, Translation Studies, Tropical Commercial Botany, Western Social and Political Thought, and Women's Studies.

Admission

FIU freshmen and sophomore students may be assigned with an "intended" major in the College upon earning 24 semester hours.

They may be fully admitted to the College if they have earned 60 semester hours, have a cumulative grade point average (GPA) of 2.0, and have passed the CLAST. Full admission to the College is accomplished by filing the form "Request for Acceptance into Upper Division College/School".

A transfer student with an Associate in Arts degree from a Florida community college, or having completed the equivalent coursework at a four-year institution with a minimum of 60 semester hours earned, having a cumulative grade point average (GPA) of 2.0, and having passed the CLAST, may be admitted to a program in the College.

Applicants must submit an Application for Admission to the University and must follow the regular University procedures. Applicants must be eligible for admission to the University before admission to the College.

All students are encouraged to seek advising as early as possible in the departmental/program of their choice, even if they have not yet been fully admitted into that major.

College Requirements for a Baccalaureate Degree

Candidates to the Bachelor's degree must satisfy individual departmental requirements, and the following College requirements. In addition to the University-wide requirements:

1. A minimum of 120 semester hours in acceptable coursework is required.

2. At least half of the upper division credits in any major must have been taken in residence at the University.

3. In the last 60 semester hours of enrollment, the student must earn nine semester hours of elective credits through coursework outside the major; six of which are to be taken outside the department sponsoring the program.

4. Earn grade of "C" or higher in all courses required for the major. A grade of "C-" or lower is not acceptable in any required course.

5. Of the total number of hours submitted for graduation, a minimum of 50 semester hours must be in upper division courses. Additionally, the student may submit, with departmental approval, up to ten semester hours of lower division courses taken at the University.

College Requirements for a Minor

Students who desire to earn a minor must satisfy individual departmental/program requirements, and the following College requirements:

1. At least half of the courses used to fulfill the requirements must have been taken at the University.

2. Earn a grade of "C" or higher in all courses required for the minor. A grade of "C-" or lower is not acceptable in any required course.

3. Of the courses used to fulfill the requirements, at least half of them must be at the upper division level and preferably should include a minimum of one course at the 4000 level.

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

L. Scott Quackenbush, Associate Professor and Chairperson
Victor Aponius, Assistant Professor
Brad Bennett, Assistant Professor
Charles Bigger, Associate Professor
Richard Campbell, Research Scientist

Chun-Ian Chen, Associate Professor
Dan Childers, Assistant Professor
Tim Collins, Assistant Professor
Keith Condon, Assistant Professor
Leon A. Cuervo, Professor

George H. Dalrymple, Associate Professor
Maureen Donnelly, Assistant Professor
Kelsey Downum, Associate Professor and Graduate Program Director

James Fourquerean, Assistant Professor
Brian Fry, Associate Professor
Robert M. George, Lecturer
Walter M. Goldberg, Professor
Jack B. Fisher, Research Scientist
Rene J. Herrera, Associate Professor
Ronald D. Jones, Professor
Christopher Kernan, Research Scientist
Suzanne Kaptur, Associate Professor
David N. Kuhn, Associate Professor
David W. Lee, Professor
John Makemson, Professor
Gerald L. Murison, Professor
Steven F. Oberbauer, Associate Professor
Case K. Okubo, Associate Professor and Head Undergraduate Advisor

Thomas R. Pitzer, Instructor
Thomas E. Pliske, Lecturer
Jennifer Richards, Professor
Laurie L. Richardson, Associate Professor
Barbro A. Roller, Lecturer
Philip Stoddard, Assistant Professor
Martin L. Tracey, Professor
Joel Trexler, Associate Professor
Ophelia I. Weeks, Associate Professor

Scott Zona, Research Scientist

Bachelor of Science

Degree Program Hours: 120

General Science Requirements

Lower Division

Required Courses

Six semester hours of lectures and two semesters of laboratories in each of the following areas: general biology, general chemistry, general physics and organic chemistry, calculus I and II or Statistics I and II. (Note: Calculus I and Statistics I together do not satisfy this requirement.) Grade 'C' or better required.

Recommended Courses

Foreign language. Two semesters of language.

To qualify for admission to the department, FIU undergraduates must meet all the lower division requirements including CLAST, completed 60 semester hours, and must otherwise acceptable to the department.

Upper Division Program

Required Courses

1. PCB 3043  Ecology  3
2. PCB 3513  Genetics  3
3. BCH 3033+L General Biochemistry  5
or
PCB 3203+L Cell Physiology  4
or
PCB 4723+L Animal Physiology  4
or
BOT 4504+L Plant Physiology  4
or
MCB 4404+L Microbial Physiology  4
or
PCB 4724+L Comparative Physiology  4
4. BSC 4931 Undergraduate Seminar  1
5. Biology Electives
   5 courses (min) 14
6. Laboratory Requirement  4 Labs
7. Electives outside major  9

Five upper division lecture courses (3000-level and above) to be chosen in consultation with a faculty advisor. The following courses are not allowed as Biology Electives: Student Research Labs (BSC 3915, 4919, and 6916); Cooperative Education credits (BSC 3949 and 4949); Biology of Aging (PCB 3241); and courses for non-science majors (BOT 1010, PCB 2700 and APB 2170, BSC 2023, EVR 3013, and OCB 2003).

Laboratory requirement is met with any four upper division Biology labs either from PCB 3043, 3513, or from any of the lab electives. This does not include the lab in requirement 3. Students interested in teacher certification should contact the College of Education at 348-2721.

Special Programs

Bachelor of Science with Honors

Admission to the Program

a. Permission of the department. Application should be made by letter to the Curriculum Committee from the applicant after completion of two semesters at the University and prior to two semesters before graduation. The letter should state the intended research problem and be countersigned by the Thesis Committee (advisor and mentor).

b. A minimum GPA of 3.5 in biology, chemistry, physics, geology, and mathematics courses.

g. Graduation Requirements

a. A minimum GPA of 3.5 in biology, chemistry, physics, geology, and mathematics courses.

b. Completion of the BS requirements in Biology and Honors Research (BSC 4015, 1 to 3 credits, and Honors Thesis (BSC 4974, 1 credit).

c. Completion of Honors research in collaboration with a two-person Honors Committee, consisting of the honors advisor and one other member. The honors advisor must be a tenured or tenure-earning member of the department. The research results must be written in the form of an honors thesis and approved by the Honors Committee.

d. Deposit two completed approved copies of the Honors Thesis with the Department's Office: one copy to be kept in the department and the other to be deposited in the Library.

e. Presentation of the results of the Honors Research in a departmental seminar.

Minor in Biology

Required Courses

BSC 1010 and BSC 1011 with labs, and three additional courses, one of which must include a lab and one must be at the 4000-level or higher. Minimum credits beyond BSC 1010 and BSC 1011 with labs are 10 credits. Grades of 'C' or better required for all courses and lab.
Science in Biology. After completing the third year curriculum at FIU, the students enter the medical program to receive the traditional four-year medical education. Satisfactory completion of the basic medical science courses at the medical school will permit the students to earn 30 credit hours toward the BS degree in Biology. For further information contact Dr. C. F. Chen at 345-3509.

Certificate Program in Tropical Commercial Botany

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

Course Descriptions

Note: Laboratories should be taken concurrently with or subsequent to lectures. Students should register for each separately.

Definition of Prefixes

APB - Applied Biology; BCH - Biochemistry; BOT - Botany; BSC - Introductory Biology; MCB - Microbiology; OCB - Oceanography (Biological); PCB - Process Cell Biology; ZOO - Zoology.

APB 2170 Introductory Microbiology (3)

APB 2170L Introductory Micro Lab (1). Basic concepts of microbes as pathogens, food spoilage and fermentative organisms. Microbial relationships to immunology, sanitation, pollution and geochemical cycling. Not applicable for majors in Biological Sciences or Medical Laboratory Sciences. (Lab fees assessed) (S)

BCH 3033 General Biochemistry (4)

BCH 3033L Biochemistry Lab (1). Chemistry of proteins, lipids, carbohydrates, and nucleic acids; principles of enzymology, metabolism, and bioenergetics. Prerequisite: CHM 2211 and BSC 1010. (F)

BCH 4034 General Biochemistry II (3). Protein synthesis and structure, nucleic acid synthesis and structure, protein-protein and protein-nucleic acid interactions, membrane structure, signal transduction, and metabolic regulation. Prerequisite: BCH 3033.

BCH 5134C Workshop in Chromatography Techniques (1). Workshop covers the theory and practice of chromatographic techniques for separate complex mixtures of biomolecules, including absorption, ion exchange, size exclusion and affinity chromatography. Prerequisite: Graduate status. (S)

BCH 5280 Bioenergetics (3). The relationship of thermodynamics to living processes; energy transduction, enzymes in coupled systems. Prerequisite: Permission of instructor.

BCH 5411C Techniques in Molecular Evolution Research (5). Ribosomal genes from related organisms are amplified by polymerase chain reaction (PCR) and sequenced. Phylogenetic maps are made by computer from sequence data. Students may use material from their own research. Prerequisites: BCH 3033 and Lab; PCB 4524 and Lab or Graduate Status.

BOT 1010 Introductory Botany (3).

BOT 1010L Introductory Botany Lab (1). A history of mankind’s study and use of plants, and a survey of plants of economic importance. Includes lab. No science prerequisite. (Lab fees assessed) (S)


BOT 3014 Plant Life Histories (3). Plant form, function, and reproduction; the lives of algae, fungi, bryophytes, ferns, gymnosperms, and flowering plants. This course is designed for majors and certificate students. Prerequisites: A course in General Biology or permission of instructor. Corequisite: BOT 3014L.

BOT 3014L Plant Life Histories Laboratory (1). Laboratory to accompany Plant Life Histories. Students examine living and preserved material in the lab and outdoors. Plants examined at all levels of complexity. Prerequisites: A course in General Biology or permission of instructor. Corequisite: BOT 3014.

BOT 3353 Morphology of Vascular Plants (3).

BOT 3353L Morphology of Vascular Plants Lab (1). Origin and evolution of plants, especially vascular plants of tropical origin. Analysis of vascular plant anatomy and morphology emphasizing the underlying principles of plant construction. Prerequisite: A course in General Biology or permission of instructor. (F)

BOT 3434 Mycology (3)

BOT 3434L Mycology Lab (1). An introduction to the taxonomy, genetics, and physiology of fungi with special emphasis on commercially
and secondary plant metabolism will be covered including biosynthesis and degradation of natural products as well as their biological/pharmacological activity. Prerequisite: CHM 2211 or BCH 3033. (S)

BOT 5575 Photobiology (3) Botany 5575L Photobiology Lab (1). The study of basic photochemical mechanisms as they occur in molecular biological processes such as photosynthesis, plant growth, animal vision, bioluminescence, and radiation damage. Prerequisite: Permission of instructor.

BOT 5602 The Functional Ecology of Tropical Plants (3). Botany 5602L The Functional Ecology of Tropical Plants Lab (1). The relationship of climate and soils to the distribution and function of the major plant groups of the tropical regions. Prerequisites: Two courses in botany or permission of instructor.

BOT 5605 Plant Ecology (3). Botany 5605L Plant Ecology Lab (1). In-depth study of plant ecology at 3 levels: individual, population, and community. Laboratory and field exercises will examine lecture topics. Includes lab.

BOT 5605L Plant Ecology Lab (1). Field and lab exercises will examine plant ecology of individuals, populations, and communities. Prerequisites: BSC 3043, or permission of instructor. Corequisite: BOT 5605.

BOT 5606 Ethnobotany (3). Review the use and management of plants by indigenous people. Discuss emerging theories in ethnobotany, examine the role of ethnobotany in conservation and resource utilization. Prerequisites: BOT 3810, BOT 3723, or ANT 3403, or permission of instructor. (F)


BOT 5682C Florida Plant Communities (3). Botany Two-week field trip to many diverse plant communities of the state. Ecological and environmental factors influencing plant distribution will be examined, contrasting vegetation among sites. Prerequisites: BSC 1011, BSC 3043 or permission of instructor.

BOT 5816L Ethnobotany Workshop (1). Field methods in the study of plant use by traditional and modern societies. Examines botanical documentation, ethnological description and experimental design. Prerequisite: Permission of instructor.

BOT 5924 Workshop in Tropical Families (3). An introduction to important spermatophyte families, including systematic, ecology, and conservation. Includes laboratory and field experience. Prerequisite: Permission of instructor.

BSC 1010 General Biology I (3) BSC 1010L General Biology Lab (1). Prerequisites: Equivalent to BSC 1010 or equivalent. BIOL 1010. General Biology major recommended. Concurrent registration in laboratory is required. (Lab fees assessed) (F,SS)

BSC 1011 General Biology II (3) BSC 1011L General Biology Lab (1). A survey of organismal biology with emphasis on botany, and zoology. Science background or Biology major recommended. (Lab fees assessed) (S,SS)

BSC 2023 Human Biology (3) BSC 2023L Human Biology Lab (1). Biological and general scientific principles governing human structure, function, health, and relationship to the planetary environment. For non-science majors. Concurrent registration in laboratory is required. (Lab fees assessed)

BSC 3915, 4914 Student Research Lab (1-12). Independent laboratory study in a project or projects of the student's choice. Registration by consultation with instructor. May be repeated for additional credit.

BSC 3949, 4949 Cooperative Education in Biology (1-3). A student majoring in biological sciences may spend several terms employed in industry or government in a capacity relating to the major. Prerequisites: Permission of Co-op Education and major department.


BSC 4915L Honors Research (1-3). Laboratory and/or field study in consultation with an Honors Thesis advi-
BSC 4931 Senior Seminar (1). An exploration of various research works in biological sciences. Oral presentation by the students required.

BSC 4934 Topics in Biology (1-3). An intensive study of a particular topic or limited number of topics not otherwise offered in the curriculum.

BSC 4974 Honors Thesis (1). Writing an Honors Thesis. Prerequisite: BSC 4915.

BSC 5259 Primate Biology (3). Survey of the natural history of the primates, monkeys, and apes with special emphasis on primate anatomy, evolution, ecology, and behavior. Prerequisites: General biology or permission of instructor.

BSC 5259L Primate Biology Field Lab (1). An introduction to the field study of non-human primate behavior. Prerequisites: General biology or permission of instructor.

BSC 5596C Environmental Instrumentation (3). Theory and techniques for measurement of environmental parameters of interest to field biologist. Prerequisite: Permission of instructor.

BSC 5825 Wildlife Biology (3). The study of game and non-game wildlife with emphasis on management and population regulation. Prerequisite: Permission of instructor.

BSC 5927 Graduate Bioresource Workshop (1). This workshop is designed to introduce Biology graduate students to the various resources available for graduate teaching and research. Prerequisite: Graduate standing.

BSC 5936 Glaser Seminar: The Biology of Tomorrow (1). A series of lectures by invited, internationally recognized authority in biological topics of current and future concern. (S)

ENY 1004 General Entomology (3)
ENY 1004L Entomology Lab (1). The morphology, systematics, physiology and ecology of the major insect orders, and introduction to basic field procedures. Prerequisite: BSC 1011. (S)

MCB 3023 General Microbiology (3)
MCB 3023L General Microbiology Lab (1). Introduction to the principles and techniques of microbiology, genetics, taxonomy, biochemistry and ecology of microorganisms. Prerequisites: Organic Chemistry I and II; General Biology I and II; or permission of instructor. (S)

MCB 4203 Microbial Pathogenicity (3)
MCB 4203L Microbial Path Lab (1). Host-parasite relationships: physiology of bacterial, fungal and viral pathogens emphasizing mechanisms of pathogenicity and the host response. Prerequisites: MCB 3023

MCB 4404 Microbial Physiology (3)
MCB 4404L Microbial Physiology Lab (1). Introduction to the study of physiological and metabolic activities of microorganisms and processes that affect them. Prerequisites: MCB 3023, MCB 3023L. (S)

MCB 4603 Microbial Ecology (3)
MCB 4603L Microbial Ecology Lab (1). Principles and applications of microorganisms interactions with the environment; physical, chemical, and biological. Prerequisite: MCB 3023, MCB 3023L.

MCB 4653 Applied and Food Microbiology (3)
MCB 4653L Applied and Food Microbiology Lab (1). Public Health microbiology of water and sewage, microbiology of food preparation and spoilage; industrial aspects of microbiology. Prerequisite: MCB 3023, MCB 3023L.

MCB 5114 Microbial Diversity (3).
Analysis of metabolic and morphological diversity in bacteria in the context of bacterial systematics. Prerequisites: MCB 3023 and MCB 3023L; additional course in microbiology or biochemistry. Corequisite: MCB 5996L.

MCB 5114L Microbial Diversity Laboratory (1). Laboratory to accompany Microbial Diversity lecture. Prerequisites MCB 3023 and MCB 3023L; additional course in Microbiology or Biochemistry. Corequisite: MCB 5996.

MCB 5405 Biology of Photosynthetic Bacteria (3).
MCB 5405L Biology of Photosynthetic Bacteria Lab (1). Study of the physiology and ecology of photosynthetic bacteria, including Blue-green algae (cyanobacteria), purple and green bacteria, and Halobacteria.

MCB 5505 Virology (3)

OCB 2003 Introductory Marine Biology (3)
OCB 2003L Introductory Marine Biology Lab (1). A survey of marine biological environments and zones, including the relationship of the physical and chemical environment to the distribution of marine plants and animals. Concurrent registration in Laboratory is required for core. (Lab fees assessed) (F)

OCB 3043 Marine Biology and Oceanography (3).
OCB 3043L Marine Biology and Oceanography Laboratory (1). An ecological approach to the biology of organisms in the marine environment with an emphasis on zonation and adaptation to the physical environment. Intended for biology majors or other science majors. Prerequisites: BSC 1010 and BSC 1011 or equivalent. (S)

OCB 3264 Biology of Coral Reefs (3).
Biology of reef animals and reef ecology: emphasis on Florida and Caribbean reefs. Classroom instruction and observation of coral reef and turtle grass communities. Prerequisites: BSC 1011 and scuba certification.


OCB 5670L Techniques in Biological Oceanography (1). A laboratory course designed to acquaint the student with biological sampling techniques at sea. Shipboard experience will be required as part of the course. Prerequisites: Previous course in marine biology; and permission of instructor.

PCB 2510 Introductory Genetics (3).
PCB 2510L Introductory Genetics Lab (1). Principles of Mendelian and Molecular genetics with selected examples of applications such as genetic engineering and twin studies. (SS)
PCB 2700 Foundations of Human Physiology (3)
PCB 2700L Foundations of Human Physiology Lab (1). Functional survey of the organ systems of the human body, intended primarily for non-science majors. (Lab fee assessed) (F)

PCB 3043 Ecology (3)
PCB 3043L Ecology Lab (1). The basic principles governing the interaction of organism and environment. Trophic structure and energetics, species diversity, evolution of populations, biogeochemical cycles. (S/F)

PCB 3203 Cell Physiology (3)
PCB 3203L Cell Physiology Lab (1). Biochemical and biophysical principles of cell physiology: enzyme structure and function, energy transductions, electrical and chemical signals. Prerequisites: Eight semester hours each of General Biology, General Physics, and Organic Chemistry. (S)

PCB 3241 Physiology of Aging (3). Introductory treatment of the physiology of organ systems with emphasis on the decline in organ function with aging and on the resultant limitations in physiological performance. (F)

PCB 3513 Genetics (3)
PCB 3513L Genetics Lab (1). Mendelian inheritance and introduction to molecular genetics. Prerequisites: BSC 1010 and CHM 2210. (F)

PCB 3702 Intermediate Human Physiology (3)
PCB 3702L Intermediate Human Physiology Lab (1). Functions of the human body and the physio-chemical mechanisms responsible for each organ’s function. Prerequisite: General Biology.

PCB 3703 Human Physiology I (3)
PCB 3703L Human Physiology I Lab (1). Basic facts and concepts relating to the physiology of cells and nervous, muscular, and cardiovascular systems, with emphasis on regulatory mechanisms and abnormal physiology. Prerequisites: One year of Biology or Zoology, Chemistry, and Physics. (F)

PCB 3704 Human Physiology II (3)
PCB 3704L Human Physiology II Lab (1). Physiology of respiratory, gastrointestinal, excretory, endocrine and reproductive systems. Continuation of PCB 3703. Prerequisites: One year of Biology or Zoology, Chemistry, and Physics.

PCB 3711 Physiological Mechanisms (3). Physiological processes studied from a biophysical and biochemical perspective. Integrative aspects of physiology are de-emphasized to accomplish a detailed, but introductory coverage of mechanisms. (F)

PCB 4024 Cell Biology (4). A structural and molecular analysis of cell function. Prerequisite: PCB 3513.

PCB 4233 Immunology (3)
PCB 4233L Immunology Lab (1). Fundamentals of immunology including antibody structure, immunopathology, molecular recognition at cell surfaces and immunological aspects of cancer biology. Prerequisite: General Microbiology or permission of instructor. (S)

PCB 4254 Developmental Biology (3)
PCB 4254L Developmental Biology Lab (1). Comprehensive survey of principles of development and critical analysis of methods used to study these problems. Prerequisites: PCB 3513 and PCB 3203 or BCH 3033.

PCB 4301 Freshwater Ecology (3)
PCB 4301L Freshwater Ecology Laboratory (2). Community-level analysis of marshes, lakes and rivers from the theoretical and practical viewpoints, emphasizing quantitative description of community structure and function. Prerequisite: Ecology or General Biology and permission of instructor.

PCB 4413 Advanced Genetics (3). Advanced level treatment of topics such as meiotic disjunction-uniparental disomy, transcription & splicing - differential splicing, polymorphisms, chromatin organization, horizontal gene transfer, etc. Prerequisite: PCB 3513.

PCB 4524 Molecular Biology (3)
PCB 4524L Molecular Biology Lab (1). Advanced nucleic acid and protein biochemistry: biosynthesis of macromolecules and molecular genetics. Prerequisite: Biochemistry or Genetics and Organic Chemistry. (F)

PCB 4573 Evolution (3). A study of the synthetic theory of evolution, its historic and experimental justification and the mechanisms of natural selection. Prerequisites: Genetics, Ecology, or permission of instructor.

PCB 4723 Animal Physiology (3)
PCB 4723L Animal Physiology Lab (1). Advanced study of physiological mechanisms employed by animals to maintain function of the organ systems and to interact with the environment. Prerequisites: Organic Chemistry and Cell Physiology or Biochemistry.

PCB 4724 Comparative Physiology (3)
PCB 4724L Comparative Physiology Lab I (1). Regulation of the internal environment: osmotic gastrointesti-nal, metabolic, circulatory and respiratory physiology. Prerequisites: General Biology and Organic Chemistry. (F)

PCB 4733 Human Systemic Physiology I (3)
PCB 4733L Human Systemic Physiology Lab (1). Selected topics in human physiology with emphasis on topics of clinical significance. Prerequisite: Introductory human physiology or a college level course in biology or chemistry.

PCB 4734 Human Systemic Physiology II (3). Selected topics in human physiology with emphasis on topics of clinical significance. Prerequisite: Introductory human physiology or a college level course in biology or chemistry.

PCB 5195 Histology/Microtechnique (3)
PCB 5195L Histology/Microtechnique Lab (1). Chemistry and use of fixatives and dyes; histotechnology emphasizes procedures used in research and pathology labs including techniques for enzymes, protein, carbohydrate, nucleic acids and lipids. Prerequisite: Biochemistry or Cell Physiology.

PCB 5238 Marine Comparative Immunology Workshop (1). A workshop at the Keys Marine Lab to present general and unique research methodologies associated with the immunology of marine animals. Prerequisite: Permission of instructor.

PCB 5185 Workshop in Microtechnique (1). Laboratory techniques required for preparation of tissues for light microscopy/histological study. Prerequisite: Senior or graduate student status.

PCB 5259 Topics in Developmental Biology (3). Molecular and cellular mechanisms in the development of plants and animals. Prerequisite: Senior status or permission of instructor.

PCB 5303 Limnology (3)
PCB 5303L Limnology (1). Chemical and physical properties of standing and flowing freshwater systems: ecology and interactions of the
fresh water flora and fauna in relation to abiotic factors; oligotrophic to eutrophic conditions.

PCB 5327 Coastal Ecosystems and Modeling (3). Basics of ecology for coastal and wetland ecosystems. The theory and mechanisms of simulation modeling. Hands-on creation and application of computer models in ecological research. Prerequisites: PCB 3043 and MAC 2311 or permission of instructor.

PCB 5344L Tropical Ecology Field Lab (3). Field course in Costa Rica with fieldwork in two or more diverse habitats (rainforest, and dry forest). Emphasis on diversity and interactions between species. Visits to selected sites of deforestation, conservation and restoration.

PCB 5358 Everglades Research and Resources Management (3). Application of basic skills in ecology to contemporary issues in the Everglades area, with emphasis on the relationship between research and management of wilderness, wildlife, vegetation, water, and fire. Prerequisite: PCB 3043 Ecology or permission of instructor.

PCB 5405 Biochemical Ecology (3). Principles of chemical communication between diverse organisms and the importance of a variety of allochemicals in community structure. Prerequisite: Permission of instructor.

PCB 5407 Workshop: Microelectrodes in Microbial Ecology (1). Use of Microelectrodes to measure chemical microenvironments and biological processes in natural samples. Hands-on experience with O2 and pH electrodes. Prerequisite: Permission of instructor.

PCB 5423 Advanced Ecology: Populations and Communities (3). Advanced analysis of population and community ecology. Prerequisites: PCB 3043 or permission of instructor or graduate standing.

PCB 5454 Advanced Ecology: Communities and Ecosystems (3). Advanced analysis of ecological principles pertaining to communities, ecosystems, and landscapes, with special emphasis on the South Florida and Caribbean region. Prerequisites: Graduate standing or PCB 3043 and permission of instructor.

PCB 5615 Molecular and Organismic Evolution (3). The evolutionary relationships among nucleotides and proteins as well as the processes which yield these relationships. The possible molecular events leading to speciation. Prerequisites: Genetics and Biochemistry.

PCB 5665 Human Genetics (3). Principles and techniques in the analysis of the human race. Prerequisite: PCB 3513.

PCB 5676 Evolution and Development of Sex (3). The evolutionary explanations for the evolution of sexual reproduction and models of sexual differentiation. Prerequisites: Genetics and Evolution or permission of instructor.

PCB 5677 Evolution and Development (3). The models and evidence for the interaction of development and evolution, in both plant and animal systems. Prerequisite: Permission of instructor.

PCB 5686 Population Biology (3). PCB 5686L Population Biology Lab (1). Intrinsic properties of natural and theoretical populations and their dynamics and interactions, and responses to disturbance. Includes field problems and computer exercises. Prerequisite: A course in genetics, evolution, or permission of instructor.

PCB 5687 Evolutionary Ecology (3). Adaptations and interactions of plants and animals in natural and disturbed habitats. Prerequisite: PCB 3043 or equivalent.

PCB 5785 Membrane Signal Transduction (3). Hormones and neurotransmitters as extracellular messengers. Membrane receptors and mechanisms of signal transduction: membrane channels and enzymes, direct linkage and G-protein linkage. Second messengers. Prerequisites: BCH 3033 or PCB 3203. (F)

PCB 5786 Membrane Physiology (3). Chemical and physical properties of the plasma membrane, its biosynthesis and functions in transport and signal transduction. Prerequisites: PHY 2048, PHY 2049, BCH 3033 or PCB 3203.

PCB 5806 Endocrinology (3). Biochemistry, physiology and anatomy of the endocrine systems of vertebrates and invertebrates. Steroid, peptide, and terpenoid hormones which control reproduction, growth, and other parameters. Prerequisite: BCH 2011, CHM 2211, one physiology course. (S)

PCB 5835C Neurophysiology (3) PCB 5835L Neurophysiology Lab (1). Comparative neurophysiology: physico-chemical mechanisms of resting and action potentials; synaptic transmission; neural coding and integration; sensory-motor function and neurophysiological basis of behavior. Prerequisites: Biochemistry or Cell Physiology, Calculus.

PCB 5934 Topics in Skeletal Muscle Physiology (4). Advanced discussion of some aspects of the biophysics, biochemistry and physiology of skeletal muscle contraction. Topics may vary from year to year. Based on review articles and research papers. Prerequisite: APB 4240 or PCB 3703 and PCB 3203 or BCH 3033.

PCB 5938 Ecosystem Studies Seminar (3). Theory and practice of ecosystem analysis, based on discussion of current articles and books. Emphasis on using different approaches to understand natural complexity, with case studies researched by students. Prerequisites: Course in Ecology, permission of instructor.

ZOO 2303 Vertebrate Zoology (3) ZOO 2303L Vertebrate Zoology Lab (1). Systematics, anatomy, physiology, development and ecology of vertebrate animals. Prerequisites: BSC 1010, BSC 1010L, BSC 1011, and BSC 1011L or equivalent. (F)

ZOO 2713C Comparative Vertebrate Anatomy (4). Study of the structural diversity and classification of vertebrates and the evolution of various organ systems. Dissection of a variety of vertebrate specimens to reveal relationships of the various organ systems. Prerequisite: One year of General Biology with laboratory or General Zoology with laboratory.

ZOO 3203C Invertebrate Zoology (4). Taxonomy, anatomy, development, physiology and ecology of major invertebrate groups, including terrestrial and aquatic phyla. Prerequisite: BSC 1011 or equivalent. Includes lab. (S)

ZOO 3603 Embryology (3) ZOO 3603L Embryology Lab (1). Animal morphogenesis. Laboratory must be taken with lecture. Prerequisites: One year of General Biology with laboratory or General Zoology and General Botany with laboratory.

ZOO 3731 Human Anatomy (3) ZOO 3731L Human Anatomy Demonstration (1). Survey of organ systems
of the human body with major emphasis on the skeletal, muscular, and peripheral nervous system. Guided examination of prospected human cadavers. Prerequisite: A course in General Chemistry, General Physics and General Biology. (F)

ZOO 3733 Human Gross Anatomy I (3)
ZOO 3733L Human Gross Anat I Lab (1). Structure and function of various tissues, organs and organ systems of the human body. Dissection of human cadaver material to reveal the relationships of the various organ systems of the body. Prerequisites: BSC 1011, BSC 1011L, CHM 1046, CHM 1046L, or equivalents. (Lab fees assessed)

ZOO 3734 Human Gross Anatomy II (3)
ZOO 3734L Human Gross Anat II Lab (1). Continuation of ZOO 3733. Prerequisites: BSC 1011, BSC 1011L, CHM 1046, CHM 1046L, or equivalents.

ZOO 3753 Histology (3)
ZOO 3753L Histology Lab (1). Microscopic anatomy of cells, tissues and organs. Prerequisites: General biology and organic chemistry. (F)

ZOO 3892C Biology of Captive Wildlife (3). Behavior, nutrition, physiology, anatomy, pathology and diseases of captive wildlife. Taught at Metrozoo. Prerequisite: General Biology or permission of instructor.

ZOO 4234 General Parasitology (3). Modern concepts of biology, development, immunology and pathology of animal parasites. Corequisite: ZOO 4234L.

ZOO 4234L General Parasitology Lab (1). Taxonomy and morphology of animal parasites. Prerequisite: BSC 1010 and BSC 1011. Corequisite: ZOO 4234.

ZOO 4472L Ornithology Lab (1). Students will learn the skills needed to conduct ecological and behavioral studies on birds in their natural habitats. Some Saturday field trips and at least one overnight weekend field trip. Corequisites: ZOO 4472. (F)

ZOO 4513 Animal Behavior (3). Evolutionary approach to understanding the diversity of behavioral strategies. Ecological and physiological mechanisms of behavior will be emphasized. Prerequisite: General Biology. (F)

ZOO 4513L Animal Behavior Laboratory (1). Field study of wild animals and lab study of neuroethology of fishes and invertebrates. Three weekend day trips and one overnight weekend field trip. Prerequisite: ZOO 4513, may be taken as a corequisite. (S)

ZOO 4743C Neuroscience (4). Structure and function of the human nervous system. Dissection and demonstration of human nervous system and various neurophysiology labs. Prerequisites: One course in physiology and one course in human anatomy. (S)

ZOO 5266L Biology of Crustaceans Laboratory (1). A laboratory to complement the lecture utilizing gross specimens and histopathologic material including glass and projection slides. Prerequisites: ZOO 3753 or permission of instructor.

the emphasis on structure and function. May be repeated to a maximum of 8 credits. Prerequisite: ZOO 3733L and ZOO 3734L or consent of instructor.

ZOO 5745 Advanced Neuroanatomy (3). In-depth knowledge of the embryonic development, structure, and function of the human nervous system with a great deal of clinical consideration. Prerequisite: ZOO 4743C or permission of instructor.

ZOO 5754 Comparative Pathology (3). General mechanisms of disease and comparative evaluation of animal diseases of specific organ systems in various animals including fish, reptiles, birds, and mammals. Prerequisites: ZOO 3753 or permission of instructor.
Chemistry

Ramon Lopez de la Vega, Associate Professor and Chairperson
David Backer, Assistant Professor
David Chatfield, Assistant Professor
William Cooper, Associate Professor
Milagros Delgado, Lecturer
Yiwei Deng, Assistant Professor
Kenneth G. Fulton, Associate Professor, and Graduate Coordinator
Arthur W. Herriott, Professor and Dean
Gary G. Hoffman, Associate Professor
Rudolf Jaffe, Associate Professor
Jeffrey A. Joens, Associate Professor
Webe Kadima, Assistant Professor
Leonard S. Keller, Professor
John T. Landrum, Associate Professor
Zaida C. Morales-Martinez, Instructor and College Coordinator for Premedical Advising and College Coordinator for Science Student Recruitment and Retention
Kevin E. O'Shea, Associate Professor
John H. Parker, Professor
J. Martin Quirke, Professor
Stephen Winkle, Associate Professor

Bachelor of Science

Degree Program Hours: 120
The chemistry program is accredited by the American Chemical Society and prepares the student for graduate study or a professional career as a chemist in industry, in government service, or in secondary school teaching. (Students interested in secondary school teaching should contact the College of Education at 348-2721.)

Lower Division Preparation
One year of general chemistry with laboratory, one year of calculus, and either one year of calculus based physics with laboratory or one year of organic chemistry with laboratories.

To qualify for the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable to the program.

Lower or Upper Division Preparation
One year of organic chemistry and laboratories or one year of calculus based physics and laboratories.

Upper Division Program: (60)
At least 36 credits in chemistry to include the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 3120</td>
<td>Quantitative Analysis 3</td>
</tr>
<tr>
<td>CHM 3120L</td>
<td>Quantitative Analysis Lab 2</td>
</tr>
<tr>
<td>CHM 3410</td>
<td>Physical Chemistry I 4</td>
</tr>
<tr>
<td>CHM 3410L</td>
<td>Physical Chemistry Lab I 1</td>
</tr>
<tr>
<td>CHM 3411</td>
<td>Physical Chemistry II 4</td>
</tr>
<tr>
<td>CHM 3411L</td>
<td>Physical Chemistry Lab II 2</td>
</tr>
<tr>
<td>CHM 4130</td>
<td>Modern Analytical Chemistry 3</td>
</tr>
<tr>
<td>CHM 4130L</td>
<td>Modern Analytical Chemistry Lab 2</td>
</tr>
<tr>
<td>CHM 4220</td>
<td>Advanced Organic Chemistry 3</td>
</tr>
<tr>
<td>CHM 4230L</td>
<td>Structure Determination Laboratory 1</td>
</tr>
<tr>
<td>CHM 4610</td>
<td>Advanced Inorganic Chemistry 3</td>
</tr>
<tr>
<td>CHM 4610L</td>
<td>Advanced Inorganic Chemistry Laboratory 1</td>
</tr>
<tr>
<td>CHM 4910L</td>
<td>Undergraduate Research in Chemistry 3</td>
</tr>
<tr>
<td>CHM 4930</td>
<td>Senior Seminar 1</td>
</tr>
<tr>
<td>One additional senior-level (4000) Chemistry course 3</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAP 2302</td>
<td>Differential Equations 3</td>
</tr>
<tr>
<td>CGS 2420</td>
<td>Fortran for Engineers 3</td>
</tr>
<tr>
<td>MAC 2313</td>
<td>Multivariable Calculus 3</td>
</tr>
<tr>
<td>Electives</td>
<td>21</td>
</tr>
</tbody>
</table>

Bachelor of Arts

This program is designed for students preparing for careers in medicine, dentistry, environmental studies, veterinary medicine, patent law, secondary school education, or criminalistics chemistry. Students should complement the basic curriculum with suitable electives chosen in consultation with an advisor. (Students interested in secondary school teaching should contact the College of Education at 348-2721.)

Lower Division Preparation
One year of general chemistry with laboratory, one of calculus, and either one year of physics with laboratories or one year of organic chemistry with laboratories.

To qualify for the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable to the program.

Lower or Upper Division Preparation
One year of organic chemistry and laboratories or one year of calculus based physics and laboratories.

Minor in Chemistry

The Minor requires at least 23 credits in chemistry to include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry I &amp; II (CHM 1045, 1045L, and 1046, 1046L) 9</td>
<td></td>
</tr>
<tr>
<td>Quantitative Analysis (CHM 3120, 3120L) 5</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry I &amp; II (CHM 2210, CHM 2210L, CHM 2211 or CHM 2211L) 9</td>
<td></td>
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</tbody>
</table>

At least half of the credits to be counted towards the minor must be taken at the University.

Criminalistics-Chemistry Program

The Criminalistics-chemistry Core Requirements are the same as the requirements for the BA degree in chemistry plus Modern Analytical Chemistry (CHM 4130, 4130L). (Degree granted by the Department of Chemistry.)

Internship

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

Criminal Justice Coursework: The student should take nine credits of criminal justice courses in consultation with an advisor in the Department of Criminal Justice, 940-5850.
Electives
Coursework in the behavioral and political sciences, and upper division coursework in the biological sciences is recommended to total 60 semester hours.

Pre-Medical, Dentistry, Veterinary, Optometry Curricula
Students who have satisfied the requirements for either the BA or the BS degree in chemistry will also have satisfied the course requirements for admission to professional schools in the above areas. Additional coursework in chemistry and biology relevant to the career objectives of the student may also be taken as electives. Interested students should consult a Chemistry Department faculty advisor.

A seven year FIU/SECOM program in osteopathic medicine is also offered; students must be admitted to FIU and to SECOM (Southeastern College of Osteopathic Medicine).

Cooperative Education
Students seeking the baccalaureate degree in chemistry may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Division of Student Affairs. The student spends one or two semesters fully employed in an industrial or governmental chemistry laboratory. For further information consult the Department of Chemistry or the Department of Cooperative Education at 348-2423.

Department Policy
The Department of Chemistry does not award credit for courses by examination; it does, however, award credit for AP Chemistry with a score of 3 or higher and with evidence of a suitable laboratory experience. The department does not award credit for life experience.

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

Definition of Prefixes
CHM-Chemistry; CHS-Chemistry-Specialized; ISC-Interdisciplinary Natural Sciences; OCC-Oceanography-Chemical.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

CHM 1032 Chemistry and Society (3)
A course for non-science majors which introduces students to basic concepts in chemistry and applies these concepts to contemporary issues such as air/water pollution, energy and food production, drugs, nutrition, and toxic chemicals. Prerequisite: One year of high school or college algebra. (Lab fees assessed) (F.S.SS)

CHM 1033 Survey of Chemistry (4)
CHM 1033L Survey of Chemistry Lab (1) General and organic chemistry for non-science majors only. Atoms and molecules, states of matter, equilibrium, kinetics, acids and bases and introduction to organic chemistry. Laboratory must be taken concurrently. Does not fulfill requirements for chemistry, biology or pre-med majors. Prerequisite: One year of high school or college algebra. (Lab fees assessed) (F.S.SS)

CHM 1045 General Chemistry I (4)
CHM 1045L General Chemistry Lab I (1) Fundamental principles of general chemistry: states of matter, atomic structure, stoichiometry, chemical bonding, acid-base reactions, gas laws. Concurrent registration in both lecture and laboratory is required. Prerequisite: Second year high school algebra or college algebra. (Lab fees assessed) (F.S.SS)

CHM 1046 General Chemistry II (3)
CHM 1046L General Chemistry Lab II (1) Continuation of General Chemistry I (CHM 1045). Fundamental principles of chemistry: thermodynamics, solutions, kinetics, equilibrium and electrochemistry. Concurrent registration in both lecture and laboratory is required. Prerequisites: CHM 1045, CHM 1045L. (Lab fees assessed) (F.S.SS)

CHM 2200 Survey of Organic Chemistry (3)
CHM 2200L Survey of Organic Chemistry Lab (1). A basic one-semester survey course in organic chemistry for non-majors presenting a broad background in the reactions and structures of organic molecules. Does not fulfill requirements for chemistry, biology, or pre-med majors. Laboratory must be taken concurrently with the course. Prerequisites: CHM 1032, CHM 1032L, CHM 1033, CHM 1033L, or CHM 1046, CHM 1046L. (Lab fees assessed) (F)

CHM 2210 Organic Chemistry I (4)
CHM 2210L Organic Chemistry Lab I (1) An introduction to chemical bonding and atomic structure theory as it pertains to the chemistry of carbon compounds. Correlation between structure and reactivity of organic molecules followed by a systematic look at the various reaction types using reaction mechanisms as a tool for study. Concurrent registration in both lecture and laboratory is required. Prerequisites: CHM 1046, CHM 1046L. (Lab fees assessed) (F.S.SS)

CHM 2211 Organic Chemistry II (3)
CHM 2211L Organic Chemistry Lab II (1) Continuation of CHM 2210, CHM 2210L. Concurrent registration in lecture and laboratory is required. Prerequisites: CHM 2210, CHM 2210L. (Lab fees assessed) (F.S.SS)

CHM 3120 Quantitative Analysis (3)
CHM 3120L Quantitative Analysis Lab (2). Fundamentals of classical quantitative analysis. Topics include theory of precipitation, acid-base and oxidation-reduction reactions, as well as an introduction to spectrophotometric methods of analysis, ion-exchange techniques and complex formation. Laboratory must be taken concurrently with the course. Prerequisites: CHM 1046, CHM 1046L. (F.S.SS)

CHM 3400 Fundamentals of Physical Chemistry (3)
CHM 3400L Fundamentals of Physical Chemistry Lab (1). Principles of physical chemistry. Topics include thermodynamics, equilibria, electrochemistry, and reaction kinetics. Laboratory must be taken concurrently with the course. Prerequisites: MAC 2311, 2312, PHY 2048, 2048L, PHY 2049, 2049L, or PHY 2053, 2048L, and 2054, 2049L, CHM 3120, 3120L. (S)
CHM 3410 Physical Chemistry I (4)  
CHM 3410L Physical Chemistry Lab I (1). Principles of thermodynamics, gas laws, kinetic theory of gases, chemical equilibrium, electrochemistry, and kinetics. Laboratory to be taken concurrently with the course. Prerequisites: MAC 2311, 2312; PHY 2048, 2048L; PHY 2049, PHY 2049L, and CHM 3120, CHM 3120L. (F)

CHM 3411 Physical Chemistry II (4), CHM 3411L Physical Chemistry Lab II (2). Introduction to quantum mechanics. The Schrödinger equation and its application to rotational, vibrational, and electronic spectroscopy, atomic and molecular structure, and bonding. Prerequisites: CHM 3410, 3410L. (S)

CHM 3949, CHM 4949 Cooperative Education in Chemistry (1-3). One semester of full-time supervised work in an outside laboratory. Limited to students admitted to the University Coop Program. A written report and supervisor evaluation will be required of each student. (F,S)

CHM 4090L Introduction to Scientific Glassblowing (1). Basic glassblowing operations with glass tubing and rod are taught. Emphasis is on making and repair of scientific glassware. No prerequisites.

CHM 4130 Modern Analytical Chemistry (3)  
CHM 4130L Modern Analytical Chemistry Lab (2). Instrumental methods of chemical analysis, including electroanalytical methods, gas and liquid chromatography, mass spectrometry, x-ray fluorescence, and spectrophotometric methods. Laboratory must be taken concurrently with the lecture. Prerequisites: CHM 3120, 3120L, CHM 2211, 2211L, CHM 3410, PHY 2048, 2048L, PHY 2049, PHY 2049L, or permission of instructor. (S)

CHM 4220 Advanced Organic Chemistry (3). An intensive examination of the major areas of contemporary organic chemistry. Reactive intermediates, pericyclic reactions, molecular rearrangements, and modern synthetic methods are among the topics covered. Prerequisites: CHM 2211, 2211L. (F)

CHM 4230L Structure Determination Lab (1). The qualitative analysis of organic compounds using modern spectroscopic, chromatographic and chemical methods. Prerequisites: CHM 2211, and 2211L. (F,S,SS)

CHM 4300 Bio-Organic Chemistry (3). Chemistry of naturally-occurring organic compounds of biological importance. The relationship between organic chemistry and the chemical reactions which constitute the living organism. Prerequisite: CHM 2211, and 2211L.

CHM 4305 Biological Chemistry (3). Structures and functions of nucleic acids and proteins and cellular processes such as metabolism, replication and transcription are examined from a chemistry perspective. Prerequisites: CHM 2211, CHM 3120, BSC 1011 or permission of instructor. Corequisite: A semester of physical chemistry.

CHM 4320L Research Techniques in Organic Chemistry (2). Practical instruction in the more advanced manipulations and procedures of the modern chemistry laboratory. Restricted to B.S. chemistry majors. Prerequisites: CHM 3120, CHM 2211, CHM 2211L, CHM 3410, and CHM 3411L.

CHM 4321 Protein Chemistry (3). Structures of proteins and how they are determined. Protein-small molecule, protein-protein, protein-DNA, protein membrane interactions and their functions. Prerequisites: CHM 2211, BSC 1011, a biochemistry course or permission of instructor. Corequisite: CHM 3410 or permission of instructor.

CHM 4610 Advanced Inorganic Chemistry (3). Atomic structure, periodicity, bonding and structure of inorganic compounds, solution chemistry, ligand field theory, organometallic chemistry, and specific chemistry of the elements. Prerequisites: CHM 3120, CHM 2211, and CHM 3411L. (F)

CHM 4610L Advanced Inorganic Chemistry Lab (1). Synthesis, purification, and study of coordination and organometallic compounds. Prerequisite: CHM 3411. Corequisite: CHM 4610. (F)

CHM 4910L Undergraduate Research in Chemistry (3). The student works directly with a professor on a research project. Credit is assigned based on 4 hr/wk laboratory/library work per credit hour. May be repeated. A written report is required. (F,S,SS)

CHM 4911L Undergraduate Research 2 (1-20). Faculty directed research in chemistry. Credit is assigned based on 4 hr/wk laboratory/library work per credit hour. May be repeated. Prerequisite: CHM 4910L.

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

CHM 4931 Special Topics (3). Covers selected topics in chemistry. Prerequisite: Permission of instructor.

CHM 4933 Special Topics (3). Covers selected topics in chemistry. Prerequisite: Permission of instructor.

CHM 4934 Special Topics (3). Covers selected topics in chemistry. Permission of instructor.

CHM 5150 Graduate Analytical Methods (3). Analysis of analytical data, electrochemistry, spectrophotometric techniques, survey of new analytical methods. Prerequisite: Graduate standing or permission of instructor. (S)

CHM 5156 Advanced Chromatography (3). Intensive examination of the contemporary practice of chromatography including available chromatographic techniques, their selection and application. Prerequisite: CHM 4130 or permission of instructor.

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

CHM 5225 Graduate Organic Chemistry (3). Advanced topics in organic chemistry. Structure of organic molecules, reaction mechanisms, organic synthesis, and natural product chemistry. Prerequisite: Graduate standing or permission of instructor. (F)

CHM 5236 Spectroscopic Techniques and Structures Elucidation (3). Advanced techniques for the spectroscopic identification of organic compounds. Interpretation of spectral information for determination of structures of various classes of organic compounds. Prerequisites: CHM 4220 and CHM 4230L.

CHM 5250 Organic Synthesis (3). Use of classical and modern reactions in the design and construction of com-
plex organic molecules including natural products. Some topics covered will be construction reactions, refuctionalization, stereochemistry and conformational analysis. Prerequisite: CHM 4220 or permission of instructor.

CHM 5250 Physical Organic Chemistry (3). A series of topics will be discussed including molecular orbital theory as it pertains to organic molecules, kinetic and thermodynamic approaches to the study of reaction mechanisms, quantitative approaches to conformational analysis, etc. Prerequisite: CHM 4220 and physical chemistry or permission of instructor.

CHM 5280 Natural Products Chemistry and Biosynthesis (3). Studies of the chemical origins (biosynthesis), properties, and synthesis of the various classes of naturally occurring compounds: terpenes, steroids, alkaloids, acetogenins. Prerequisite: CHM 4220 or permission of instructor.

CHM 5306 Special Topics in Biological Chemistry (3). Investigation of one or more areas of biologically related chemistry. Prerequisites: CHM 4305 or permission of instructor.

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

CHM 5423 Atmospheric Chemistry (3). Chemical processes in atmosphere. Photochemistry, chemical kinetics, tropospheric and stratospheric chemical reactions, anthropogenic effects on the earth's atmosphere and chemistry of planetary atmosphere. Prerequisite: CHM 3410, CHM 3411, or permission of instructor.

CHM 5425 Graduate Physical Chemistry (4). Prequantum physics, the Schrödinger equation and its solutions, atoms and molecules, rotational, vibrational, and electronic spectroscopy. Prerequisite: Graduate standing or permission of instructor.

CHM 5440 Kinetics and Catalysis (3). Theory of elementary reactions, activated complex theory, mechanisms of complex reactions. Prerequisites: CHM 3411, MAP 2302.

CHM 5490 Physical Spectroscopy (3). Introduction to atomic and molecular quantum states, selection rules, and fundamental principles of spectroscopy. Introduction to group theory and to the theory of UV/visible, infrared, Raman, microwave, nmr, photoelectron, and mass spectrometry, and the applications of these methods to the determination of fundamental physical properties and the structure of organic and inorganic molecules. Prerequisite: Physical Chemistry.

CHM 5490L Physical Spectroscopy Lab (1). The theory of spectroscopy and the use of modern instrumentation to investigate molecular structure. Prerequisites: CHM 2211, CHM 2211L. Corequisite: PHY 4604 or CHM 5490.

CHM 5506 Physical Biochemistry (3). Physical properties of biomolecules, molecular conformation: thermodynamic, kinetic, and spectroscopic properties of biomolecules. Prerequisite: CHM 4305 or permission of instructor.

CHM 5517 Solid State (3). Crystalline form of solids, lattice dynamics, metals, insulators, semiconductors, and dielectric materials. Prerequisite: CHM 5490 or PHY 4604.

CHM 5575 Aquatic Chemistry (3). Redox chemistry, chemistry of sediments, organic biogeochemistry, chemodynamics, and fate of organic pollutants in aqueous environments. Prerequisites: CHM 2211, CHM 4130, or permission of instructor.

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

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

CHS 4100 Radiochemistry (2) CHS 4100L Radiochemical Techniques Lab (2). Production, isolation, methods of detection, counting statistics and estimation of radioisotopes. Applications to chemical, physical and biological problems. Laboratory must be taken concurrently with the course. Prerequisites: CHM 1045, 1046, 3120, 3120L; MAC 3411, 3412.

CHS 4503 Forensic Science (3). Modern instrumental methods of chemical analysis and their use in the administration of justice. Prerequisites: CHM 3120 and CHM 2211 or permission of instructor. Corequisite: a semester of physical chemistry or permission of instructor.

CHS 4503L Forensic Science Lab (1). Laboratory to accompany Forensic Science, CHS 4503. Prerequisite: CHM 3120, CHM 3120L, CHM 2211, CHM 2211L or permission of instructor.

CHS 4591 Internship in Criminalistics Chemistry (3). Internship in a forensic-type laboratory, contributing in a specific manner on an assigned problem. Twenty hrs/wk. Written report required. Open only to students in the Criminalistics Chemistry Program. Prerequisite: Senior standing.

CHS 5531 Forensic Analysis (3). An introduction to established chemical analysis techniques used in forensic science and new techniques under development. Prerequisite: CHM 3120, CHM 3120L, CHM 2211, CHM 2211L or permission of instructor.

CHS 5531L Forensic Analysis Lab (1). Laboratory to accompany Forensic Analysis CHS 5531. Prerequisite: CHM 3120, CHM 3120L, CHM 2211, CHM 2211L, or permission of instructor.

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

Michael Evangelist, Professor and Director
Bill Kraynek, Associate Director
Rida Bazzi, Assistant Professor
Paul C. Altie, Assistant Professor
Toby S. Berk, Professor
David Barton, Professor
Chung-Min Chen, Assistant Professor
John C. Comfort, Professor
Yi Deng, Assistant Professor
Timothy Downay, Instructor
Raimund Ege, Associate Professor
Mbola Fanomezantsoa, Instructor
Dawn J. Holmes, Lecturer
Masoud Milani, Associate Professor
Jainendra K. Navlakha, Professor
Cyril U. Oriji, Assistant Professor
Ana Pasztor, Professor
Alexander Pein, Associate Professor
Norman Pestoina, Instructor
N. Prabhakaran, Associate Professor
Naphali Risha, Professor
Rakesh Sinha, Assistant Professor
Orlando Sauleda, Instructor
Weil Sun, Associate Professor
Mark Weiss, Professor

The Bachelor of Science program in Computer Science is accredited by the Computer Science Accreditation Commission (CSAC) of the Computer Science Accreditation Board (CSAB), a specialized accrediting body recognized by the Council on Postsecondary Accreditation (COPA) and the U.S. Department of Education.

The School of Computer Science offers both undergraduate and graduate degree programs. The major program and a minor program, are described below.

Bachelor of Science

Degree Program Hours: 120

Lower Division Preparation

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable to the program.

As part of the 60 semester hours of lower division coursework necessary to enter this upper division major, note the following recommendations or course requirements, or both.

Required Courses

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 2132 Pre-Calculus (if necessary)</td>
<td>MAP 2311 Calculus I</td>
</tr>
<tr>
<td>COP 2210 Introduction to Programming</td>
<td>COP 3 Fundamentals of Computer Systems</td>
</tr>
<tr>
<td>or CGS 2423 C for Engineers</td>
<td></td>
</tr>
</tbody>
</table>

Third and Fourth Years

| ENC 2210 Technical Writing | MAD 2104 Discrete Mathematics |
| COP 3420 Logic for Computer Science | MAD 3512 Introduction to Theory of Algorithms |
| MAD 3512 Introduction to Theory of Algorithms | STA 3033 Introduction to Probability and Statistics for CS |
| or STA 3321-2 Mathematical Statistics I and II |
| COP 2212 Intermediate Programming | COP 3223 Advanced Programming |
| COP 3530 Data Structures | COP 4540 Database Management |
| CDA 4101 Structured Computer Organization | CEN 4010 Introduction to Software Engineering |
| COP 4610 Operating Systems Principles | |

In addition, majors must complete three courses from the following list. At least one course must be a starred (*) course:

- COP 5621 Compiler Construction
- COP 4225 Advanced Unix Programming
- CEN 4500 Data Communications
- COP 4555 Survey of Programming Languages
- CDA 4400 Computer Hardware Analysis
- CAP 3710 Introduction to Computer Graphics
- COT 5420 Theory of Computation I
- MAD 3401 Numerical Analysis

- MAD 3305 Graph Theory
- MAD 4203 Introduction to Combinatorics
- MHS 4302 Mathematical Logic

Science Requirement

I. A two-semester sequence in physics for science majors. The following sequences (with accompanying laboratory courses) will satisfy the requirement:

Physics with Calculus I and II with Labs
Physics I and II with Labs
General Physics I and II with Labs
Physics without Calculus I and II with Labs

II. Two additional one-semester courses in natural science. Each of these should be a course designed for science or engineering majors.

A list of additional approved courses is available through the School of Computer Science.

At least 28 of the 43 upper division credits must be taken at the University.

Remarks: The following courses are not acceptable for credit toward graduation, unless a student has passed the course before declaring a Computer Science major: CDS 2060, CGS 3300, COP 2172, MAC 2233, STA 1013, STA 2122-23, STA 3132, QMB 3150, ESI 3161.

Minor in Computer Science

Required Courses

- COP 2210 Introduction to Programming
- CGS 2423 C for Engineers
- COP 3 Fundamentals of Computer Systems
- COP 2212 Intermediate Programming

Plus two from the following list: COP 2120, COP 3223, COP 3530, COP 4555, CDA 4101, CDA 4400, CEN 4500, CAP 3710, COP 2570, and MAD 3401. Normally the students from Engineering would choose COP 3223, and either COP 3530 or CDA 4101 and students from the School of Business would choose CGS 2570 and COP 2120. If one of the other options are selected, then the student should verify that he or she has the additional prerequisites necessary for the chosen course. At least nine of the 15 credits must be taken at FIU.
CEN 4500 Data Communications (3). Study of communications-based systems, common carrier facilities, tariffs, and related equipment. Analysis and design of communications networks utilizing various techniques. Uses of communications for data collection, remote computing, message switching. Prerequisite: CDA 4101.

CEN 5011 Software Engineering (3). This course deals with the design of large scale computer programs. Included are topics dealing with planning design, implementation, validation, metrics, and the management of such software projects. Prerequisite: CEN 4010.

CEN 5666 Expert Systems (3). Introduction to expert systems, knowledge representation techniques and construction of expert systems. A project such as the implementation of an expert system in a high level AI-language is required. Prerequisite: COP 3530 or permission of instructor.

CDA 5312 Micro Processing for Software Designers (3). Design of application software for OEM products. Topics include: 16-bit microprocessor architecture and assembly language, HLLs for design of microprocessor software, software for multiprocessor and multiprocessor systems. Prerequisite: Permission of instructor.

CGS 1500 Word Processing with Wordperfect (1). This course is to teach how to use Wordperfect effectively. The student will be expected to become competent Wordperfect user. Not acceptable for credit to Computer Science majors.

CGS 1510 Electronic Spreadsheets (1). The fundamentals of electronic spreadsheets using a modern software package on a microcomputer. Not acceptable for credit to Computer Science majors.

CGS 1540 Microcomputer Databases (1). The fundamentals of microcomputer Database management systems using a modern software package on a microcomputer. Not acceptable for credit to Computer Science majors.

CGS 1580 Desktop Publishing (1). The fundamentals of desktop Publishing and Presentation graphics using a modern software package on a microcomputer. Not acceptable for credit to Computer Science majors for credit to Computer Science majors.

CGS 2 Intro to Microcomputer Applications for Business (3). A hands-on study of spreadsheet and database management package for business students without a technical background. Not acceptable credit by Computer Science major.

CGS 2060 Introduction to Microcomputers (3). A hands-on study of microcomputer software packages for applications such as operating system, word processing, spreadsheets, and database management. For students without a technical background. Not acceptable for credit to Computer Science majors.

CGS 2420 FORTRAN for Engineers (3). A first course in programming that describes the syntax and semantics of the FORTRAN 77 programming language. The development of algorithms will be discussed together with fundamentals of program testing and debugging. Emphasizes those aspects of the language required by students of engineering and natural sciences. Not acceptable for credit to Computer Science majors.

CGS 2423C for Engineers (3). A first course in programming geared for engineering and natural science students that describe the ANSI C programming language. Not acceptable for credit to Computer Science majors.

CGS 2570 Advanced Microcomputer Applications (3). Microcomputer systems and technology. Topics include popular hardware, operating systems, application software, system development and maintenance. Prerequisites: CGS 2060 or COP 2210.

CGS 3403 COBOL for Non-Computer Science Majors (3). Introduction to COBOL and historical background. Flowcharting and program design. This course is not for computer science majors.

CGS 3559 Using the Internet (1). Internet history and importance. What is available on the Net. Tools such as email, listserves, telnet, ftp, Archie, Veronica, Gopher, netfind, the World Wide Web, NCSA, and Mosaic. Nontechnical. Prerequisite: CGS 2060 or equivalent.

CIS 3900 Independent Study (VAR). Individual conferences, assigned
readings, and reports on independent investigations.

CIS 3930 Special Topics (VAR). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

CIS 4905 Independent Study (VAR). Individual conferences, assigned readings, and reports on independent investigations.

CIS 4930 Special Topics (VAR). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

CIS 5900 Independent Study (1-10). Individual conferences, assigned readings, and reports on independent investigations.

CIS 5910 Project Research (1-6). Advanced undergraduate or master's level research for particular projects. Repeatable. Prerequisite: Permission of Department.

CIS 5931 Special Topics (VAR). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

COP 2120 Data Processing and COBOL (3). A course in programming, oriented toward data processing applications. Various techniques for organizing and processing files; sequential file random-access, indexed and inverted files. File sorting and maintenance. Program documentation. Instruction for COBOL programming language. Applications of computers and data processing in business. Prerequisite: COP 2212.

COP 2172 Programming in BASIC (3). Introduction to the BASIC computer language with emphasis on business data processing applications. Not acceptable for credit to computer science majors.

COP 2210 Introduction to Programming (3). A course in the fundamentals of digital computer programming. The concept of an algorithm; pseudocode; programming; testing and debugging using a well-structured language.

COP 2212 Intermediate Programming (3). A study of C++ Programming Language including streams, classes, recursion, template classes and exceptions. An introduction to data structures included. Prerequisites: COP 2210, CGS 3403, or equivalent.

COP 2400 Assembly Language Programming (3). Principles and techniques of digital computers with emphasis on machine language and assembly language programming. Internal representation of numeric and non-numeric information; registers, indexing and computer structure; arithmetic, logical and input-output instructions; fixed and floating arithmetic. Prerequisites: COP 2210 or CGS 2420 or CGS 2423 or equivalent.


COP 3223 Advanced Programming (3). Advanced programming concepts including object-oriented programming. Topics include inheritance and polymorphism in the C++ Programming Language and programming in a pure object oriented language such as JAVA. Prerequisites: COP 2212 and Fundamentals of Computer Systems.

COP 3530 Data Structures (3). Basic concepts of data organization, running time of a program, abstract types, data structures including linked lists, n-ary trees, sets and graphs, internal sorting. Prerequisites: MAD 2104 and COP 2212.

COP 3949 Cooperative Education in Computer Science (1-3). One semester of full-time work, or equivalent, in an outside organization, limited to students admitted to the CO-OP program. A written report and supervisor evaluation is required of each student. Prerequisites: MAP 2312, STA 3033 and COP 2212.

COP 5621 Compiler Construction (3). Basic techniques of compilation; self-compilers; syntax encoding and recognition; code generation and optimization. Prerequisites: MAD 3512 and CEN 4010.

COT 3420 Logic for Computer Science (3). An introduction to the logical concepts and computational aspects of propositional and predicate logic, as well as to concepts and techniques underlying logic programming, in particular, the computer language Prolog. Prerequisites: COP 2212, and MAD 2104.

COT 5420 Theory of Computation I (3). Abstract models of computation; halting problem; decidability and undecidability; recursive function theory. Prerequisite: MAD 3512.
Economics

Panagis Liossatos, Professor and Chairperson
Nejat M. Anbarci, Associate Professor
Hassan Arvin-Rad, Assistant Professor
Harvey Averch, Professor, Courtesy Appointment
Alison Butler, Assistant Professor
Manuel J. Carvajal, Professor
Ima de Alamos, Professor and Graduate Program Director
Alan Gummerson, Lecturer
Antonio Jorge, Professor of Political Economy
Ali Cem Karayalcin, Associate Professor
Bruce Kelley, Assistant Professor
J. Kenneth Lipner, Associate Professor
Ellisabetta Magnani, Assistant Professor
Devashish Mitra, Assistant Professor
Raul Moncarz, Professor
Jorge Salazar-Carrillo, Professor and Director, Center for Economic Research and Education
Constantinos Syropoulos, Associate Professor
Mira Wilkins, Professor
Maria Willumsen, Associate Professor
Ann Witte, Professor

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

Bachelor of Arts

Degree Program Hours: 120

Lower Division Preparation

Required Courses

Three semester hours of calculus, three semester hours of statistics, Principles of Macroeconomics (ECO 2013 or ECO 3011, or equivalent) and Principles of Microeconomics (ECO 2023 or ECO 3021, or equivalent).

To qualify for admission to the program, BU undergraduates must have met all the lower division requirements, including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program: (60)

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 3101</td>
<td>Theory of Price</td>
<td>3</td>
</tr>
<tr>
<td>ECO 3203</td>
<td>Aggregate Economic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECO 3930</td>
<td>Special Topics in Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECO 3303</td>
<td>Development of Economic Thought</td>
<td>3</td>
</tr>
<tr>
<td>ECO 4410</td>
<td>Measurement and Analysis of Econ., Activity</td>
<td>3</td>
</tr>
<tr>
<td>ECO 4421</td>
<td>Introduction to Econometrics</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional Economics Courses 2 15

Electives 27

1This requirement can also be met by taking one of the following topics in theory courses: ECO 3931, ECO 4932, ECO 4933.

2ECO 2013, ECO 2023, ECO 3011, ECO 3021, ECO 3040, ECO 3431, ECO 3949, ECO 4906, and ECO 4949 cannot be included in this grouping of additional economic courses.

Minor in Economics

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 2013</td>
<td>Macro Principles or</td>
<td>3</td>
</tr>
<tr>
<td>ECO 3011</td>
<td>Economics and Society- Macro</td>
<td>3</td>
</tr>
<tr>
<td>ECO 2023</td>
<td>Micro Principles or</td>
<td>3</td>
</tr>
<tr>
<td>ECO 3021</td>
<td>Economics and Society - Micro</td>
<td>3</td>
</tr>
<tr>
<td>ECO 3101</td>
<td>Theory of Price</td>
<td>3</td>
</tr>
<tr>
<td>ECO 3203</td>
<td>Aggregate Economic Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional Economics Courses 1 6

1ECO 3040, ECO 3431, and ECO 4906 cannot be included in this grouping of additional economic courses.

Course Descriptions

Definition of Prefixes

ECO-Economics; ECP-Economic Problems and Policy; ECS-Economic Systems and Development.

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering

ECO 2013 Macro Principles (3). Introduction to economic analysis of the overall economy, national income accounting, unemployment, inflation, monetary and fiscal policies, budget deficits and debt, long-run growth. (F.S.SS)

ECO 2023 Micro Principles (3). Introduction to economic analysis of individual units—households and firms. Operation of markets; supply and demand analysis. (F.S.SS)


ECO 3021 Economics and Society-Micro (3). Introduction to economic analysis of individual units in the economy—households, firms. Supply and demand analysis, operation of markets. Cannot receive credit for both ECO 2023 and ECO 3021. (F.S.SS)

ECO 3040 Consumer Economics (3). Consumer behavior; advertising and other influences affecting demand. Patterns of consumer expenditure; effects of public policy on family incomes and consumption patterns. The consumer protection movement. Does not count as economics elective toward economics major. (F.S.SS)

ECO 3101 Theory of Price (3). Operation of individual markets; market structure; theory of the firm; theory of production; demand theory; general equilibrium and welfare economics. Recommended preparation: Introductory sequence in micro and macro economics. (F.S)

ECO 3203 Aggregate Economic Analysis (3). Analysis of the measurement, determination, and control of aggregate economic activity: the monetary system in relation to income and employment; short-term income fluctuations; long-term growth. Recommended preparation: Introductory sequence in micro and macro economics. (F.S)

ECO 3223 Money and Banking (3). Elements of monetary theory; relationships between money, prices, production, and employment; factors determining money supply; history and principles of banking, with special references to the United States. (F)

ECO 3271 Topics in Theory (3). Welfare economics: analysis of factor
markets and income distribution; growth theory. Prerequisites: ECO 3101 and ECO 3203.

ECO 3303 Development of Economic Thought (3). Evolution of economic theory and doctrine. Contributions to economic thought from ancient times to J. M. Keynes. Emphasis on institutional forces shaping the continuum of economic thinking. (S)


ECO 3930, 3931 Special Topics in Theory (3,3). Study of a particular topic or a selected number of topics in economics theory not otherwise offered in the curriculum. Prerequisites: ECO 3101 and ECO 3203 or permission of the instructor.

ECO 3933 Special Topics (3). A course designed to give students a particular topic or a limited number of topics not otherwise offered in the curriculum.

ECO 3949 Cooperative Education in Economics (1-3). A student majoring in Economics may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Does not count as economics elective toward economics major.

ECO 4224 Issues in Money and Banking (3). Formulation and execution of monetary policy. Analysis of monetary policy as it has been carried out in recent years, and as it should be conducted.

ECO 4321 Radical Political Economy (3). The relationship between Marxist and orthodox economists. Attention given to the New Left and other current criticisms of capitalist economies. Multinational corporate policy, concentration of economic power, income distribution, and Third World development.

ECO 4401 Introduction to Mathematical Economics (3). Mathematical formulation of economic theory. Mathematical treatment of maximizing and optimizing behavior; applications to consumer and business firm theory, value, economic strategies, growth and stability. Emphasis on understanding of analytical techniques. Recommended preparation: ECO 3101 or ECO 3203, and Calculus. (F,S)

ECO 4410 Measurement and Analysis of Economic Activity (3). Statistics with special reference to economics, including the following topics: quantitative economics, descriptive statistics, probability and inference, and regression analysis applied to economics. Prerequisite: STA 2122 or permission of instructor. (F,S)

ECO 4421 Introduction to Econometrics (3). Introduction to measurement in economics; numerical evaluation of mathematical models by statistical methods; survey of classical models; discussion of the scope and method of econometric analysis. Prerequisites: ECO 3101, ECO 3203, and ECO 4410 or permission of instructor. (F,S)

ECO 4504 Economics of Government Spending and Taxation (3). Describes the way resources are allocated in a market economy and cases where markets fail. Analyzes government expenditure policy, principles of taxation, and the various taxes in use today. Prerequisites: Introductory sequence in micro and macro economics. (S)

ECO 4622 Economic Development of the United States (3). The growth of the American economy from colonial times to the present. Special emphasis on market forces, institutional arrangements, and policies contributing to this process.

ECO 4623 American Business History (3). The growth of American business from 1880 to present; integration, diversification, and foreign expansion. Business strategies and managerial structures. (F)

ECO 4632 European Economic History (3). The development of Mediterranean and Western European economies, from the earliest times to the 20th Century. Attention is centered on capital accumulation, technology, trade, industrialization, monetary factors, and the role of government in economic organization.

ECO 4701 World Economy (3). A broad overview of the international economy in historical perspective. Topics: economic demography, trade flows, capital movements, diffusion of technology, the emergence of multinational institutions. The student acquires a conception of how economic interdependence has developed.

ECO 4703 International Economics (3). Principles of international trade and balance of payments; significance of geographic, economic, social, and political influences; current problems in international trade and payments; tariffs and commercial policy; role of international organizations. Recommended preparation: ECO 3101. (F)

ECO 4713 International Monetary Relations (3). International money and capital markets; international financial institutions. Interpretation of balance of payment statements. Adjustments to disequilibria, through changes in prices, exchange rates, and national income. Recommended preparation: ECO 3203. (S)

ECO 4733 Multinational Corporation (3). Growth and development of multinational enterprise. Theories of direct foreign investment. Impact on the United States and other developed and less developed nations. Policy implications relating to employment, economic growth, balance of payments, taxation, and national defense. National sovereignty and the multinational corporations.

ECO 4906 Undergraduate Tutorial (1-6). Supervised readings, individual tutorial, and preparation of reports. Requires consent of faculty supervisor and Department Chairperson. Does not count as economics elective toward economics major.

ECO 4932, 4933 Special Topics in Theory (3,3). Study of a particular topic or a selected number of topics in economics theory not otherwise offered in the curriculum. Prerequisites: ECO 3101 and ECO 3203 or permission of the instructor. (F,S)

ECO 4934 Special Topics (3). A course designed to give students a particular topic or a limited number of topics not otherwise offered in the curriculum.

ECO 4949 Cooperative Education in Economics (1-3). A student majoring in economics may spend one or two semesters fully employed in industry or government in a capacity
relating to the major. Does not count as economics elective toward economics major.

ECO 5709 The World Economy (3). Designed to give an overview of the crucial issues in the world economy. The course covers trade, capital, labor, and technology flows; transnational economic organizations; current economic crisis; global economic interdependence; and the nature and characteristics of international economic order. Required for MIB Program. (S)


ECO 5906 Advanced Individual Study (1-6). Supervised readings, individual tutorial, and preparation of report. Requires consent of faculty supervisor and Department Chairperson. Open to seniors and graduate students.

ECO 5945 Internship (3). Directed individual study which assists the student in using economic analysis in his employment. Prerequisite: Permission of the instructor.


ECO 3302 Introduction to Environmental Economics (3). Economic principles applied to environmental problems. Relationship of market and non-market forces to environmental quality. Development of tools for policy analysis. (F,S,S)

ECO 3410 Introduction to Public Economics (3). An introduction to the applied economics of the public sector and the microeconomics of public policy making and administration.

ECO 3533 Health Systems Economics (3). Identification of health systems issues and basis. Instruments of health systems analysis including the market mechanism, insurance and cost-benefit analysis.

ECO 3613 Introduction to Urban Economics (3). Study of the urban environment, its characteristics and trends. Location behavior of firms and households. Urban financial problems, transportation, and housing. (F)

ECO 4004 Seminar on Current Economic Topics (3). Faculty and student discussion of contemporary economic and social issues.

ECO 4031 Cost-Benefit Analysis (3). Covers cost-benefit analysis, cost-effectiveness analysis, benefit-risk analysis, risk-risk analysis, and systems analysis as applied in the government sector for public investment decisions. Prerequisites: ECO 3101 or equivalent.

ECO 4143 Economics of Racism (3). Analysis and examination of the economic costs of racism to the individual and society. A perspective from mercantilism to the post-industrial contemporary world; international racial aspects of development, income distribution and wealth.

ECO 4203 Introduction to Labor Economics (3). Basic introduction to supply and demand for labor. Discusses labor markets in both historical and institutional context emphasizing why certain patterns have occurred and contemporary institutions developed. Prerequisite: ECO 3021.

ECO 4204 Theory of Labor Economics (3). Neo-classical theory of labor demand and labor supply, human capital theory and critiques. Current programs of human resource development and income maintenance are discussed. Prerequisite: ECO 3101.


ECO 4451 Law and Economics (3). The relationship of economic principles to law and the use of economic analysis to the study of legal problems. Topics include property rights and contracts, and economic analysis of legal decision making. Prerequisites: ECO 2013 and ECO 2023 or equivalents.

ECO 4540 Social Insurance and Economic Security (3). Survey of the development of the social insurance system in the United States, with particular emphasis on "Social Security". It reviews the scope and coverage of the Social Security programs, their administration and their costs.

ECO 4622 Regional Economic Growth Management (3). Combines natural resource economics and the economics of public decision-making to identify and evaluate costs and benefits of public policies for managing rapid population change. Prerequisites: ECO 3011 and ECO 3021.


ECS 3402 The Political Economy of South America (3). An introduction to the political economy of the Latin American nations. Designed as a basic course to give the student an overview of the political economy of the nations with which we share this hemisphere. (F)

ECS 3440 Economics of Central America (3). Survey of recent economic history of Central American countries, dealing with the institutional background and the structure of current economic activities. Special attention devoted to current problems of economic growth and social transformation. (F)

ECS 4013 Introduction to Economic Development (3). Analysis of institutional and structural factors which determine the course of economic progress in developing countries. Characteristics of less developed areas: agriculture, investment, technology, population, international trade, economic integration. (F,S)

ECS 4403 The Latin American Economies (3). Survey of economic status and problems of the Latin American nations, with special emphasis on the larger countries. Attention is given to the role of foreign intervention and dependence, and to different attempts at economic integration. (S)
### English

**Donald Watson**, Professor and Chairperson  
**Harry T. Antim**, Professor  
**St. George Tucker Arnold**, Associate Professor  
**Joan L. Baker**, Assistant Professor  
**Lyne Barrett**, Associate Professor  
**Lynn M. Berk**, Professor  
**Lisa Blansett**, Assistant Professor  
**Gisela Casines**, Associate Professor and Associate Dean  
**Maneck Daruwaia**, Associate Professor  
**Theresa DiPasquale**, Associate Professor  
**John Dufresne**, Associate Professor  
**Charles Elkins**, Professor  
**Mary Jane Elkins**, Associate Professor  
**Peggy Endel**, Associate Professor  
**Mary Free**, Associate Professor  
**James Hall**, Professor  
**Bruce Harvey**, Assistant Professor  
**Alonso Hawkins**, Assistant Professor  
**Tometo Hopkins**, Assistant Professor  
**Peter Hargital**, Instructor  
**Jeffrey Knapp**, Instructor  
**Kenneth Johnson**, Associate Professor  
**Kathleen McCormack**, Associate Professor  
**Campbell McGrath**, Assistant Professor  
**Asher Z. Milbauer**, Associate Professor  
**Carnela Pinto McIntire**, Associate Professor  
**Adele S. Newson**, Associate Professor  
**Robert Ratner**, Instructor  
**Meri-Jane Rochelson**, Associate Professor and Associate Chairperson  
**Richard Schwartz**, Associate Professor  
**Ronn Silverstein**, Instructor  
**Ellen Sprechman**, Lecturer  
**Lester Staniford**, Professor  
**Linda Strong-Leek**, Assistant Professor  
**James Sutlif**, Assistant Professor  
**Richard Sugg**, Professor  
**Patricia Wallace**, Assistant Professor  
**Butler H. Waugh**, Professor  
**Robert Weinberger**, Instructor  
**Barbara Weitz**, Instructor  
**C. Kemp Williams**, Assistant Professor  
**Mehmet Yavas**, Associate Professor

### Bachelor of Arts in English

**Degree Program Hours:** 120

**Lower Division Requirements**

**Recommended Courses**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENG 2012</td>
<td>Approaches to Literature</td>
</tr>
<tr>
<td>AML 2011</td>
<td>Survey of American Literature I</td>
</tr>
<tr>
<td>AML 2020</td>
<td>Survey of American Literature II</td>
</tr>
<tr>
<td>ENL 2011</td>
<td>Survey of British Literature I</td>
</tr>
<tr>
<td>ENL 2021</td>
<td>Survey of British Literature II</td>
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To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

**Upper Division Requirements**

(30 hours in 3000 and 4000 level courses)

**Periods:** (Two courses - Six hours)

a. One course in British literature before 1800  
   or  
   One course in American literature before 1800

b. One course in British literature after 1800  
   or  
   One course in American literature after 1860

**Note:** In addition to these courses, the Department may designate specific courses each semester which will fulfill these requirements.

**Shakespeare:** (One course - Three hours)

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ENL 4320</td>
<td>Shakespeare: Histories</td>
</tr>
<tr>
<td>ENL 4321</td>
<td>Shakespeare: Comedies</td>
</tr>
<tr>
<td>ENL 4322</td>
<td>Shakespeare: Tragedies</td>
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</tbody>
</table>

**Linguistics:** (One course - Three hours)

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<tr>
<th>Course Code</th>
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<tr>
<td>LIN 3013</td>
<td>Introduction to Linguistics</td>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>LIN 4680</td>
<td>Modern English Grammar</td>
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</table>

**Electives:** (18)

Upper division electives in writing, film, literature, and/or linguistics. The English Department recognizes a continuing obligation to insure that its majors write well. The Chairperson may require any English major to take the appropriate composition course. An English major may

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**ECS 4404 Economic Integration/Latin America (3).** Analysis of the methods, meaning and implications of economic integration in Latin America. Designed to enable the student to appreciate the trend toward regionalism and economic cooperation. Prerequisite: ECO 3021.

**ECS 4430 The Economic Development of Cuba/Past and Present (3).** Survey of the Cuban economy under capitalist and Marxist ideologies. Emphasis on the transition stage and on current policies of economic and social change. (F)

**ECS 4432 Economic Integration/Caribbean (3).** Analysis of the methods, meaning, and implications of economic integration in the Caribbean. Designed to enable the student to appreciate the trend toward regionalism and economic cooperation.

**ECS 4433 Economics of the Caribbean (3).** Survey of the economic systems of the major British, French, Dutch, and Spanish areas in the Caribbean. Special attention devoted to current problems of economic growth and social transformation.

**ECS 5005 Comparative Economic Systems (3).** A critical evaluation of the design, goals, and achievements of economic policies in capitalist and socialist economies. Prerequisite: Permission of instructor for undergraduates.

**ECS 5025 Economic Planning (3).** Analysis of planning methods in capitalist and socialist economies. Evaluation of macro and micro economic planning tools (input-output) and programming techniques. Theory and practice of economic development planning of agriculture, industrialization, foreign trade, and manpower. Prerequisite: Graduate standing or permission of the instructor.
choose to take a general program of English studies or may select one of the Department's three areas of emphasis: literature, language and linguistics, or creative writing. Majors should choose their English courses and electives in consultation with their advisors, especially upon entering the program.

Additional Approved Electives: (30)
Students should consult with a departmental advisor.

Minor in English

Students majoring in any other discipline may minor in English.

There are several advantages for obtaining this minor. First, students expand their knowledge of literature written in English, thus, make their college education more complete and rounded. Second, because in the courses that the Department of English offers writing skills are emphasized, students will polish and perfect forums for the development of complex and sophisticated arguments through the analysis of literary work; the training students receive in these courses will help them to point to the strengths and weaknesses of any piece of writing.

Requirements

Fifteen hours in 3000 and 4000-level courses

Period Courses: (Two courses - Six hours)

1. One course in British literature before 1800
   or
   One course in American literature before 1860

2. One course in British literature after 1860
   or
   One course in American literature after 1860

Note: In addition to these courses, the Department may designate specific courses each semester which will fulfill these requirements

3. Three courses (nine hours) at the 3000 and 4000-level in the Department of English

Course Descriptions

Definition of Prefixes

AML-American Literature; CRW-Creative Writing; ENC-English Composition; ENG-English-General; ENL-English Literature; HUM-Humanities; LIN-Linguistics; LIT-Literature; MMC-Mass Media Communication.

AML 2011 Survey of American Literature I (3). Students read and discuss major American works written between 1620 and 1865. Works will be considered in an historical context.

AML 2020 Survey of American Literature II (3). Students will read and discuss major American works written between 1865 and the present. Works will be examined in an historical context.

AML 3001 American Folklore (3). An examination of the variety of American folklore from the very earliest expressions to the present.

AML 3032 The American Revolution in Literature (3). Study of writings created at the time of the American Revolution and those of later authors in order to evaluate how American writers have shaped our sense of the Revolution.

AML 3262 Modern Southern Short Story (3). The contributions of twentieth-century writers of the South to the short story genre. Includes the work of Faulkner, O'Connor, Welty and McCullers.

AML 3401 American Humor (3). This course examines the writings of American humorist from the beginnings to the present. Special attention is given to the writings of Twain and Thurber.

AML 3602 African-American Literature (3). Offers a survey of African-American literature spanning its genesis to the present. Includes units on major eras and major figures in the development of the literary traditions. May be repeated.

AML 3 American Fiction to 1900 (3). Study of representative fiction by American authors from the Colonial period to 1900. Authors include Brown, Irving, Cooper, Hawthorne, Melville, Twain, Chopin, James, and others.

AML 4014 Studies in 19th-Century African American Literature (3). An examination of literary works written by African Americans during the 19th Century. May be repeated with change of content.

AML 4024 Studies in 20th-Century African American Literature (3). An examination of literary works written by African Americans during the 20th Century. May be repeated with change of content.

AML 4120 Modern American Fiction (3) Study of American novels and short stories written in the twentieth century. Among the writers to be read are John Barth, Alice Walker and Flannery O'Connor.

AML 4154 Modern American Poetry (3) Study of American poetry written in the twentieth century. Among the poets to be examined are Elizabeth Bishop, Gwendolyn Brooks and Richard Wilbur.

AML 4213 Studies in Colonial and Early American Literature (3). Students read, discuss, and write about literature of the Colonial and Early American periods from the time of the Puritans through the period of the Early Republic.

AML 4216 Colonial Literature (3). American Literature from the settlement of the continent through 1776.

AML 4221 Early National Literature (3). Examines the major literary works of the period 1776-1825.

AML 4223 Antebellum Literature (3). Examines the writings of the period 1825-1860, including Hawthorne, Poe, and Jacobs.

AML 4245 Modernism and Post-Modernism in American Literature (3). The course provides working definitions of modernism and post-modernism and will consider how the writers of the twentieth century use their outlooks while addressing political, social, and personal issues.

AML 4263 Contemporary Southern Writers (3) Study of the literature of the modern South, its uniqueness and variety. Some of the writers included are Tennessee Williams, Eudora Welty and William Faulkner.

AML 4621 Major African American Writers (3). An examination of selected African American writers. May be repeated with change of content.

AML 4624 African American Women Writers (3). A study of the writings of African American women. May be repeated with change of content.

AML 4300 Major American Writers (3). Each section of this course will consider the works of one, two, or
three major American writers. The writers studied in this course will
change from semester to semester. The course may be repeated for
credit.

AML 4306 Mark Twain (3) Study of the writings of American humorist
and novelist Mark Twain including Roughing It, Innocents Abroad
and Huckleberry Finn.

AML 4312 Hemingway, Fitzgerald and Faulkner (3) Analysis of the
most important novels of Hemingway, Fitzgerald and Faulkner includ-
ing The Sun Also Rises, The Great Gatsby and The Sound and the Fury.

AML 4503 Periods in American Literature (3). Individual sections will
read and discuss works in the context of such historical settings as the
colonial, federal, antebellum, reconstruction, or modern periods of the
American past. May be repeated.

AML 4930 Special Topics in American Literature (3). An examination of
different aspects of American literature may be repeated with a change
of content.

AML 5305 Major American Literary Figures (3). Each section will con-
sider the lifework of several authors such as Hawthorne, Melville, Whit-
man, Twain, James, Faulkner, Mailer, Wright, Baldwin. May be repeated.

AML 5505 Periods in American Literature (3). The literature and criticism
regarding one specified period of American literature such as Colo-
nial, Federal, Transcendental, Antebellum, and Twentieth Century. May
be repeated with change of period. Prerequisite: Permission of instructor.

CRW 2001 Introduction to Creative Writing (3). Beginning course de-
signed to acquaint students with elementary critical vocabulary and
writing skills necessary for the writing of poems and short fiction. Students
may also be required to read and discuss published writing. Prereq-
usites: ENC 1101 and ENC 1102 or equivalent.

CRW 3111 Narrative Techniques (3). Analysis of and exercises in the el-
ements of fiction: point of view, conflict, characterization, tone.
 Students will do various short assignments and one short story. Reading
of published fiction will also be re-
quired. Prerequisite: CRW 2001.

CRW 3311 Poetic Techniques (3). Analysis of and exercises in poetic

CRW 5935 Special Topics in Creative Writing (1-5). Gives students an op-
portunity to pursue special studies in aspects of creative writing not other-
wise offered. May be repeated. Prereq-
usites: CRW 2001 and three
hours of CRW on the 3000/4000 level.

ENC 1930 Essay Writing (3). A course in writing short descriptive, analytic,
and argumentative essays. Does not fulfill core curriculum requirement.
Students who have completed ENC 1101 or ENC 1102, or both, cannot
receive credit for this course. Written work meets state composition re-
quirement of 6,000 written words.

ENC 1101 Freshman Composition (3). Students will be introduced to
the principles and process of expository, persuasive, and reflective writ-
ing. The first of a two-semester sequence. Written work meets state com-
position requirement of 6,000 written words.

ENC 1102 Literary Analysis (3). A continuation of ENC 1101. Develops an
analytical, aesthetic, and cul-
tural sensitivity to literature and fur-
ther explores the techniques of composition and library research.

ENC 1200 Business Letter and Re-
ports (3). Intensive instruction and prac-
tice in the organization, con-
tent, and style of business letters of all kinds: special correspondence
formats (bid proposals, customer rela-
tions), memoranda, feasibility re-
ports, speeches, and group
conference reports. Written work
meets state composition require-
ment of 6,000 written words.

ENC 2210 Technical Writing (3). Ef-
f ective presentation of technical
and semi-technical information:
telecom technique, telegraph,
telegraph, technical fact, technical
gathering, general technical re-
ports, organization and develop-
ment of information, process
communication. Written work meets
state composition requirement of
6,000 written words.

ENC 2301 Expository Writing (3). An
advanced composition course in
the techniques of exposition, argu-
mentation, and persuasion. Written
work meets state composition re-
quirement of 6,000 written words.

ENC 3211 Report and Technical Writing (3). For business, professional,
and scientific students needing prac-
tice in collecting, organizing,
interpreting, and presenting factual
material.
ENC 3311 Advanced Writing and Research (3). Provides instruction in the concepts and methods of critical response and argumentation, and in the formulation, analysis, and presentation of original research in extended academic papers. Written work meets state composition requirement of 6,000 written words. Prerequisites: ENC 1101, ENC 1102 or equivalent.

ENC 3317 Writing Across the Curriculum (3). An interdiscipliary, upper division, Gordon Rule, writing course in which students explore substance and style as they compose essays on subjects from various fields. Written work meets state composition requirement of 6,000 written words.

ENC 4240 Report Writing (3). Instruction and practice in writing reports for practical purposes. Collecting, organizing, and interpreting facts, then writing up findings in report form and style. Includes recommendation reports, use of graphical elements, writing manuals and instructions, physical research reports, feasibility reports, progress reports, other special reports. Prerequisite: ENC 1200 or ENC 2210. Written work meets state composition requirement of 6,000 written words.

ENC 4241 Scientific Writing (3). Develops skills necessary to write laboratory reports, scientific proposals, articles, research reports, progress reports, and seminar presentations. Written work meets state composition requirement of 6,000 written words.

ENC 4930 Special Topics in Composition (3). Allows students to refine nonfiction writing skills in a variety of genres and roles. May be repeated. Prerequisites: ENC 1101 or ENC 1102 or equivalent. Written work meets state composition requirement of 6,000 written words.

ENG 2100 Introduction to Film (3). This course will introduce students to the basic artistic and compositional elements of film and the analysis of the relationship between technical and aesthetic aspects of film. Prerequisite: ENC 1101.

ENG 3138 The Movies (3). Viewing and discussion of films, with attention to cinematic ways of story-telling and to the popular film as an expression of cultural values. May be retaken for credit with change of content.

ENG 4013 History of Literary Criticism (3). A study of the major texts in literary criticism and theory from Plato to the present.

ENG 4022 Rhetoric and Poetics (3). Ancient and modern theory and practice in discussing the formal properties of elevated language.

ENG 4023 Semiotics and Narratology (3). This course studies Semiotics (the science of signs and sign systems) and Narratology (theories about the nature of narratives) in an attempt to characterize the nature of how a story gets told/shown.

ENG 4043 Contemporary Literary Theory and Criticism (3). An examination of the works of recent literary theorists.

ENG 4119 Film Humor and Comedy (3). Examines the nature of humor and comedy and its relation to film narrative. Films from all periods of cinematic history will be viewed.

ENG 4121 History of the Film (3). Discussion, with examples, of the development of cinematic art, from its European and American beginnings to its place as a major world art form.

ENG 4132 Studies in the Film (3). Intensive examination of the work of a particular nation, group, or director. May also explore various film genres, e.g., documentary, horror, the Western. With change of content, may be repeated for credit.

ENG 4134 Women and Film (3). An examination of how women have been represented in dominant commercial films and how women filmmakers have responded to the appropriation of the image of women through alternative film narratives.

ENG 4135 The Rhetoric of Cinema (3). This is an examination of how films are constructed cinematically and narratively to involve audiences on aesthetic, intellectual and ideological levels.

ENG 4906 Independent Study (VAR). Individual conferences, assigned readings, and reports on independent investigations, with the consent of the instructor.

ENG 4936 Honors Seminar (3). Designed specifically for honors students and other superior, highly motivated students. Seminar topics will vary from semester to semester.

ENG 4949 Cooperative Education in English (1-3). A student majoring in English may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

ENG 5009 Literary Criticism and Scholarship (3). Techniques and goals of humanistic research, bibliography, and critical commentary.

ENG 5018 Practical Criticism (3). Applies various critical theories—e.g., the formalistic, historical, structural, archetypal, sociological, etc.—to specific literary productions.

ENG 5058 Form and Theory of Contemporary Literature (3). Various approaches and theories of practice in the major genres of imaginative writing, including development and articulation of the creative aesthetic. May be repeated. Prerequisite: Permission of instructor.

ENG 5907 Independent Study (VAR). Individual conferences, assigned readings, reports on independent investigations, with the consent of the Chairperson.

ENL 2011 Survey of British Literature I (3). Students will read and discuss major British works written from the Old English period through 1750. Works will be examined within an historical context.

ENL 2021 Survey of British Literature II (3). Students will read and discuss major British works written between 1750 and the present. The works will be examined in an historical context.

ENL 3112 Development of the Novel: The 18th Century (3). A study of the development of the novel in England from the early attempts by Defoe and others to the Gothic novel.
ENL 3122 Development of the Novel: The 19th Century (3). A study of the development of the novel in England from Austen to Henry James; some of the novelists to be discussed are Bronte, Eliot and Dickens.

ENL 3132 Development of the Novel: The 20th Century (3). A study of the development of the novel in England from Conrad to the present; some of the novelists to be discussed are Lawrence, Woolf, and Joyce.

ENL 3261 19th Century British Women Novelists (3). Examines fiction written by women in the 19th century, including classical realist, gothic, sensation, working-class, and New Woman novels. Authors include Austen, Eliot, Bronte, and Gaskell.

ENL 4161 Renaissance Drama (3). A study of non-Shakespearean drama of the English Renaissance. Among the dramatists to be read are Johnson, Kyd, Marlowe and Webster.

ENL 4210 Studies in Medieval Literature (3). Students will read, discuss and write about works of medieval English literature from the time of Beowulf to that of Chaucer.

ENL 4212 Medieval Women Writers (3). The contributions of medieval women to literary history are examined. Among the writers to be studied are Margery Kemp and Marie de France.

ENL 4222 Studies in Renaissance Literature (3). Students will read, discuss, an renaissance excluding William Shakespeare.

ENL 4225 Spenser (3). Study of the works of one of the most important figures of the sixteenth century including The Faerie Queene, The Shepherds Calender and Amoretti.

ENL 4222 Renaissance: Prose and Poetry (3). A study of Renaissance poetry and prose to suggest their contributions to literary history. Among the writers to be read are Wyatt, Sidney, Donne, Marie and Bacon.

ENL 4230 Studies in Restoration and 18th-Century Literature (3). An in-depth study of the major figures in English Literature from 1660 to 1800, a period of transition between the Renaissance and modern times. Some of the writers who will be studied are Dryden, Pope, Swift, Johnson, and Fielding.

ENL 4241 Romanticism I (3). Focuses on the first generation of Romantic writers, including Blake, Wordsworth, Wallstonecraft, and Coleridge.

ENL 4242 Romanticism II (3). Focuses on the second generation of Romantic writers including Byron, Keats, Shelley, and Bronte.

ENL 4243 Studies in Romanticism (3). Examination of recurring themes and motifs in Romantic literature.

ENL 4251 Victorian Literature (3). Study of the poetry and prose of the Victorian Age (1832-1901). Among the authors to be read are Dickens, Eliot, Carlyle, Ruskin, Arnold, Tennyson and Browning.

ENL 4254 Late Victorian Fiction (3). An examination of the variety of fiction written from 1880-1901. Some of the writers to be studied include Wells, Zangwill, Gissing and D'ArCY.

ENL 4260 Studies in 19th-Century British Literature (3). Students will read, discuss, and write about literary works produced by British Romantic and Victorian writers between the Age of Wordsworth and the death of Queen Victoria.

ENL 4273 Studies in Modern British Literature (3). This course focuses on the literature of the 20th Century, limiting itself to British writers, but including the various genres of the modern and post-modern periods.

ENL 4274 Yeats and His Contemporaries (3). Studies the major works of William Butler Yeats and some of his contemporaries and associates.

ENL 4303 Major British Writers (3). Each section will consider the life-work of an author such as Chaucer, Spenser, Milton, Pope, Wordsworth, Dickens, Browning, Joyce, or others. May be repeated.

ENL 4311 Chaucer (3). Study of Geoffrey Chaucer's contributions to English literature. Among the works to be examined are The Canterbury Tales, The Parliament of Fowls and The Book of the Duchess.

ENL 4320 Shakespeare: Histories (3). Reading and informal dramatic interpretation of representative plays.

ENL 4321 Shakespeare: Comedies (3). Reading and informal dramatic interpretation of representative plays.

ENL 4322 Shakespeare: Tragedies (3). Reading and informal dramatic interpretation of representative plays.

ENL 4341 Milton (3). Study of the poetic and prose contributions of John Milton including the influence of the literature of antiquity on him and influence on subsequent poets.

ENL 4370 Virginia Woolf and Her Circle (3). Focusing on the works of Virginia Woolf. This course also explores how the members of the Bloomsbury Circle influenced this English novelist.

ENL 4503 Periods in English Literature (3). Individual sections will read a group of literary works from one specified period of English literature, such as the Medieval, Renaissance, Victorian, twentieth-century and contemporary periods. May be repeated with change of period.

ENL 4930 Special Topics in English Literature (3). An examination of the different aspects of English literature. May be repeated with change of content.

ENL 5220 Major British Literary Figures (3). Each section will consider the life-work of an author such as Chaucer, Spenser, Milton, Pope, Wordsworth, Dickens, Browning, Joyce, or others. May be repeated.

ENL 5505 Periods in English Literature (3). The literature and criticism regarding one specified period of English Literature, such as Medieval, Renaissance, Victorian, Twentieth Century, and Contemporary. May be repeated with change of period. Prerequisite: Permission of instructor.

LIN 2002 Introduction to Language (3). The study of the nature of human language, its origins, and its relation to thinking behavior, and culture. An examination of the similarities and differences between spoken human languages, animal languages, and non-verbal communication (including sign language); of language variation between dialects and between different historical stages of a language; and of writing systems.

LIN 2612 Black English (3). This course covers the varieties of Black English spoken in the Americas, the Caribbean, and West Africa. Focuses on the nature of these English varieties and their social uses within the community, literature, and educational system.
LIN 3013 Introduction to General Linguistics (3). Study of the sounds, vocabulary, and sentence patterns of modern English. Other topics include meaning, social and regional dialects, language change, and style.

LIN 3670 Grammatical Usage (3). The study of formal, traditional usage of English grammar and mechanics. Prerequisites: ENC 1101 and ENC 1102.

LIN 4122 Historical Linguistics (3). The study of the historical methodology for determining historical and genetic relationships among languages. Prerequisite: Introductory course in Linguistics or permission of instructor.

LIN 4321 General Phonology (3). The study of phonological processes in language and linguistic methodology for phonological analysis. Prerequisite: Introductory course in Linguistics or permission of instructor.

LIN 4430 General Morphology and Syntax (3). The study of linguistic methodology for determining the morphological and syntactic structures of languages. Prerequisite: Introductory course in Linguistics or permission of instructor.

LIN 4612 Black English (3). This course is a linguistic approach to the characteristics and functions of Black English and the current social controversies surrounding it. Prerequisite: Permission of instructor.

LIN 4651 Gender and Language (3). Examines the evidence on a variety of questions regarding women and language, including women’s speech in English and other languages, sexist language, and the relationship between language and societal attitudes towards women.

LIN 4660 Modern English Grammar (3). Practical study of syntax, phonology, morphology, syntax, semantics, psycholinguistics, historical linguistics, or language contact. Prerequisite: Introductory course in Linguistics or permission of instructor.

LIN 5 Applied Phonetics (3). Study of sounds and suprasegmentals of English. Comparison of phonetic features of English with those of other languages. Universal constraints and markedsness in learning second/foreign language pronunciation. Prerequisites: LIN 3010, LIN 3013, or LIN 5018 or the equivalent.

LIN 2010 Introduction to Fiction (3). This course offers an introduction to the basic elements of prose fiction: symbolism, plot, imagery, structure, characterization, style, point of view. Prerequisite: ENC 1101.

LIN 2030 Introduction to Poetry (3). This course offers an introduction to the basic elements of poetry: imagery, figurative language, diction, style, tone, prosody. Prerequisite: ENC 1101.

LIN 2040 Introduction to Drama (3). This course will introduce the student to the basic elements of drama and its various forms, modes, and techniques. Students will read 10-12 plays by representative English, American, and European authors. Prerequisite: ENC 1101.

LIN 2110 World Literature I (3). Surveys the literature of many cultures from the beginning of written texts through the 16th century. Usually excludes British works.

LIN 2120 World Literature II (3). This course surveys the literature of Asia and Europe from the 17th century to the present. It gives attention to the themes and world views these works embody, as well as to their artistry.

LIN 3022 The Short Novel (3). An examination of the variety of short novels that have been written in the past three centuries. Short novels from Europe and the Americas are discussed.

LIN 3050 Forms of Satire (3). This course will discuss the history and the different forms of satire from the Romans to the present, including the works of Horace, Juvenal, Swift, and Byron.

LIN 3132 Arthurian Literature (3). The legend of King Arthur is examined both in the original medieval version and in the subsequent retellings.

LIN 3145 Continental Novel (3). A study of the works of the major European novelists of the 19th and 20th centuries. Some of the writers whose work are read in translation are Tolstoy, Mann, and Flaubert.

LIN 3170 Topics in Literature and Jewish Culture (3). An examination of literature by or about Jews in a variety of national, cultural, or historical contexts. May be repeated with change of content.

LIN 3190 Survey of Caribbean Literature (3). Surveys course of the narratives, poetry, and fiction from the beginning of the Caribbean literary tradition to the present time.

LIN 3200 Themes in Literature (3). Individual sections will read and discuss works relating to topics of current and enduring interest. Discussion of literature as it reflects the identities of men and women: their places in families in past, present, and future societies, in the natural world, and the cosmic order. May be repeated.

LIN 3331 Classics of Children's Literature (3). An examination of literary texts that form part of the imaginative experience of children, as well as part of our literary heritage.

LIN 3383 Women in Literature (3). Students will examine the images of women created by European and American writers. The course will also explore the roles, historical and contemporary, of women writers.

LIN 3384 Caribbean Women Writers (3). Examination of the writings of Caribbean women.

LIN 3702 Major Literary Modes (3). Individual sections will read and discuss the literary expression of heroic, tragic, comic, satiric, mythic, realistic, or others formalized views of human existence. May be repeated.

LIN 3202 Morality and Justice in Literature (3). A study of the ways literary texts articulate the values of their society.

LIN 3930 Special Topics (3). A course designed to give students an opportunity to pursue special studies not otherwise offered. May be repeated with change of content.

LIN 4001 Major Literary Genres (3). Individual sections will read and discuss the form and development of novels, drama, poetry, short fiction, or such special forms as biographies, folk songs and tales, or essays.
among other genres. May be repeated.

LIT 4041 17th Century Drama (3). A study of Western European drama of the seventeenth century including Calderon, Jonson, Tasso de Molina, Cornelle, Racine, Wycherley, and Congreve.

LIT 4188 Regional Literature in English (3). Individual sections will discuss English writing in Ireland, Scotland, Wales, Canada, the Caribbean, India, sub-Saharan Africa, and Oceania, as well as distinctive regions in England and America. May be repeated.

LIT 4192 Major Caribbean Authors (3). Examines the literary achievements of major writers of the Caribbean region in the social, political, and cultural contexts of the English, French, and Dutch Caribbean.

LIT 4351 Major African Writers (3). Surveys a variety of literary texts relevant to life in post-colonial Africa.

LIT 4403 Literature Among the Arts and Sciences (3). Individual sections will relate the study of literature to other disciplines in the humanities, fine arts, the social and natural sciences. May be repeated.

LIT 4420 The Psychological Novel (3). This course concentrates on novels which explore the complexities of the human psyche.

LIT 4930 Special Topics (3). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. May be repeated.

LIT 4931 Special Topics in Women's Literature (3). An examination of different aspects of literature by women. May be repeated with a change of content.

LIT 5934 Special Topics (3). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. May be repeated.

Environmental Studies
David Lee, Professor and Chairperson
Bradley Bennett, Assistant Professor
Madev Bhat, Assistant Professor
Alice Clarke, Assistant Professor
Constantine Hadjilambros, Assistant Professor
Krishnaswamy Jayachandran, Assistant Professor
Joel Heinke, Assistant Professor
Jack Meeder, Research Scientist
John Parker, Professor
Tom Pliske, Instructor
Gary Rand, Assistant Professor
Mike Ross, Research Scientist

Affiliated Faculty
Jerry Brown, Sociology/Anthropology
George Dalrymple, Biological Sciences
Jim Fourquarean, Biological Sciences
David Genereux, Geology
Joel Gottlieb, Political Science
Kevin Hill, Political Science
James Huchinson, Philosophy and Religious Studies
Rudolf Jaffe, Chemistry
Jeff Joens, Chemistry
Ronald Jones, Biological Sciences
Farokh Jhabvala, International Relations
Suzanne Koptur, Biological Sciences
Rod Neumann, International Relations
Steve Oberbauer, Biological Sciences
George O'Brien, Education
Betsy Smith, Social Work
Berrin Tansel, Civil and Environmental Engineering
Joel Trexler, Biological Sciences
Bill Vickers, Sociology/Anthropology

This department prepares students to work in professions with an environmental focus. The Bachelor of Science degree emphasizes the chemical and ecological aspects of environmental analysis. The Bachelor of Arts degree is broader, with an emphasis on the political, social and economic aspects of environmental issues. This is an interdisciplinary program and particularly relies on assistance of faculty from outside departments who are affiliated with Environmental Studies.

Bachelor of Science in Environmental Studies

Degree Program Hours: 120

Lower Division Preparation

Required Courses
Equivalent of eight semester hours of both general biology and general chemistry; three semester hours each of algebra and trigonometry or pre-calculus math.

Recommended Courses
Energy and the Natural Environment, General Physics.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Lower or Upper Division Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Department</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ECO 3021</td>
<td>Economics, Man, and Society - Micro</td>
<td>3</td>
</tr>
<tr>
<td>STA 3111</td>
<td>Statistics I</td>
<td>4</td>
</tr>
<tr>
<td>STA 3112</td>
<td>Statistics II</td>
<td>2</td>
</tr>
<tr>
<td>MAC 2311</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHY 2023</td>
<td>Survey of Physics</td>
<td>3</td>
</tr>
<tr>
<td>GLY 1010, 1010L</td>
<td>Physical Geology plus</td>
<td>4</td>
</tr>
<tr>
<td>EVR 3010</td>
<td>Energy Flow in Natural and Man-made Systems</td>
<td>3</td>
</tr>
<tr>
<td>CHM 2200</td>
<td>Survey of Organic Chemistry</td>
<td>3</td>
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<td>CHM 2200L</td>
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<td>CHM 2211</td>
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<tr>
<td>CHM 2211L</td>
<td>Organic Chemistry II Lab</td>
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Upper Division Program

Recommended Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Department</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 2210</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>POS 2042</td>
<td>American Government</td>
<td></td>
</tr>
<tr>
<td>POS 3424</td>
<td>Legislative Process</td>
<td>3</td>
</tr>
</tbody>
</table>
Required Courses

Three of the four following courses

- EVR 4026: Ecology of Biotic Resources (3)
- EVR 4211: Water Resources (3)
- EVR 4231: Air Resources (3)
- EVR 4312: Energy Resources (3)
- PCB 3043: Ecology (3)
- PCB 3043L: Ecology Lab (1)
- CHM 3120: Quantitative Analysis (3)
- CHM 3120L: Quantitative Analysis Lab (2)
- ECP 3302: Introduction to Environmental Economics (3)
- REL 3492: Nature and Human Values (3)
- PUP 4203: Environmental Politics (3)
- EVR 4: U.S. Environmental Policy (3)
- EVR 4920: Environmental Studies Seminar (1)
- EVR 4905: Independent Study (2)

Electives (17)

Students are urged to develop an area of specialization of 12 to 15 credits or a minor in consultation with an advisor.

Total: 60 semester hours

Bachelor of Arts in Environmental Studies

Degree Program Hours: 120

Lower Division Prerequisites

Required Courses

Equivalent of one semester of general organismal biology (ESC 1011 and Lab), one semester of introductory chemistry (CHM 1032 and Lab or CHM 1033 and Lab), and college algebra

Recommended Courses

- Energy and the Natural Environment

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Preparation

Recommended Courses

- ENC 2210: Technical Writing (3)
- POS 2642: American Government (3)
- POS 3424: Legislative Process (3)
- EVR 3010: Energy Flow in Natural and Man-made Systems (3)
- EVR 3011: Environmental Resources and Pollution (3)
- EVR 3011L: Environmental Resources and Pollution Lab (1)
- EVR 3013: Ecology of South Florida (3)
- EVR 3013L: Ecology of South Florida Lab (1)
- PUP 4203: Environmental Politics (3)

or

- EVR 4: U.S. Environmental Policy (3)
- REL 3492: Nature and Human Values (3)

or

- ANT 3403: Cultural Ecology (3)
- ECO 3021: Economics, Men, and Society - Micro (3)
- STA 3111: Statistics I (4)
- ECP 3302: Introduction to Environmental Economics (3)
- EVR 4920: Environmental Seminar (1)
- EVR 4905: Independent Study (3)

Area of Specialization Courses: (9)

The student must take at least nine additional credits in an approved area of specialization, such as energy and resource management, human ecology, international/political issues, urban/environmental planning and policy, geography or ecology. Minors may be used as an area of specialization.

Electives (20)

Total: 60 semester hours

Cooperative Education

Students seeking the baccalaureate degree in environmental studies may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Division of Student Affairs. The student spends one or two semesters fully employed in industry or a governmental agency. For further information consult the Department of Cooperative Education.

Environmental Internships

Students interested in job-related academic internships should contact the Environmental Studies office, CP 323. For details on compensation, benefits, and academic credit, contact Dr. Jack Parker.

Course Descriptions

(Course descriptions are also found in catalog sections of all participating departments. For assistance see an advisor.)

Definition of Prefixes

EVR-Environmental Studies.

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

EVR 3010 Energy Flow in Natural and Man-made Systems (3). A course for non-science majors, emphasizing the study of energy flow and energy resources in natural ecosystems, agriculture and the global food and population crises, and land use. (F.S.S)

EVR 3011 Environmental Resources and Pollution (3). A course for non-science majors, emphasizing air and water pollution, water resources, earth resources, solid waste disposal, noise pollution, and weather patterns. (F.S.S)

EVR 3011L Environmental Science: Pollution Lab (1). Laboratory and field analyses of topics and concepts covered in EVR 3011. Corequisite: EVR 3011. (F.S.S)

EVR 3013 Ecology of South Florida (3)

EVR 3013L Ecology of South Florida Lab (1). A course for non-science majors, offering an introduction to the ecology of South Florida through lectures and a series of field trips into several unique ecosystems, such as the Everglades, hardwood hammocks, and coastal regions. The course also deals with natural resource conservation, wildlife management, endangered species, and wilderness issues. (F.S.S)

EVR 3931 Topics in Environmental Studies (3). An intensive analysis of several current environmental topics. Recommended for primary and secondary school teachers.

EVR 3949/EVR 4949 Cooperative Education in Environmental Studies (1-3). One semester of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A
written report and supervisor evaluations will be required of each student. (F,S,SS)

EVR 4026 Ecology of Biotic Resources (3). The study of renewable natural resources of the earth's biomes, particularly those of tropical forests, the factors influencing their productivity, conservation, and human use. Prerequisites: BSC 1010 and BSC 1011.

EVR 4211 Water Resources (3). A seminar dealing with various aspects of water use, water pollution problems, chemistry and ecology of South Florida's waters. Ecology is recommended. Prerequisites: CHM 1045 and CHM 1046 or equivalent and general biology. (F)

EVR 4231 Air Resources (3). Common air pollutants - their sources and methods of control. Different legislative and administrative approaches will be studied. Prerequisite: CHM 1045 and CHM 1046 or equivalent. (S)

EVR 4312 Energy Resources (3). Seminar dealing with power and energy production in modern society, fundamental energy relationships of industrial and domestic processes. Prerequisite: EVR 3010 or PHY 2023 or equivalent. (S)

EVR 4351 U.S. Energy Policy (3). Policies governing the utilization of energy in the U.S. Focuses on the physical, political and social constraints that shape energy policy in this country. Prerequisites: EVR 3010 or permission of instructor.

EVR 4401 Conservation Biology (3). Applies modern theory from ecology and population genetics to conservation issues. Topics include population viability studies, reserve design, forms of rarity, and policy issues. (S)

EVR 4905 Research and Independent Study (Var). The student works with a professor on a research project.

EVR 4920 Environmental Seminar (1). A series of talks by University and external experts on a variety of environmental issues. Preparation in giving a seminar.

EVR 5061 South Florida Ecology: Field Studies (3). An introduction to the ecology of South Florida through a series of field trips into several unique ecosystems, such as the Everglades, hardwood hammocks, and coastal regions. No science background required.

EVR 5065 Ecology of Costa Rican Rainforest (3). Intensive study of Central American tropical forest ecosystems conducted for two weeks in Costa Rica in sites ranging from lowland to high mountains. Primarily for teachers. Prerequisites: Graduate standing or permission of instructor. (SS)

EVR 5066 Ecology of the Amazon Flooded Forest (3). Study of the ecology of the flooded forest with emphasis on the relationships between plants and animals and the annual flooding cycle. The course includes a two-week field study of river camp in Peru. Prerequisites: Graduate standing or permission of instructor. (SS)

EVR 5067 Tropical Forest Conservation and Utilization (3). Distribution and classification of tropical forest ecosystems, their description and the ecological principles governing their function. Factors influencing tropical forest utilization and destruction, and strategies for sustainable use and conservation. Prerequisites: EVR 5355 or permission of instructor.

EVR 5141 Environmental Nuclear Chemistry (3). Nuclear reactions and the nature of radioactivity. Properties and uses of radioactive isotopes, fission, and fusion. Introduction to reactor technology. Consent of instructor required.

EVR 5236 Air Pollution Dynamics (3). A course designed to give an understanding of the fates of atmospheric pollutants. Scavenging processes in the atmosphere; radiation, residence times, chemical reactions, global transport processes, point source dispersion and modeling calculations. Prerequisites: EVS 3300 or EVR 4231.

EVR 5300 Topics in Urban Ecology (3). Topics include urban and suburban ecosystems emphasizing energy relations, ecological functions of urban landscapes, urban wildlife, urban forestry and ecological issues relevant to human health and wellbeing. Prerequisites: PCB 3043 or permission of instructor.

EVR 5312 Renewable Energy Sources (3). An analysis of renewable energy sources and energy efficiency including wind, biomass, geothermal, hydroelectric, solid waste, solar heating, solar cooling, and solar electricity. Prerequisite: Permission of instructor.


EVR 5320 Environmental Resource Management (3). The scientific and philosophical basis for the management of renewable and non-renewable energy, mineral, air, water, and biotic resources. Prerequisite: Permission of instructor. (F)

EVR 5353 International Energy Policy (3). Focuses on the distribution of global energy resources and related issues. A comparison of the energy policies of various countries serves as the basis for exploring alternative energy policy approaches. Prerequisites: EVR 5355 or permission of instructor.

EVR 5355 Environmental Resource Policy (3). A survey of international and national environmental policy and the legal, economic, and administrative dimensions of international accords and selected U.S. laws. Prerequisites: EVR 5320 or permission of instructor. (S)

EVR 5405 International Biological Conservation Accords (3). Survey of international biological conservation agreements. Topics include bilateral migratory wildlife agreements, the Berne Convention on Migratory Wildlife, CITES, Ramsar, the UNCED Biodiversity Treaty and the Statement of Principles on Forests. Prerequisites: EVR 5355 or permission of instructor.

EVR 5406 U.S. Endangered Species Management (3). History and implementation of the U.S. Endangered Species Act. Topics include legal and administrative aspects, reauthorization, procedures for recovery planning and conflict resolution, and biological measures of success. Prerequisites: EVR 5355 or permission of instructor.

EVR 5410 Women and the Population/Environment Equation (3). Women's role in family and society as an important component of the population and environment equation. Factors such as education, employment, and health are explored. Prerequisites: Graduate standing or permission of instructor.
Geology

Gautam Sen, Professor and Chairperson
Bradford Clement, Associate Professor
Laurel Collins, Research Scientist
Charles Connor, Research Associate
Grenville Draper, Professor
David Generaux, Assistant Professor
Rosemary Hickey-Vargas, Associate Professor
Martha Gamper-Longoria, Research Associate
Michael Gross, Assistant Professor
Jose Longoria, Professor
Andrew MacFarlane, Assistant Professor
Florentin Maurrasse, Professor
Claudia Owen, Lecturer
Edward Robinson, Research Associate
James Salers, Assistant Professor
Dean Whitman, Assistant Professor

Geologists are employed widely in environmental and hydrologic assessment and remediation, petroleum, mining and mineral industries. Geologists also are involved in basic research and teaching. Knowledge of geology is essential for understanding problems of groundwater supply, environmental hazards, geotechnical engineering and natural resources.

Well-equipped laboratories in the Geology Department allow students to learn the major techniques of the earth sciences. The geology program prepares students to become licensed Professional Geologists (P.G.) in the State of Florida.

The program offers a B.S. degree in Geology with an optional environmental geology track and a broader-based interdisciplinary B.A. in Geology. Only grades of "C" or better will be accepted for required courses in either program option. A minor in geology is also available.

Bachelor of Science

Degree Program Hours: 120

Prerequisites

General biology (BSC 1011, BSC 1011L) or equivalent; Introduction to Earth Science (GLY 1010 & 1010L) or equivalent, Historical Geology (GLY 1100 & 1100L), general chemistry (CHM 1045 & CHM 1045L) and (CHM 1046 & CHM 1046L); differential and integral calculus (MAC 2311 & MAC 2312), general physics, with or with-out calculus, (PHY 2053 & PHY 2054 or PHY 2048 & PHY 2049) and labs.

Required Courses

GLY 3202 Earth Materials 3
GLY 3202L Earth Materials Lab 2
GLY 4311 Petrology 3
GLY 4311L Petrology Lab 2
GLY 3511 Stratigraphy and Lab 4
GLY 4400 Structural Geology 3
GLY 4400L Structural Geology Lab 1
GLY 4822 Introduction to Hydrogeology 3
GLY 4791 Field Geology and Geology Mapping 3
or
GLY 4 Environmental Geology Field Methods 3
or
GLY 3782 Geology Field Excursion 3

Electives

9-12

Three courses at the 3000 to 5000 levels offered by the Geology Department (but excluding Environmental Geology GLY 3030, and Earth Resources GEO 3510) selected to form a concentration in consultation with a department advisor.

For example, to form a concentration in environmental geology, a student might select from: Applied Environmental Geology (EVS 4164 & EVS 4164L), Physical Geography (GEO 3200), Remote Sensing in the Earth Sciences (GLY 3754), Florida Geologic and Hydrologic Systems (GLY 4823), Geochemistry (GLY 5246).

Bachelor of Arts

Degree Program Hours: 120

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

Prerequisites

General Biology (BSC 1011 & 1011L) or equivalent; Introduction to Earth Science (GLY 1010 and GLY 1010L) or Environmental Geology (GLY 3030 & 3030L); Historical Geology (GLY 1100 & 1100L); General Chemistry (CHM 1045 & 1045L & CHM 1046 & 1046L); General Physics without calculus (PHY 2053 & PHY 2054; Calculus I (MAC 2311).
Required Courses

GLY 3202 Earth Materials 3
GLY 3202L Earth Materials Lab 2
GLY 4311 Petrology 3
GLY 4311L Petrology Lab 2
GLY 3511 Stratigraphy 4
GLY 4400 Structural Geology 3
GLY 4400L Structural Geology Lab 1
GLY 4822 Introduction to Hydrogeology 3

Electives

Three approved 3000 or 4000 level courses in either geology (excluding Earth Resources, GEO 3510 and Environmental Geology, GLY 3030), other science departments or in the College of Engineering and Design.

Minor in Geology

Required courses

GLY 1010 or GLY 3030 and GLY 1100 with labs, and four additional geology courses. At least two of the four additional courses must be taken with accompanying labs, one of which must be at the 4000 level.

Cooperative Education

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

Course Descriptions

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

Definition of Prefixes

EVS-Environmental Science; GEO-Geography/Systematic; GLY-Geology; MET-Meteorology; OCE-Oceanography; OCG-Oceanography-Geological; OCP-Oceanography/Physical.

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

EVS 4164 Applied Environmental Geology (3).
EVS 4164L Applied Environmental Geology Lab (1). A survey of the geological and geographical factors critical to man's attempt to contend with the natural processes. Construction problems, sewers, waste disposal, dams, ground water, and terrain evaluation in relation to the nature of the underlying substratum. Principles illustrated from South Florida and the Caribbean region in particular. Study of the geological factors involved in future development and growth of these areas, and conservation methods in relation to the geology of these areas. Prerequisites: GLY 1010, GEO 2200, and a sound background in mathematics, physics, and chemistry. Laboratory must be taken concurrently with the course. (S in alternate years)

GEO 2200 Physical Geography (3).
GEO 2200L Physical Geography Lab (1). Survey of the physical environment relevant to studies in regional geography and earth sciences. Natural evolution of landforms, and the interacting processes responsible for these features. Environmental modification and deterioration caused by human interaction. Effects of these changes: socio-economic impact and geographic problems. Case studies illustrated from South Florida and the Caribbean region. (S in alternate years.)

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

GLY 1010 Introduction to Earth Science (3).
GLY 1010L Introduction to Earth Science Lab (1). Basic survey of Earth materials and structure, plate tectonics, volcanoes, earthquakes, surface processes and groundwater, climate change, earth resources and the impact of geology on society. Prerequisites: High school or college algebra. (Lab fees assessed) (F,SS)

GLY 1110 Historical Geology (3).
GLY 1110L Historical Geology Lab (1). An introduction to the geological history of the earth and the geological time scale. Evolution of animals and plants. Prerequisite: GLY 1010 or GLY 3030 or equivalent. Lecture and lab must be taken concurrently. (F)

GLY 2072 Earth's Climate and Global Change (3). Introduction to Earth's climate and the variations of climate through geological and historical time. Emphasis is placed on the importance of the interactions of Earth's crust, atmosphere, biosphere and oceans in affecting the planet's climate. (F in alternate years)

GLY 2072L Earth's Climate and Global Change Lab (1). Practical analysis of the important factors affecting Earth's Climate. Analysis of historical and geological records of climate change. Corequisite: GLY 2072. (F in alternate years)

GLY 3030 Environmental Geology (3).
GLY 3030L Environmental Geology Lab (1). The composition and structure of the earth, the internal and external forces acting upon it and the resulting surface features. Case studies and general principles illustrated from South Florida and the Caribbean. Two field trips expected. No prerequisites. (F,SS)

GLY 3103 Dinosaurs (3). Survey of the different groups of dinosaurs. Dinosaur biology, geology, and the history of their discovery to further understanding of their life histories, environments, and the causes of their extinction. Corequisite: GLY 3103.

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

GLY 3202 Earth Materials (3). Physical and chemical properties of minerals and mineral assemblages, such as rocks and soils. Processes of mineral formation. Prerequisites: GLY 1010 or permission of instructor and General Chemistry. Corequisite: GLY 3202L.

GLY 3202L Earth Materials Lab (2). Physical and chemical properties of
minerals, rocks and soils with emphasis on identification. Application of macroscopic methods, X-ray diffraction, polarized light microscopy, in situ and bulk chemical analysis. Prerequisites: GLY 1010 and GLY 1010L or permission of instructor and General Chemistry. Corequisite: 3001.

GLY 3220 Optical Mineralogy (3). GLY 3220L Optical Mineralogy Lab (1). Principles and use of the polarizing petrographic microscope. Optical properties of isotropic, uniaxial and biaxial minerals; solution of optical problems by use of stereographic projections. Prerequisite: GLY 3200 or equivalent. Laboratory must be taken concurrently with course. (S)

GLY 3511 Stratigraphy (3). GLY 3511L Stratigraphy Lab (1). Stratigraphic principles applied to interpreting the rock record. Sediments, depositional environments and dynamics in the sedimentary record. Stratigraphic correlation and the development of the Geologic Time Scale. Prerequisites: GLY 1010, GLY 1100 or permission of instructor.

GLY 3754 Remote Sensing in the Earth Sciences (3). Remote sensing methods for the exploration and investigation of geologic processes and earth resources; airborne interpretation, processing and analysis of multi-band digital satellite imagery; GIS. Prerequisite: GLY 1010 or permission of the instructor. (S)

GLY 3760 Geological Map Analysis (3). Laboratory course dealing with analysis of geological maps and sections; theory and method of interpretation of surface outcrops on maps. Properties of simple geological structures. Recommended to be taken prior to GLY 4400 and GLY 4791. Prerequisites: Trigonometry, introduction to Earth Science or equivalent (e.g. MAC 2132, GLY 3030 or equivalents). (F)

GLY 3782 Geology Field Excursion (1-3). A one to three-week field excursion in a region of interest to demonstrate the occurrence, appearance and processes of various geological phenomena. Course may be repeated. Prerequisite: GLY 1010 (F,S,S)

GLY 3881 Environmental Geology Field Methods (3). Introduction to commonly used field methods in environmental geology including the evaluation, use and geophysical and hydrogeological techniques, and topographic map skills. Prerequisites: GLY 1010 or GLY 3030.

GLY 3949/GLY 4949 Cooperative Education in Geology (1-3). One semester of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluations will be required for each student. (F,S,SS)

GLY 4036 Earth Sciences and Society (3). Explores the new directions of Earth Science studies and examines how they can enhance society's ability to make wise decisions on resource development, waste disposal, natural hazards Prerequisites: GLY 1010 or GLY 3030.

GLY 4300 Palaeontology (3). Origin, composition and classification of igneous, sedimentary, and metamorphic rocks. Observational, theoretical, and experimental studies of rocks. Prerequisite: GLY 3202.

GLY 4300L Palaeontology Lab (2). Identification of rocks using macroscopic and microscopic techniques. Application of electron microscope. Prerequisite: GLY 3202.

GLY 4400 Structural Geology (3). GLY 4400L Structural Geology Lab (1). Faults, folds, fractures and other rock structures; their description and representation on maps and diagrams; mechanics of their formation. Prerequisites: GLY 1010 or equivalent; knowledge of trigonometry and algebra. (S)

GLY 4450 Environmental and Exploration Geophysics (3). Introduction to geophysical methods used in exploration and environmental geophysics. Seismic methods; potential fields; electrical and EM methods; ground penetrating radar; geophysical well logging. Prerequisites: GLY 1010 or 3030; MAC 2312 PHY 2049 or 3054; or consent of instructor. Corequisite: GLY 4450L (S)

GLY 4450L Environmental and Exploration Geophysics Laboratory (1). Acquisition and interpretation of exploration geophysical data. Seismic, gravity, magnetic, and geoelectrical methods; geophysical well logging; 4.5 field trips to sites in Dade County expected. Corequisite: GLY 4450. Prerequisite: GLY 3360 or GLY 4400 or permission of instructor. Corequisite: GLY 4450. (S)

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

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

GLY 4730 Marine Geology (3). GLY 4730L Marine Geology Lab (1). Survey of the main physiographic provinces of the ocean floor. Modern theories concerning the evolution of the crust; continental drift; seafloor spreading. Distribution and thickness of deep-sea sediments, and their relationship to the morphology and evolution of the crust. Deep-sea mineral resources. Marine geology of the Caribbean from recent data. Sea-bed assessment of mineral resources in the Caribbean and neighboring region. Prerequisites: OCE 3014, GLY 1010, or instructor's permission. Laboratory must be taken concurrently with course. (F)

GLY 4791 Field Geology and Geologic Mapping (3). A three-week course to be offered in the United States or in the Caribbean Islands. Instruction and practice in methods of geological mapping using topographic base maps and aerial photographs or plane table. Prerequisite: GLY 4400 or equivalent. Open to majors only. (SS)

GLY 4812 Introduction to Ore Deposits (3). Major classes of metal deposits, their geologic settings and genetic theories, and case studies of great deposits. Environmental,
economic and legal aspects of metal extraction, processing and use. Prerequisites: GLY 1010, GLY 1010L or GLY 3030, GLY 3030L.

GLY 4822 Introduction to Hydrogeology (3). Principles of groundwater flow, determination of aquifer properties, geologic factors influencing groundwater flow and quality, legal/regulatory framework for hydrogeology. Prerequisite: One college-level course in physics, chemistry, geology, and calculus, or permission of instructor. (F)

GLY 4823 Florida Geologic and Hydrologic Systems (3). Survey of geologic formations of Florida and their relationship to hydrologic and mineral resources. Sedimentary facies in relation to their hydrologic properties. Prerequisites: GLY 4822 and GLY 3511 or permission of instructor.

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

GLY 5021 Earth Sciences for Teachers (3). Study of geological materials and processes, as covered in introductory geology, but at a higher level and with additional assignments. Prerequisite: Permission of instructor. Corequisite: GLY 5021L. (F.S.S)

GLY 5021L Earth Sciences for Teachers Laboratory (1). Study of the properties of minerals and rocks; interpretation of topographic and geologic maps; study of the geology of Florida, including field trips. Prerequisite: Permission of instructor. Corequisite: GLY 5021L. (F.S.S)

GLY 5158 Florida Geology (4). Detailed lithostratigraphic and biostratigraphic analyses of Southeast Florida and their relationship to tectonics, paleoclimates. Prerequisite: GLY 4555 or permission of instructor. (S in alternate years)

GLY 5246 Geochemistry (3). GY 5246L Geochemistry Lab (1). Origin of chemical elements and principles affecting their distribution in the solar system, solid earth and hydrosphere. Use of chemical data to solve geologic problems. Prerequisites: Introduction to Earth Science and General Chemistry. (F in alternate years)

GLY 5251 Water-Rock Interaction (3). Survey of geochemical processes at the water-rock interface. Topics include absorption of inorganic and organic ions, colloid stability in groundwater, mineral dissolution and precipitation. Prerequisites: CHM 1045, MAC 2312, GY 4311 or permission of instructor.

GLY 5253C Application of ICPEs in Geochemistry (3). Determination of elemental abundances in rocks, soils, natural water using inductively coupled plasma emission spectroscopy (ICPES). Instrumental principles, sample selection and preparation methods and application of results to research. Prerequisites: CHM 1045, CHM 1046 or permission of the instructor. (S or SS)

GLY 5286 Research Instrumentation and Techniques in Geology (3). Survey of techniques and instrumentation used in geological research, including computing and data handling. Prerequisite: Graduate standing or permission of instructor. Corequisite: GY 5286L. (F)

GLY 5286L Research Instrumentation and Techniques in Geology Lab (1). Introduction to advanced instrumentation and analytical techniques in Geology, including computing and data processing. Prerequisite: Graduate standing or permission of instructor. Corequisite: GY 5286L. (F)

GLY 5298 Topics in Geochemistry (3). Seminar covering current research in selected areas of low-temperature geochemistry: oceans and oceanic sediments; continental waters and sediments; hydrothermal systems. Prerequisite: GY 4555 or permission of instructor. (F)

GLY 5322 Igneous Petrology and Geochemistry (3). Presentation and discussion of current topics in igneous petrology and geochemistry in a seminar format. Prerequisite: Permission of instructor. (S)

GLY 5335 Metamorphic Geology (3). Metamorphic mineralogy; characteristics of low, medium and high pressure metamorphic rocks; pressure-temperature determinations; metamorphic textures; modeling and determination of P-T paths. (F)

GLY 5335L Metamorphic Geology Lab (1). Metamorphic mineralogy: characteristics of low, medium and high pressure metamorphic rocks; pressure-temperature determinations; metamorphic textures; modeling and determination of P-T paths. (F)

GLY 5346 Sedimentary Petrology (3). Systematic study of sedimentary rocks. Special emphasis on sedimentary processes, sedimentary structures, sedimentary facies. Emphasizes microcrystalline and microfacies study. Prerequisite: GY 4555, Corequisite: GY 5346L. (F in alternate years)

GLY 5346L Sedimentary Petrology Lab (1). Laboratory studies of sediments and sedimentary rocks. Special emphasis on microscopic analyses and geochronologic techniques. Prerequisite: GY 4555 and GY 4555L. Corequisite: GY 5346. (F in alternate years)

GLY 5408 Advanced Structural Geology (3). Advanced treatment of the theory of rock mechanics to solve problems of natural rock deformation. Prerequisites: GY 4400, MAC 3413, or permission of instructor. Corequisite: GY 5408L. (S)


GLY 5425 Tectonics (3). Properties of the lithosphere; plate kinematics and tectonics; characteristics of plate boundaries; mountain belts; deformation of sedimentary basins. Prerequisites: GY 1010, 1100, 4400, 4310, 3200 or permission of instructor. (S)

GLY 5446 Topics in Structural Geology and Tectonics (3). Selected advanced topics in structural geology and rock deformation. Latest advances in crustal tectonics. Prerequisite: GY 5408. (F/S)

GLY 5457 Analysis of Geophysical Data (3). Reduction and interpretation of geophysical data, including time series analysis, continuation of potential fields. Three-dimensional modeling of gravity, magnetic, gravity, and integrated geophysical surveys. Prerequisites: GY 4450, PHY 2048, PHY 2049, MAC 2311, MAC 2312, MAP 2302. Corequisite: GY 5457L. (S)

GLY 5457L Analysis of Geophysical Data Lab (1). Field and laboratory applications of geophysical techniques. Computer aid analysis and three-dimensional modeling of
similar emerged environments in the Caribbean islands. Economic importance of tropical shallow-marine environments in world fuel resources. Course includes extensive field work both on land and underwater, and an individual field research project. Qualifications: Open to advanced undergraduate and graduate students in the earth and biological sciences or cognate fields. (SS)

GLY 5786 Advanced Field Excursion (3). A study of the geology of a selected region of the world followed by 10-12 day field trip in order to study the field relationships of the geologic features. Special emphasis is given to stratigraphic, structural and tectonic relationships of lithic package. Prerequisite: Permission of instructor. (SS)

GLY 5808 Mining Geology (3). Application of theoretical models of ore formation to exploration and the use of geochemical and geophysical techniques in the search for ore deposits. Prerequisites: GLY 4311 and CHM 1046. (F/S)

GLY 5816 Economic Geology (3). Economically important metal deposits of sedimentary, igneous and hydrothermal origins and their geologic settings and characteristics. Prerequisites: GLY 1010, GLY 4311, CHM 1045, CHM 1046. (F)

GLY 5826 Hydrogeologic Modeling (3). Techniques used in modeling groundwater flow and solute transport in geologic systems. Case studies of significant aquifers. Prerequisites: GLY 5827, MAP 2302, or permission of instructor. (S,SS)

GLY 5827 Hydrogeology (3). Physics of flow in geologic media. Saturated and unsaturated flow, groundwater and the hydrologic cycle, estimating hydraulic parameters of aquifers, introduction to chemical transport. Prerequisite: GLY 1010, MAC 2312, and PHY 2053, or permission of instructor. (F)

GLY 5827L Hydrogeology Lab (1). Recharge and discharge of groundwater, geological controls on groundwater, occurrence, movement, and water chemistry. Corequisite: GLY 5827. (F)

GLY 5828 Chemical Hydrogeology and Solute Transport (3). Quantitative analysis of hydrologic, geologic, and chemical factors controlling water quality and the transport and fate of organic and inorganic solutes in the subsurface. Prerequisites: GLY 5827. (S)

GLY 5857 Geology for Environmental Scientists and Engineers (3). Characterization of rocks and rock masses; geological maps; seismic hazards; weathering of rocks; hydrologic cycle; slope stability; coastal processes; geophysical techniques. Course includes field trips in the South Florida region. Prerequisites: CHM 1045, GLY 1010 or permission of instructor. (S)

GLY 5931 Graduate Seminar (1). Presentation or critical examination of current research problems in geology. A selection of topics is considered each term. Topics may also include individual research in the student's field of investigation. Prerequisite: Graduate standing or permission of instructor. (F,SS)


History

N. David Cook, Professor and Chairperson
Daniel A. Cohen, Associate Professor
Christopher Gray, Assistant Professor
Mitchell Hart, Assistant Professor
Alison Isenberg, Assistant Professor
Sherry Johnson, Assistant Professor
Alan Kahan, Associate Professor
Howard Kaminsky, Professor Emeritus
Eric J. Leed, Professor
Alex Lichtenstein, Assistant Professor
Felice Lifshitz, Associate Professor
Joseph F. Patrouch, Assistant Professor and Director of Graduate Studies
Brian Peterson, Associate Professor
Joyce S. Peterson, Associate Professor and Associate Dean
Darden Asbury Pyron, Professor
Erico Rappaport, Assistant Professor
Howard B. Rock, Professor
Mark D. Szungman, Professor
Warren T. Treadgold, Professor
Victor M. Urbe, Assistant Professor

Bachelor of Arts in History

Degree Program Hours: 120

Students interested in teacher certification should contact the College of Education at 348-2721.

Lower Division Preparation

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program: (60)

One course, at the 3000 or 4000 level in each of the following areas, (indicated in brackets at the end of each course description in the University Catalog).

Medieval Europe or Ancient History (1) 3
Modern Europe (2) 3
The United States (3) 3
Latin America or Africa (4) 3
HIS 4935 Senior Seminar 3
Any five additional History courses (at the 3000 or 4000 level) 15

Electives (at the 3000 or 4000 level) in any Department at FIU, to make up the prescribed number of credits required for graduation. (Ten credits maximum at the 1000 or 2000 level for those entering as juniors or seniors).

Minor in History

Five general History courses (at the 3000 or 4000 level) 15 semester hours.

Course Descriptions

Definition of Prefixes

AFH-African History; AMH-American History; EUH-European History; HIS-General; LAH-Latin American History;

AFH 4454 Sub-Saharan Africa (3). A survey of Sub-Saharan Africa from the origins of humankind to the present. Topics include the rise of centralized societies; slavery; colonialism; independence; and contemporary challenges. (4)

AFH 5905 Readings in African History (3). An examination of historiographical traditions within African history. Topics will vary; with a change in theme, the course may be repeated. Prerequisite: Graduate standing.

AFH 5935 Topics in African History (3). An examination of specific themes in African history. Topics will vary. With a change in theme, the course may be repeated. Prerequisite: Graduate standing.

AMH 2000 Origins of American Civilization (3). Examines the origins of the United States from the first European settlements through the early republic. Topics include society, culture, politics and economics. Written work meets the state composition requirement (6,000 words).

AMH 2002 Modern American Civilization (3). Examines the development of the United States from the early republic to the present. Topics include society, culture, politics and economics. Written work meets the state composition requirement (6,000 words).

AMH 2010 American History, 1607-1850 (3). A survey of American history from the founding of Virginia to the antebellum era. Analysis of colonial America, the American Revolution, the Constitution, and the growth of a new republic. (3)


AMH 2020 American History, 1850 to the Present (3). A survey of American history from before the Civil War to our own day. Analysis of the Civil War, Reconstruction, the Gilded Age, the move toward imperialism, and the problems of the 20th Century. (3)

AMH 2053 Historical Analysis: Democracy in America (3). The institutions, social order, and mentality of the United States in the 1830s, as it is reflected in their classic portrayal by Alexis de Tocqueville’s, Democracy in America. Written work meets state composition requirement (6,000 words).

AMH 2428 History of Miami (3). The history of Miami and Dade County from the time of the native Americans until today. Students write research papers based on primary sources, as well as archival sources. (3)

AMH 3012 American History, 1600-1763 (3). The American social colonial experience from the earliest settlements at Jamestown and Plymouth to the eve of the American Revolution. Particular emphasis will be on religion, social structure, politics, and slavery. (3)

AMH 3141 American History, 1790-1860 (3). An exploration of early national U.S. History, with particular attention to party politics, religious pluralism, sentimental culture, reform movements, and economic development. (3)

AMH 3270 Contemporary U.S. History (3). An examination of the major trends, forces and personalities that have shaped the recent American past. (3)

AMH 3317 America and the Movies (3). An examination of the social and cultural history of 20th century America through its movies. (3)

AMH 3331 American Intellectual History I (3). This course will trace the origins and development of the main ideas and intellectual themes of Anglo-American history during the colonial and early national period, 1600-1815. It will stress social ideas and popular concepts, and relate them to the formation of dominant American national characteristics. (3)
AMH 3332 American Intellectual History II (3). This course will emphasize the full flowering of individualistic liberalism in 19th Century American thought, and trace the implications of and reaction against this tradition down to the present. (3)

AMH 3444 The Great American West (3). The course will explore the meaning of the West for both the settlers and modern Americans. Using song, film, novels, art, etc., the course will examine the lives and values of the Indians, mountain men, farmers, ranchers, and cowboys. (3)

AMH 4130 The American Revolution (3). An exploration of the nature of the Revolution from the beginning of the conflict in 1763 through the ratification of the Constitution in 1789. Discussion of the political and economic differences between the colonists and England, along with the meaning the war had to the different classes of Americans. (3)

AMH 4140 Age of Jefferson (3). A survey of Jeffersonian America (1790-1828) with emphasis on the origins of American politics, the emerging American economy, the rise of American nationalism, and Jeffersonian mind. (3)

AMH 4160 The Age of Jackson (3). A survey of Jacksonian America (1828-1850) with emphasis on the growth of political parties, the rise of American industry, the emergence of labor, slavery, and early reform movements. (3)

AMH 4170 Civil War and Reconstruction (3). The rise and sources of militant sectionalism in the United States, the war itself, and the restoration of the nation. (3)

AMH 4230 The Roaring Twenties and the Great Depression (3). A political, economic, social, and intellectual history of the 1920s and the great depression of the 1930s. (3)

AMH 4251 The Great Depression (3). This course deals with the experiences of the American people in the Great Depression of the 1930s. It examines causes of the depression, government response, and effectiveness of response, as well as looking at the actual daily experience of people during the Depression and the changes it made in U.S. society. (3)

AMH 4272 Origins of Modern America, 1877-1920 (3). U.S. history between the Civil War and World War I, origins of modern American social, cultural, and private life. Impact of industrialization, urbanization, immigration and war on American society, culture between 1877 and 1920. (3)

AMH 4400 Southern History (3). An examination of the main themes and social forces that have shaped the southern experience and the southern intellectual tradition in a distinctive way within the larger historical reality of colonial Anglo-America and the United States. The period covered is from initial exploration and settlement of Sir Walter Raleigh and John Smith to the present. (3)

AMH 4500 United States Labor History (3). Transformations in the nature of work, the experience of the working class, and the development of the American labor movement, with special attention to issues of race, region, and gender. (3)

AMH 4560 History of Women in the United States (3). The changing dimensions of women's lives from the colonial era of U.S. history to the present. The course will examine the changing economic, social, and political position of women as well as the development of feminist movement and organizations. (3)

AMH 4670 African-American History (3). Black society in the United States and its relation to the political, economic, social, and cultural history of America. (3)

AMH 4930 Topics in U.S. History (3). Selected topics or themes in U.S. history. The themes will vary from semester to semester. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). (3)

AMH 5905 Readings in American History (3). Students read books from different historiographical traditions and with conflicting interpretations about an important subject in American history. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate standing.

AMH 5915 Research in American History (3). Students conduct research in primary and secondary sources on aspects of important subjects in American History. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate standing.

AMH 5935 Topics in American History. An examination of specific themes or topics in American history. The theme will vary from semester to semester. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedules.) Prerequisite: Graduate standing.

EUI 2002 Historical Analysis: Western Europe and the World (3). A survey of western European history from the 15th through the 20th centuries, concentrating on the interactions between Europeans and non-Europeans. Written work meets state composition requirement (6,000 words).

EUI 2007 Historical Analysis: The Rise of Western Culture (3). A survey of Western history from Antiquity to the Renaissance, illustrated by analysis of classic histories written in each period. Written work meets state composition requirement (6,000 words).

EUI 2011 Western Civilization: Early European Civilization (3). Examines the earliest development of European Civilization; European thought and behavior in pre-classical, classical and post-classical periods. Written work meets state composition requirement (6,000 words).

EUI 2015 Historical Analysis: Athens, Sparta, Peloponnesian War (3). A study of the Peloponnesian War, in Thucydides' classical history, that aims to introduce the student to the subject-matter of Western history and to the habits of critical thinking about the meanings of thought and action. Written work meets state composition requirement (6,000 words).

EUI 2021 Western Civilization: Medieval to Modern Europe (3). Examines key developments of European civilization from medieval to early modern times. Written work meets state composition requirement (6,000 words).

EUI 2030 Western Civilization: Europe in the Modern Era (3). Examines key developments in the origins and nature of contemporary Europe, including social, political and industrial changes from the early modern period to the present. Written work meets state composition requirement (6,000 words).
EUh 2069 Historical Analysis: The Russian Revolution (3). A study of the Russian Revolution of 1917: its causes, dynamics, and implications.  Written work meets state composition requirement (6,000 words).

EUh 2074 Historical Analysis: De Tocqueville and the French Revolution (3). Analysis of the causes and effects of the French Revolution through the eyes of one of its leading interpreters, Alexis de Tocqueville. Written work meets state composition requirement (6,000 words).

EUh 2235 Historical Analysis: The Romantic Tradition (3). A study of the Romantic tradition of self-fulfillment from Rousseau and Goethe to the present. Alternative paths of self-fulfillment including socialism and elitism. Written work meets state composition requirement (6,000 words).

EUh 3120 Europe in the Central Middle Ages (3). Europe from the ninth to the twelfth centuries, analyzing the disintegration of the empire of Charlemagne and its replacement by nascent national states and by the supranational papal monarchy. (1)

EUh 3121 Europe in the Earlier Middle Ages (3). The disintegration of the Roman imperial unity and its replacement by Latin, Greek and Arabic cultural spheres, with particular emphasis on the Latin West. (1)

EUh 3122 Europe in the Later Middle Ages (3). The thirteenth through the fifteenth centuries as the prelude to the revolutionary transformations of early modernity e.g., secularization, industrialization, expansionism, scientism and democratization (1).

EUh 3142 Renaissance and Reformation (3). A study of the development of humanism in Italy and Protestantism in Germany, and their impact on Europe in the Fourteenth, Fifteenth, and Sixteenth Centuries. (2)

EUh 3181 Medieval Culture (3). Selected topics in the cultural history of Europe from 500 to 1500: epic and knightly romance; Christian theology and spirituality; scholastic philosophy; Romanesque and Gothic arts; the rise of literature in the vernacular; the culture of the layman; and the contribution of women. (1)

EUh 3205 Nineteenth-Century Europe 1815-1914 (3). This course will deal with the political, diplomatic, economic, social, and cultural history of Europe from 1815 until 1914. Special attention will be given to the Industrial Revolution. (2)

EUh 3245 European History, 1914-1945 (3). Europe in the era of the two World Wars, with special emphasis on communism and fascism. (2)

EUh 3282 European History, 1945 to Present (3). Europe since the Second World War examined in its political, diplomatic, social, economic, and cultural aspects. (2)

EUh 3400 Greek History (3). The origins of the Greek polis in Mycenaean times, its domination of civilization in the first millennium B.C., its transformation under Alexander and his successors. The political history, culture, values, and social dynamics of Greek civilization. (1)

EUh 3411 Ancient Rome (3). The formation of the Roman republic, its rise to domination in the Mediterranean, its transformation into the Roman Empire, and its final disintegration. The political history, culture, values, social dynamics, and enduring force of the Roman civilization. (1)

EUh 3460 Germany from Charlemagne to Hitler (3). An overview of German history with special emphasis on the development of the National Socialist movement. Political, economic, social, and religious aspects of German history will be covered. (2)

EUh 3570 Russian History (3). An overview of Russian History from the time of tribal Slavs until today. The course will focus especially on the changing conditions of the Russian peasantry and on the unique development of the Russian state. (2)

EUh 3576 The Russian Revolution and the Soviet Union (3). This course deals with Russia since 1917 and focuses particularly on the theory and practice of communism in the Soviet Union. The impact of communism on the lives of the people, whether in politics, economics, or culture, will be examined. (2)

EUh 3611 European Cultural and Intellectual History (3). This course will examine the development of the key ideas in European political and social theory, in conceptions of the natural world and of the individual which have come to dominate European culture in the last four hundred years. (2)

EUh 4 Medieval Holy War (3). Analysis of the cross-cultural phenomenon of holy warfare or the sanctification and glorification of militarism in the Christian crusader movement and the Islamic jihad. (1)

EUh 4025 Saints, Relics and Miracles in Medieval Europe (3). Synthetic view of medieval Europe through the lens of saints veneration. Topics include saints as patrons, miracles and magic pilgrimage, bureaucratic canonization, gender and mysticism. (1)

EUh 4032 Nazism and the Holocaust (3). The history of the Third Reich and the Holocaust. The development of the German State and the emancipation of the Jews; the rise of racial antisemitism; Hitler and the emergence of Nazism as a political force; the 'Final Solution' and European and American responses. (2)

EUh 4186 King Arthur and His Knights (3). A study of Arthurian romance from the 12th to the 15th Centuries, as the self-image of aristocracy. The following themes will be emphasized: chivalry, adventure, erotic idealism, Christian consecration, and the creation of secular individualism. (1)

EUh 4187 Topics in Medieval European History (3). Selected topics or themes in Medieval history. The themes will vary from semester to semester. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). (1)

EUh 4200 Seventeenth Century Europe (3). A thematically-arranged study of social, political and artistic developments, in the 17th century. Concentrates on the 30 years war, absolutism, rural society, scientific revolution, and Baroque art. (2)

EUh 4286 Topics in European History (3). An examination of selected topics or themes in early modern and modern European history. The themes will vary from semester to semester. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). (2)

EUh 4300 Byzantine History (3). A survey of the political, cultural, and social history of the Byzantine Empire from 284 to 1461, including Byzan-
tium's contributions to Christian theology, Roman law, and the culture of the Renaissance and eastern Europe (1).

EIH 4313 History of Spoin (3). A survey of Spanish history from the Reconquista through the Civil War, with particular emphasis on the Golden Age. (2)

EIH 4432 Between Empire & Renaissance: Italy in the "Middle Age" (3). The Italian peninsula between the age of Roman imperial dominance and the rebirth of Italian centrality during the "Renaissance." Greek, Germanic, Muslim and Norman intervention and the political role of the Roman Church. (1)

EIH 4451 History of Modern France, 1815-1968 (3). Survey of French history from the Restoration through the student revolt of May 1968, with attention to questions of change and continuity in the French response to modernity. (2)

EIH 4440 The Making of Medieval France (3). A survey of French history as a case study in state building from the Celtic period and the incorporation of the region into the Roman Empire as Gaul to the reign of Philip Augustus (1).

EIH 4453 The French Revolution and Napoleon (3). A study of French and European history from 1798 to 1815, with an emphasis on the political development of the Revolution, social groups within France, and the rise of Napoleon. (2)

EIH 4462 History of Modern Germany, 1815-1945 (3). A survey of German history from the unification movement through WWII. Topics discussed include Hitler's relation to the German past, liberalism, modernization. (2)

EIH 4501 England to 1688 (3). A survey of ancient, medieval and early modern English history with attention to continental comparisons and contrasts. (1)

EIH 4520 England in the 18th Century (3). Exploring one of the greatest eras in English history, this course will cover the growth of the British Empire, crown and Parliament, the industrial revolution, social problems and English culture. (2)

EIH 4542 The Culture and Society of Britain, 1830-Present (3). An exploration of the rise and fall of Britain as an industrial, imperial nation. Topics include the nature of industrialization and class formation, the role of race and gender in British culture and society, war and the loss of empire in the 20th century. (2)

EIH 4600 Key Texts in Western Culture to the Renaissance (3). The history of Western Civilization from its beginning to the Renaissance, studied through particularly significant texts. (1)

EIH 4602 The Enlightenment (3). This course deals with the French Enlightenment of the Eighteenth Century, particularly with Voltaire, Diderot, and Rousseau. Impact of the Scientific and English Revolutions on Enlightenment. (2)

EIH 4606 Key Texts in Western Culture from the Reformation to the 20th Century (3). The history of Western Civilization from the Reformation to the present, studied through particularly significant texts. (2)

EIH 4610 Women and Gender in Europe, 1750-Present (3). Examines how women contributed to the development of modern European history. Also explores how ideas about gender and sexuality shaped, and were influenced by, the nature of politics, economics and culture. (2)

EIH 4613 Social History of Early Modern Europe (3). Examines European history 1300-1800 through discussion of various topics including: lords, peasants, demography, family life, education, witchcraft. (2)

EIH 4660 Modern Europe, 1789-Present (3). European history from the French Revolution until today, with special attention to liberalism, nationalism, socialism, communism, and fascism. The course will touch on the main points of the national histories of the various European states, from Britain to Russia. (2)

EIH 5905 Readings in European History (3). Students read books from different historiographical traditions and with conflicting interpretations about an important subject in European history. Subjects will vary according to professors. Course may be repeated with departmental approval. Prerequisite: Graduate standing.

EIH 5915 Research in European History (3). Students conduct research in primary and secondary sources on aspects of important subjects in European History. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate standing.

EIH 5935 Topics in European History (3). An examination of specific themes or topics in European history. The theme will vary from semester to semester. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule.) Prerequisite: Graduate standing.

HIS 3001 Introduction to History (3). Approaches to the study of the Western tradition.

HIS 3308 War and Society (3). An examination of the ways societies have organized themselves for external and internal wars. The course will also explore the changing conduct of war, the image of the warrior, and the ways in which military institutions have crystalized class structures.

HIS 4424 The History of Racial Theory in Europe and the United States (3). The literature produced by natural and social scientists on the question of race, the shifting notions of racial identity and difference, superiority and inferiority, and the political and social consequences of these ideas. (2,3)

HIS 4476 The Formation of Urban Society (3). A comparative study of the cultural, social, political and economic development of cities. Topics include: the ancient city, industrialization, immigration, poverty and urban planning.

HIS 4908 Independent Study (VAR). Individual conferences, assigned readings and reports on independent investigations, with the consent of the instructor.

HIS 4930 Special Topics (3). An examination of specific themes or topics in history. The theme will vary from semester to semester. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule).

HIS 4935 Senior Seminar (3). A seminar to be taken by all history majors, to provide experience in research, writing, and critical analysis.

HIS 5289 Comparative History (3). A study of specific topics in history that cut across regional, national, and chronological lines. The topics will change from semester to semester, and with a change in content, the course may be repeated. (The topic
of the course will be announced in the yearly schedule).

**HIS 5908 Independent Study (VAR).** Individual conferences, assigned readings and reports on independent investigations, with the consent of the instructor.

**HIS 5910 Advanced Research Seminar (3).** Small group sessions will analyze particular subject areas in history, with the consent of the instructor.

**HIS 5930 Special Topics (3).** An examination of specific themes or topics in history. The theme will vary from semester to semester, and with a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). Prerequisite: Graduate Standing.

**HIS 5940 Supervised Teaching (3).** The student will work under the close supervision of a regular member of the faculty in a mentorial fashion. The supervision will cover various aspects of course design and delivery in History.

**LAH 2020 Latin American Civilization (3).** An analysis of the underlying themes that have shaped the history of the Ibero-American areas from the time of initial contact to the present. Emphasis is given to cultural exchange and transformation. Written work meets state composition requirement (6,000 words).

**LAH 2092 Historical Analysis: The Latin Americans (3).** An examination of the evolution of symbols of status and power, and of the socioeconomic relationships among groups within the various Latin American regions. Written work meets state composition requirement (6,000 words).

**LAH 3132 The Formation of Latin America (3).** An examination of Latin America in the colonial period, focusing on conquest, Indian relations, the landed estate, urban functions, labor, and socioeconomic organization from the 15th through the 18th Centuries. (4)

**LAH 3200 Latin America: The National Period (3).** Trends and major problems of Latin American nations from independence to the present. (4)

**LAH 3450 Central America (3).** An overview of Central American history from colonial times to the present, with emphasis on the period after the mid-Eighteenth Century. All five modern nations are dealt with in some detail, while the thematic focus is on social and economic history. (4)

**LAH 3718 History of US-Latin American Relations (3).** Surveys the history of the social, economic and political relations between the US and the countries of Central America, South America, and the Caribbean basin during the last two centuries. (4)

**LAH 3740 Comparative History of Latin American Revolutions (3).** Identifies the historical forces driving revolutionary change in Latin America. Causes of revolutions, directions of the revolutionary movements, and their political agendas. (4)

**LAH 4433 Modern Mexico (3).** An examination of the central themes of nation-building in Mexico from 1810 to the present: race, land, political authority, regionalism, dictatorship, and the Mexican Revolution. (4)

**LAH 4482 Cuba: 18th - 20th Centuries (3).** The socio-economic and political setting in Cuba since the mid-Eighteenth Century. (4)

**LAH 4511 Argentina: 18th - 20th Centuries (3).** A survey of the social and political formation of the Argentine nation, starting with the colonial legacy and ending with the contemporary political situation. (4)

**LAH 4600 History of Brazil (3).** Origins of Portuguese rule and African slavery; crisis of colonialism and transition to independence; coffee, abolition, and the Brazilian Empire; Republican Brazil and the Revolution of 1930; postwar developments. (4)

**LAH 4720 Family and Land in Latin American History (3).** Evolution of land tenure in Latin American societies and its connections with the strategies and interests of elite families. (4)

**LAH 4738 History of Women in Latin America (3).** Examines women's roles in indigenous societies, in the colonial period, during independence, and in the 19th century. Also explores women and slavery, populism and popular culture, and the rise of the feminist movement. (4)

**LAH 4750 Law and Society in Latin American History (3).** Social history of law and legal struggles by colonial Indians, black slaves, peasants, women and contemporary "colonos" (settlers). Its emphasis is on the prevalence of legal confrontations throughout Latin American History. (4)

**LAH 4932 Topics in Latin American History (3).** Selected topics or themes in Latin American History. The themes will vary from semester to semester. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). (4)

**LAH 5905 Readings in Latin American History (3).** Students read books from different historiographical traditions and with conflicting interpretations about an important subject in Latin American History. Subjects will vary according to professors. Course may be repeated with departmental approval. Prerequisite: Graduate Standing.

**LAH 5915 Research in Latin American History (3).** Students conduct research in primary and secondary sources on aspects of important subjects in Latin American History. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate Standing.

**WOH 1001 Historical Analysis: World Civilization (3).** Comparative histories of major world civilizations, including China, India, the Moslem Middle East, Africa, Latin America, and the West. Emphasis on cultural characteristics and interactions. Written work meets state composition requirement (6,000 words).

**WOH 3281 Jewish History to 1750 (3).** Jewish history from the First Exile in 586 BCE to 1750. The development of Jewish institutions in exile and as a nation, the development of the Talmud and the medieval experience.

**WOH 3282 Modern Jewish History (3).** A survey of the major currents in modern Jewish History. The reaction to the Enlightenment, the American experience, the growth of the Eastern European Shtetl, the Holocaust and the Birth of the State of Israel.
The Humanities program is not only theoretical. It seeks to develop in the student those skills and attitudes which are specifically human, such as skills of verbal and written communication, analytical skills, open-minded and critical attitudes towards the problems of our changing society, artistic sensitivity and expression, and all forms of imaginative creativity. Above all, the program hopes to challenge the student to raise the cultural level of our society by bringing his or her humanistic approach to bear upon institutions, cultural programs, mass media, and the business community.

The Humanities program is not only a richly rewarding program of undergraduate study, but it also prepares students for later success in post-graduate programs in the liberal arts, law school, business, and public affairs.

A Humanities double major is a fine complement to a highly specialized vocational or professional major. In addition, a Humanities minor offers an attractive option both to students in arts and sciences and to those in the other schools of the University.

Lower Division Preparation
To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program (30)
A. Core: The following four courses are required from all HUM majors (12 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 4431</td>
<td>The Greek World</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3232</td>
<td>Renaissance and Baroque</td>
<td>3</td>
</tr>
<tr>
<td>HUM 4920</td>
<td>Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3246</td>
<td>The Enlightenment and the Modern World</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3254</td>
<td>Contemporary World</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3252</td>
<td>20th Century Culture and Civilization</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: For students who take more than four core courses, the surplus can be counted under B or C below.

B. Three additional Humanities courses (9 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 3214</td>
<td>Ancient Classical Culture and Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3304</td>
<td>Values in Conflict</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3225</td>
<td>Women, Culture and History</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3306</td>
<td>History of ideas</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3432</td>
<td>The Roman World</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3435</td>
<td>The Medieval World</td>
<td>3</td>
</tr>
<tr>
<td>HUM 2512</td>
<td>Art and Society</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3545</td>
<td>Art and Literature</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3930</td>
<td>Female/Male: Women’s Studies Seminar</td>
<td>3</td>
</tr>
<tr>
<td>HUM 4391</td>
<td>Human Concerns</td>
<td>3</td>
</tr>
<tr>
<td>HUM 4406</td>
<td>Film and the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>HUM 4491</td>
<td>Cultural Heritages and Changes</td>
<td>3</td>
</tr>
<tr>
<td>HUM 4542</td>
<td>Human Concerns</td>
<td>3</td>
</tr>
<tr>
<td>HUM 4543</td>
<td>Literature and Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>HUM 4544</td>
<td>Literature and the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>HUM 4561</td>
<td>Ethics and the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>HUM 4555</td>
<td>Symbols and Myths</td>
<td>3</td>
</tr>
<tr>
<td>HUM 4906</td>
<td>Independent Study</td>
<td>3</td>
</tr>
</tbody>
</table>

C. Three additional courses either from the list of HUM courses offered by the Program, or from the following Humanities disciplines: History, Philosophy, Religion, Art History, and Literature, or from other disciplines related to the Humanities if approved by Humanities faculty student advisers. (9 credit hours)

D. General Electives (30 semester hours): These courses may be outside of the Humanities and its contributing disciplines. Courses must be approved by the Program Director.

Classics Track
a. Humanities Core Curriculum 12
b. Three additional courses dealing with Classical (Greek or Roman) culture and civilization. These courses may be either HUM courses or courses from contributing Humanities disciplines. 9

c. Three interdisciplinary Humanities (HUM) courses. 9

d. Language requirement: The language requirement is the same as for other FIU students; however, students in the Classics Track are strongly encouraged to satisfy the requirement with a Classical language.

e. General Electives (30 semester hours). These courses may be outside of the Humanities and its contributing disciplines. Courses
must be approved by the Program Director.

Minor in the Humanities (15)

1. One of the following:
   - HUM 3214 Ancient Classical Culture and Civilization
   - HUM 4431 The Greek World
   - HUM 3432 The Roman World

2. Four additional HUM courses (including classical languages)  12

Course Descriptions

Definition of Prefixes

HUM-Humanities

GRE 1120 Classical Greek I (5). Emphasis of grammar, and on basic reading and writing skills.

GRE 1121 Classical Greek II (5). Emphasis on grammar, and on basic reading and writing skills. Prerequisite: GRE 1120.

GRE 2200 Intermediate Classical Greek (5). Emphasis on grammar, and on acquiring intermediate reading and writing skills. Prerequisite: GRE 1121.

GRW 3210 Greek Prose Writers (3). Translation into English and grammatical analysis of selected texts of Classical prose writers, such as Plato, Aristotle, Xenophon, Thucydides and Plutarch. Prerequisite: Reading knowledge of Classical Greek or GRE 2200.

HUM 2512 Art and Society (3). A study of the relationship between art and culture in different periods, including patronage, the role of the artist, and the relationship between art and economic, political, religious, and ideological forces.

HUM 2701 Study Abroad in the Humanities (1-9). Integrated study of painting, architecture, music, drama, dance, and philosophy. Attitudes and beliefs of societies as they are reflected in the arts.

HUM 3214 Ancient Classical Culture and Civilization (3). Explores the culture of the ancient Greek and Latin worlds from an interdisciplinary perspective and studies the varied conceptions of the individual, society, and nature.

HUM 3225 Women, Culture and History (3). Examines women’s lives within various world cultures and historical periods. Examines the cultural meaning attributed to women, women’s experiences and historical contributions.

HUM 3232 Renaissance and Baroque Cultures (3). An in-depth examination of the cultural monuments of the Renaissance, Reformation, Counter-Reformation, and Baroque periods and of the forces that helped shape them.

HUM 3246 The Enlightenment and the Modern World (3). Examines the culture and the Enlightenment and the modern world from an interdisciplinary perspective and studies the varying conceptions of the individual society and nature.

HUM 3252 20th Century Culture and Civilization (3). The 20th century through the Vietnam war, as represented by the period’s creative and intellectual works in literature, art, history and philosophy - discussed from an interdisciplinary perspective.

HUM 3254 The Contemporary World (3). Significant creative and intellectual works, ideas and movements of the last twenty years - surveyed and discussed from an interdisciplinary perspective.

HUM 3304 Values in Conflict (3). Philosophical, ethical, and religious foundations of Western civilization and significant challenges its value system has received from critical and revolutionary thought.

HUM 3306 History of Ideas (3). The historical development of fundamental concepts through an interdisciplinary cultural approach. Nature, freedom, beauty, virtue, alienation, and relativism are traced in literature, art, and philosophy including the social context of developing ideas.

HUM 3432 The Roman World (3). An in-depth examination of selected cultural monuments and events of the Roman Republic and Empire and of the forces that helped shape them.

HUM 3435 The Medieval World (3). An in-depth examination of cultural monuments of the European Middle Ages and of the forces that helped shape them.

HUM 3545 Art and Literature (3). A study of a period in the history of visual art as it relates to literature. Topics may include art and mythology, sacred and profane love in art and literature, painting and poetry, and the novel and art.

HUM 3562 Politics and the Arts (3). Explores arts and patronage in relation to the politics and ideologies of a given place and time. Topics vary. May be repeated with a change in content.

HUM 3591 Art and Technology (3). Explores the relationship between innovations in technology and artistic expression. Course theme is media based, and varies from semester to semester. May be repeated with department approval.

HUM 3930 Female/Male: Women’s Studies Seminar (3). This course interprets and contrasts the status of women and men in context with women’s inequality. Diverse topics include the workplace, family, education, image, value and social identity.

HUM 3949 Cooperative Education in Humanities (3). A student majoring in Humanities may spend one or two semesters fully employed in industry in a capacity relating to the major.

HUM 3 Special Topics (3). An examination of specific topics in the humanities. The topics may vary from semester to semester. May be repeated with a change in content.

HUM 4392, 4542 Human Concerns (3). Examines concerns important to the human condition, including varying conceptions of human nature, the relation of the individual to society, the quest for identity, the search for meaning through literature, art and social institutions. (With consent of the instructor, this course may be repeated for credit).

HUM 4406 Film and the Humanities (3). Studies the significance of film in Western culture: the language, semiotics and techniques of films with the aid of appropriate cinematographic material.

HUM 4431 The Greek World (3). An in-depth examination of selected cultural monuments and events of the Greek World in the Classical and Hellenistic periods and of the forces that helped shape them.

HUM 4491 Cultural Heritages and Cultural Changes (3). Focuses upon various cultures and their development, including such topics as: cul-
International Relations

Domian J. Fernandez, Associate Professor and Chairperson
Ken I. Boodhoo, Associate Professor
Thomas A. Breslin, Associate Professor
John F. Clark, Assistant Professor
Ralph S. Clem, Professor
Emily Copeland, Assistant Professor
Peter R. Craumer, Associate Professor
Farrokh Jhabvala, Professor
Antonio Jorge, Professor
Paul A. Kowert, Assistant Professor
Charles G. MacDonald, Professor
Mohiaddin Mesbahi, Associate Professor
Roderick P. Neumann, Assistant Professor
Nicholas Onuf, Professor
Elsbeth Prugl, Assistant Professor
Susan E. Waltz, Professor
Gregory B. Wolfe, Professor

Bachelor of Arts

Degree Program Hours: 120

Lower Division Preparation

Students may begin taking courses in the Department at any time and may declare their intention to major in International Relations after completing 24 semester hours of general education requirements. To qualify for full admission to the program, ITR students must have met all lower division requirements including CLAST, complete 60 semester hours, and must be otherwise acceptable into the program. ITR 2001, Introduction to International Relations, or its equivalent, is required of all students, but does not count toward the 30 semester hour minimum for the major. Students may begin taking courses in the Department without having completed ITR 2001 or its equivalent.

Recommended Courses

Economics, foreign languages, geography, history, international relations, political science, sociology.

Upper Division Program

International Relations majors must complete a minimum 30 semester hours of coursework in the department with a grade of 'C' or better.

Core Requirement: (9)

International Relations

Group I Courses for the Major: (9)

In addition to the Core Requirement, ITR majors must take at least one course (3 sem. hrs.) from each of the following divisions in Group I:

(1) International Law/International Organizations (IL)
(2) Foreign Policy/Security Studies (FP)
(3) International Political Economy/Economic Geography (IPE)

Group II Courses for the Major: (12)

IRN majors must also take at least four courses (12 sem. hrs.) in Group II, including at least one from each of the following divisions:

(1) Area Studies (AS)
(2) Geography (G)
(3) Issues and Problems in International Relations (IP)

Electives

Courses are designed to meet particular professional goals. The student is encouraged to consider a dual major in related fields; to pursue courses in foreign languages and methodology; and to work toward appropriate academic certificates (e.g., Latin American and Caribbean Studies).

Minor in Geography

A student majoring in another academic discipline earns a Minor in Geography by successfully completing approved coursework of 15 semester hours with a grade of 'C' or better as described below:

GEA 2000 Introduction to Geography

GEA 2000 World Regional Geography

In addition to the above required courses, students must take a minimum of three other Geography courses, at least one with a GEA prefix, and at least one with a GEO prefix.

Minor in International Relations

A student majoring in another academic discipline earns a Minor in International Relations by successfully completing approved coursework of 15 semester hours in the Department of International Relations with...
a grade of ‘C’ or better. This program must include:

INR 2001 Introduction to International Relations 3
GEO 2000 World Regional Geography 3
At least one course from Group I 3
At least one course from Group II 3
Any other course offered by the Department of International Relations.

Dual Major and Certificate
Students are encouraged to pursue a dual major or a certificate program to complement the International Relations program. This allows the student to add an important dimension to the major.

Course Descriptions

Definition of Prefixes
GEA-Geography-Regional (Area); GEO-Geography-Systemic; INR-International Relations; PUP-Public Policy.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

GEO 2000 World Regional Geography (3). A systematic survey of the major regions and countries of the world, with regard to their physical, cultural, and political characteristics. Emphasis upon climate, natural resources, economic development, and population patterns. (F.S,SS)

GEO 3320 Population and Geography of the Caribbean (G) (3). Physical, cultural, and political geography of the Caribbean; emphasis on population patterns, growth and ethnicity. (S)

GEO 3400 Population and Geography of Latin America (G) (3). Introduction to the physical, cultural, and political geography of Latin America. Emphasis on population patterns and problems of population growth, systems of land use and tenure, economic development, natural resources, and agriculture. (F.S)

GEO 3500 Population and Geography of Europe (G) (3). Introduction to the physical, cultural, and political geography of Europe emphasizing the evolution of the states and the geographical factors facilitating the integration movement. (S)

GEO 3554 Geography of Russia and Central Eurasia (G) (3). A geographical analysis of the countries of the former Soviet Union. Emphasis on resources, population, urbanization, and economic development. (S)

GEO 3600 Population and Geography of Africa (G) (3). Examines the structure of pre-conquest society and covers colonialism’s effects on contemporary food production and ecological management. An overview of development issues in Africa. (F)

GEO 3630 Population and Geography of the Middle East (G) (3). Introduction to the physical, cultural, and political geography of the Middle East. Emphasis on population patterns, natural resources, and economic development. (F)

GEO 4905 Independent Study (1-6). Directed independent research in regional geography. Requires prior approval by instructor. (F.S,SS)

GEO 5415 Topics in Social Geography (G, IP) (3). Topics discussed include geographic aspects of population and ethnicity, with emphasis on sources and analysis of data and pertinent concepts. Prerequisite: GEO 2000 or permission of instructor. (S)

INR 2001 Introduction to International Relations (3). Introduction to the interactions among international actors: states, international organizations, and transnational groups. Concepts such as power and national interest will be introduced. (F.S,SS)

INR 3004 Patterns of International Relations (IP) (3). The course deals with the development and practice of key concepts of international relations as seen in the historical perspective of the 19th and 20th centuries. The course is structured so as to emphasize the continuity and coexistence of the several concepts during the 20th century, and to provide an outline of modern diplomatic history. (F.S,SS)

INR 3013 Development of International Relations Thought (3). The nature and characteristics of international relations from antiquity to the end of the First World War. Examination of the religio-philosophical, socio-economic and political ideas and systems associated with them. Study of selected historical occurrences and patterns of social change and their interaction with the dynamics of international relations. Prerequisite: INR 2001.

INR 3043 Population and Society (G, IP) (3). Introduction to basic demographic concepts: fertility, mortality, migration, urbanization. Discussion of economic development, modernization and population change. Examination of sources of data and background information including censuses and vital statistics, and their utilization. (F)

INR 3081 Contemporary International Problems (IP) (3). Examines selected world and regional issues and problems. Topics vary according to the instructor. (F.S,SS)

INR 3106 International Relations of the United States (FP) (3). Introduces major issues of U.S. foreign policy. Topics are examined from multiple
INR 3214 International Relations of Europe (AS) (3). An examination of the international, social, economic, and political life of contemporary Europe. Emphasis given to international organizations and the trend toward economic and political integration. (F.S)

INR 3232 International Relations of China (AS) (3). An examination of the development of China's international relations in the 20th century. Special attention to the development of institutional mechanisms for diplomacy and to problems of integrating domestic and foreign policies. (S)

INR 3243 International Relations of Latin America (AS) (3). An examination of international, social, economic, and political life of Latin America. Emphasis given to the role of international organizations; regionalism; and the trend toward economic integration. (F.S.SS)

INR 3246 International Relations of the Caribbean (AS) (3). An examination of the international social, economic, and political life of the Caribbean. Includes English, Spanish, and French speaking regions. (F.S)

INR 3252 International Relations of North Africa (AS) (3). An examination of the social, political and economic structure of North Africa and the manner in which its historical development has conditioned international relations within and external to the region. (F)

INR 3253 International Relations of Sub-Saharan Africa (AS) (3). An examination of contemporary social, economic, and political life in sub-Saharan Africa in view of historical experiences. Special attention given to regional conflicts and apartheid. (F)

INR 3262 International Relations of Russia and the Former USSR (AS) (3). Analysis of the international relations of countries of the former USSR, covering the Soviet and post-Soviet eras. Emphasis on Russia, Muslim Central Asia, and their impact on the international system. (F)

INR 3274 International Relations of the Middle East (AS) (3). An examination of the international social, economic, and political life of the Middle East. The role of oil in the region will receive special attention. (F.S)

INR 3403 International Law (IL) (3). Introduction to the legal concepts, framework, and institutions which play a role in international relations theory and practice. (F.S,S)

INR 3502 International Organizations (IL, IP) (3). The study of international political, economic, and social organizations and their impact upon the relations between nations. Emphasis on the constitution, voting, membership, security and operation of such organizations, and the setting of international disputes through these bodies. (F.S,S)

INR 3706 International Political Economy (IPE) (3). Explores the important concepts, theories, and contending approaches used in the study of international political economy. (F.S,S)

INR 3949 Cooperative Education in Social Sciences (3). A student majoring in one of the Social Sciences (Economics, International Relations, Political Science, Sociology, or Psychology) may spend several semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department. (F,S,S)

INR 4024 Ethnicity and Nationality; World Patterns and Problems (IP) (3). A systematic survey of multinational states and their current political and socio-economic situations. The concept of ethnicity and its correlates. Conceptual bases of ethnic integration, assimilation, and stratification. The macro and micro-scales; country, region, city, neighborhood. The consequences of modernization and economic development. (F)

INR 4044 World Population Problems (IP) (3). Analysis of problems of population growth, economic development, and food supply. The impact of population growth upon the world political system, the Green Revolution and its implications. Environmental consequences of population growth. Prerequisite: INR 3043. (F)

INR 4054 World Resources and World Order (IP) (3). An examination of the impact of the quantity and distribution of the world's resources upon the relations between nations. The availability of mineral resources and food, in particular, will receive attention; and an assessment will be made of the international economic and political implications deriving therefrom. (F.S)

INR 4083 Islam in International Relations (IP) (3). Analysis of the role of Islam in shaping the dynamics of contemporary international relations. Emphasis on ideological, cultural and political role, Islamic movements and states and relations with the West. (S)

INR 4090 Ethical Problems in International Relations (IP) (3). Explores several approaches to the international ethical problems posed by intervention, human rights abuses, nuclear threats, global economic privatism and other international phenomena. Prerequisite: INR 2001.

INR 4247 Caribbean Regional Relations (AS) (3). An examination of the forces and institutions which contribute to or inhibit cooperation and integration in the Caribbean. Prerequisites: INR 3246, CPO 3323, ECS 4432, or ECS 4433. (S)

INR 4283 International Relations, Development, and the Third World (AS, IP) (3). An examination of the impact of the theory and practice of development and the relations between nations, with particular emphasis on the Third World. Attention given to the role of international political and economic organizations in the development process. (F,S)

INR 4335 Strategic Studies and National Security (FP) (3). The role of force in international relations is examined. The use and control of force in theory and practice is analyzed. Special attention is paid to contemporary national security issues. (F,S)

INR 4404 International Protection of Human Rights (IL, IP) (3). Development of the concern of the international community with the rights of individuals and groups and the institutional mechanisms which have been set up for their protection. (F)

INR 4408 Topics in International Law (IL, IP) (3). An intensive examination of selected topics in international law and relations among nations. Topics will vary according to the interests of the instructor and the students. (F)

INR 4603 Theories of International Relations (3). Analysis and conceptualization of the forces and conditions which influence relations among na-
tions. Emphasis is on the provision of an analytical basis for the study of international relations. Prerequisite: INR 2001 or permission of instructor. (F,S,SS)

INR 4905 Independent Study (VAR). Directed independent research. Requires prior approval by instructor. (F,S,SS)

INR 4931 Topics in International Relations (3). Varies according to the instructor. (F,S,SS)

INR 4949 Cooperative Education in Social Sciences (3). A student majoring in one of the Social Sciences (Economics, International Relations, Political Science, Sociology, or Psychology) may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department. (F,S,SS)

INR 5007 Seminar in International Politics (3). An advanced graduate course designed to give students a specialized knowledge of the classics in international politics. The course traces the development of international politics from Thucydides to the present.

INR 5086 Islam in International Relations (3). Analysis of the role of Islam in shaping the dynamics of contemporary international relations. Emphasis on the ideological, cultural, and political role of Islamic movements and states, and their relations with the West. (F)

INR 5087 Ethnicity and the Politics of Development (3). This course examines the conceptual and substantive dimensions of ethnicity in the context of world politics and political development. The course will highlight ethnicity and ethnic groups as critical factors in North-South politics. (F)

INR 5315 Foreign Policy Analysis (3). Comparative examination of theories of foreign policy making, emphasizing the international, domestic, and organizational contexts in which national policies are formulated and enacted. Prerequisites: Graduate standing or permission of instructor. (F)

INR 5409 International Law I (3). Role of international law in the relations of states; nature, development, theory, sources of law; international personality; jurisdiction, including territory and nationality; dispute settlement. (F)

INR 5507 International Organizations I (3). Study of international organizations and their role in international relations. Emphasis on their legal status, rule-making capacities and role in dispute settlement and maintenance of peace. (S)

INR 5607 International Relations and Development (3). An analysis and conceptualization of the process of development as it takes place in the international context. Special attention given to the role of international organizations in promoting development and the manner in which differences in developmental levels conditions international relations. (S)

INR 5906 Independent Study (VAR). Directed independent research. Requires prior approval by instructor. (F,S,SS)

INR 5935 Topics in International Relations (3). Varies according to the instructor. (F,S,SS)

PUP 3206 International Law and the Environment (IL, IP) (3). Introduction to the growing body of international laws on environmental issues, with special emphasis on important cases. Recent attempts to coordinate and regulate activities affecting the global environment, with particular attention to the UN Environmental Agency. (S)
**Liberal Studies**

Janet F. Parker, Professor, Psychology, and Director of Liberal Studies  
Marcella Welch, Professor, Modern Languages, and Associate Director of Liberal Studies

The Liberal Studies Program exposes the student to a wide range of courses offered by the College, while granting the opportunity to pursue an individualized program of studies under the Liberal Studies guidelines. These guidelines include six categories of courses: (1) Foundations of Liberal Studies, two courses to be taken as early as possible; (2) Interdisciplinary Colloquia, two courses involving faculty from several departments of the College, and dealing with interdisciplinary topics; (3) Scientific Analysis, two courses to expose the student to the scientific method and its application to problems in biology, chemistry, environmental science, geology, and physics; (4) Humanistic Analysis, two courses dealing with the analysis of literary and historical texts or works of art and music; (5) Social Analysis, two courses to expose the student to the basic theories and methods of social scientists in the fields of anthropology, economics, international relations, political science, psychology, and sociology; (6) Artistic Creation, one course in studio art or music, creative writing, or theatre to allow the student to experiment with his or her own creativity, and to experience the work of the artist.

Students are free to choose any combination of courses within these guidelines. Under the advisement of the Director or Associate Director of Liberal Studies, the student will be encouraged to pursue an individualized and focused program.

**Bachelor of Arts**

Degree Program Hours: 120

**Lower Division Preparation**

Recommended Courses: Arts and Sciences concentration recommended

To qualify for admission to the program, RIT undergraduates must have met the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

**Upper Division Program**

**Required Courses:** (33)

Courses offered by any of the units of the College of Arts and Sciences, chosen in accordance with academic guidelines of the Program of Liberal Studies, to meet requirements in the four following areas:

- Scientific Analysis 6
- Humanistic Analysis 6
- Social Analysis 6
- Artistic Creation 3
- Interdisciplinary Colloquia offered by the Liberal Studies Program 6
- Foundations of Liberal Studies 6

**Electives**

The remaining hours will be taken as electives.

**Limitations**

If the student wishes to obtain a second major concurrently, no more than three courses taken to meet the requirements of the other major may be counted towards the requirements of Liberal Studies. If the student wishes to obtain a minor concurrently, no more than two courses taken to meet the requirements of the minor may be counted towards the requirements of Liberal Studies. No student is allowed to take more than six courses in one discipline.

**Course Descriptions**

**Definition of Prefixes**

IDS - Interdisciplinary Studies; SSI - Social Sciences: Interdisciplinary

**IDS 2930 Faculty Scholars Seminar**

(1) Provides freshman Faculty Scholars the opportunity to participate in the interdisciplinary study of significant themes. May only be taken twice.

**IDS 3930 Foundations of Liberal Studies**

(3). This will be a broad synthesis of knowledge and methods in the Arts and Sciences taught from the perspective of different disciplines. Specific topics will be announced in advance.

**IDS 3949 Cooperative Education in Liberal Studies**

(3). A student majoring in Liberal Studies may spend one semester fully employed in industry in a capacity relating to the major.

**IDS 4905 Independent Study (VAR)**

Cross-disciplinary topics for individual study and research to be chosen by students in consultation with their faculty advisors.

**IDS 4920 Liberal Studies Colloquia**

(3). Individual sections will study, from an interdisciplinary perspective, issues selected and presented jointly by College faculty. Specific topics will be announced in advance.

**IDS 4930 Foundations of Liberal Studies**

(3). This will be a broad synthesis of knowledge and methods in the Arts and Sciences, taught from the perspective of different disciplines. Specific topics will be announced in advance.

**IDS 4949 Cooperative Education in Liberal Studies**

A student majoring in Liberal Studies may spend one or two semesters fully employed in industry in a capacity relating to the major.

**SSI 3240 World Prospects and Issues**

(3). This course examines, from a multidisciplinary point of view, specific global issues such as food, population, and arms control. The issues discussed may change from one semester to the next.

**Labor Studies**

**Required Courses for Liberal Studies:** (33)

Thirty-three semester hours of concentration at the 3000 or 4000 level as required for all Liberal Studies students to be selected in consultation with and agreement of advisor. Courses are to meet requirements in the following areas:

- Scientific Analysis 6
- Humanistic Analysis 6
- Social Analysis 6
- Artistic Creation 3
- Interdisciplinary Colloquia 6
- Foundations of Liberal Studies 6

When possible, these courses should be selected from the list of required and elective courses for Labor Studies. All courses must be completed with a grade of 'C' or better.

**Required Courses for Labor Studies Concentration:** (12)

- LBS 3001 Introduction to Labor Studies

Minimum of three courses (nine hours) to be chosen from the following: (additional courses from this list may be used to fulfill electives). To be chosen in consultation with and agreement of advisor.

- ECO 3021 Economics and Society, Micro
Theories of the Labor Movement
Women and Work in the United States
Labor and Industrial Relations Law
Directed Study in Labor Studies
Industrial Sociology

EIN 4214 Safety in Engineering
EIN 4261 Industrial Hygiene

International Relations
INR 3004 Patterns of International Relations
INR 3043 Population and Society
INR 4283 International Relations, Development, and the Third World

Labor Studies
LBS 4401 Collective Bargaining in Industrial Systems
LBS 4150 Contemporary Labor Issues
LBS 4260 Administration of Labor Organizations
LBS 4461 Labor Dispute Resolution
LBS 4654 Comparative and International Labor Studies
LBS 4905 Topics in Labor Studies
LBS 4930 Topics in Labor Studies
LBS 5464 Fact Finding and Arbitration

Management
MAN 4401 Collective Bargaining
MAN 4410 Union-Management Relations
MAN 4610 International and Comparative Industrial Relations

Philosophy
PHI 2600 Ethics
PHI 3636 Professional Ethics
PHI 4630 Contemporary Ethical Issues
PHM 3200 Social and Political Philosophy
PHM 3400 Philosophy of Law

Political Science
POS 3044 Government and Politics of the U.S.
POS 3071 Corporate Power and Politics
POS 3424 Legislative Process
POS 4122 State Government and Politics
POT 3204 American Political Thought
POT 3302 Political Ideologies
PUP 4004 Public Policy (U.S.)

Psychology
INP 2002 Introductory Industrial/Organization Psychology

Public Administration
PAD 2002 Intro to Public Administration
PAD 4223 Public Sector Budgeting
PAD 5427 Collective Bargaining in the Public Sector

Sociology
ANT 4007 The Organizer
ISS 3330 Ethical Issues in Social Sciences
SYA 3300 Research Methods
SYA 4010 Sociological Theories
SYO 4360 Social Stratification (Mobility)
SYO 4530 Social Stratification

Statistics
STA 1013 Statistics for Social Sciences
STA 2122 Introduction to Statistics I
STA 3123 Introduction to Statistics II

Theatre
SPC 2600 Public Speaking

Course Descriptions

Definition of Prefixes
LBS - Labor Studies

LBS 3001 Introduction to Labor Studies (3). History and development of the labor movement, with emphasis on union development as a response to industrialization and technological change. Includes the structure and functioning of modern unions, the development of modern technology, the industrial working class, and the impact of the rural-urban shift of labor.

LBS 3949 Cooperative Education in Labor Studies (1-3). One or two semesters of part or full-time work related to the major. Written reports and supervisor evaluations required. Prerequisite: Permission of Labor Studies Program.

LBS 4101 Theories of the Labor Movement (3). This course deals with theories which have attempted to explain the origins, developments, and functioning of the labor movement.

LBS 4150 Contemporary Labor Issues (3). Studies of contemporary labor issues selected from such areas as collective bargaining, arbitration, mediation, legislation, and administrative law, employing.

ment discrimination, and union grievances.

LBS 4210 Women and Work in the United States (3). The role of women in the work force and in unions with historical, social, and economic emphasis.

LBS 4260 Administration of Labor Organizations (3). Administration of labor organizations; labor policies and practices; legal requirements and financial administration of unions. Prerequisite: LBS 3001.

LBS 4401 Collective Bargaining in Industrial Systems (3). A comprehensive study of collective bargaining with emphasis upon the private sector. Included will be negotiations and scope of contracts, day-to-day contract administration, and major bargaining issues.

LBS 4461 Labor Dispute Resolution (3). Theory and practice of dispute resolution in industry arbitration processes; grievances, mediation, fact-finding, and conciliation. Arbitration of industrial claims and disputes, commercial arbitration. Prerequisite: LBS 3001.

LBS 4501 Industrial and Labor Relations Law (3). Studies the history and current functioning of labor law with special emphasis upon the private sector.

LBS 4654 Comparative and International Labor Studies (3). A study of labor issues from a comparative and international perspective with emphasis upon the impact of international organizations on labor relations systems and a comparison among major labor relations models.

LBS 4900 Directed Study in Labor Studies (3) Supervised reading and/or field research and training.

LBS 4905/4930 Topics in Labor Studies (3). Selected topics or themes in Labor Studies. The themes will vary from semester to semester. With a change in content, course may be repeated.

LBS 4949 Cooperative Education in Labor Studies (1-3). One or two semesters of part or full-time work related to the major. Written reports and supervisor evaluations are required. Prerequisite: Permission of Labor Studies Program.

LBS 5464 Fact Finding and Arbitration (3). Study of labor dispute resolution with emphasis on grievances, fact-finding, and arbitration.

Mathematics

Steven M. Hudson, Associate Professor and Chairperson
Gerardo Alacaro, Associate Professor
William Galbeek, Assistant Professor
Julian Edward, Assistant Professor
Domilila Fox, Instructor
Susan Gorman, Instructor
George Kalkoulis, Assistant Professor
Mark Leckband, Associate Professor
Zongy Li, Assistant Professor
Diana McCoy, Instructor
Abdelhamid Meziani, Associate Professor
Richard Nadel, Instructor
Taej Ramsamujh, Associate Professor
David Ritter, Associate Professor
Michael Rosenthal, Instructor
Dev K. Roy, Associate Professor
Richard L. Rubin, Associate Professor
Milch Rudominer, Assistant Professor
Philippe Rukimbira, Assistant Professor
Anthony C. Shershin, Associate Professor
Minna Share, Instructor
James F. Slikter, Associate Professor
W. Jay Sweet, Assistant Professor
Graham Taylor, Assistant Professor
Enrique Villamor, Associate Professor
John Zweibel, Associate Professor

An undergraduate student may major in Mathematics or in Mathematical Sciences. The Bachelor's degree in Mathematics emphasizes a deeper study of pure mathematics in the traditional mode. A student planning to continue into graduate study should major in Mathematics.

The Mathematical Sciences degree offers an alternative involving more breadth. The mathematical requirements, which are fewer and tend to be more applied, are supplemented by additional requirements in computer science and applied statistics.

Bachelor of Science in Mathematical Sciences

Degree Program Hours: 120

Lower Division Preparation

To qualify for admission to the program, FLU undergraduates must have met all the lower division requirements including CLAS, completed 60 semester hours, and must be otherwise acceptable into the program.

Required Courses

Three semesters of calculus, including multivariable calculus; differential equations; linear algebra; introductory course in a high level programming language. Transfer students may take these courses at the University if they have not been completed at the lower division. The equivalent FIU courses are MAC 2311-2-3 (Calculus); MAP 2302 (Differential Equations); MAS 3105 (Linear Algebra); and COP 2210 (PASCAL) or CGS 2420 (FORTRAN) or CGS 2423.

Upper Division Program

Required Courses

COP 2400 Assembly Language Programming 3
COP 2212 Intermediate Programming 3
MAD 2104 Discrete Mathematics 3
MAD 3401 Numerical Analysis 3
MAD 3512 Introduction to the Theory of Algorithms 3
MAP 4401 Advanced Differential Equations 3
STA 3163-4 Statistical Methods I and II 3-3

In addition, two courses from the following list:

COP 3530 Data Structures 3
MAA 4402 Complex Variables 3
MAD 3305 Graph Theory 3
MAP 3103 Mathematical Modeling 3
MHF 4302 Mathematical Logic 3
STA 5446 Probability Theory 3

Electives

The balance of the 60 semester hour requirement for graduation may be chosen from any courses in the University approved by the student's advisor.

Remarks: The following courses are not acceptable for credit toward graduation, unless a student has passed the course before declaring a Mathematical Sciences major: MAC 2233, STA 1013, STA 2122, STA 3132, and GMB 3150 (College of Business Administration).
Minor in Mathematical Sciences

Required Courses:
MAC 2311-2-3. Calculus I,II,III (or equivalent).

Plus four courses from those approved for the Mathematical Sciences Major program. MAP 2302 and MAS 3105 may be included among these four courses. A grade of 'C' or higher is necessary for the minor.

Remarks: No mathematical sciences courses (Computer Science, Mathematics, or Statistics) can be applied to more than one minor, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a mathematical science course is required for a major in one area and a minor in another, the student should see his or her advisor for an appropriate substitution for the requirement of the minor.

Bachelor of Science in Mathematics

Degree Program Hours: 120

Lower Division Preparation
To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Required Courses
Three semesters of calculus including multivariable calculus; differential equations; linear algebra; introductory course in high level programming language. Transfer students may take these courses at the University if they have not been completed at the lower division. The equivalent FIU courses are MAC 2311-2-3 (Calculus); MAP 2302 (Differential Equations); MAS 3105 (Linear Algebra); and COP 2210 (PASCAL) or CGS 2420 (FORTRAN) or CGS 2423 (C).

Upper Division Program

Required Courses
MAA 3200 Introduction to Analysis 3
MAA 4411 Advanced Calculus 3
MAS 4301 Algebraic Structures 3
STA 3321 Mathematical Statistics I 3

In addition, three courses from each of the following lists.

List 1
MAA 4402 Complex Variables 3
MTG 3212 College Geometry 3
MAS 4213 Number Theory 3
MAA 4212 Topics in Advanced Calculus 3
MAS 4302 Topics in Algebraic Structures 3
MTG 4302 Topology 3

List 2
MAP 4401 Advanced Differential Equations 3
MAP 3305 Graph Theory 3
MAP 3103 Mathematical Modeling 3
STA 3322 Mathematical Statistics II 3
MAD 3401 Numerical Analysis 3
MHF 4302 Mathematical Logic 3
MHF 4102 Axiomatic Set Theory 3

Electives
The balance of the 60 semester hour requirement for graduation may be chosen from any courses in the University approved by the student's advisor.

Remarks: The following courses are not acceptable for credit toward graduation, unless a student has passed the course before declaring a Mathematics major: MAC 2233, STA 1013, STA 2122-23, STA 3132, and QMB 3150 (College of Business Administration).

Certificate in Actuarial Studies

The department offers a Certificate in Actuarial Studies. For further information refer to the Certificate section at the end of the College of Arts and Sciences' section.

Course Descriptions

Definition of Prefixes

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

MAA 3200 Introduction to Analysis (3). Topics include: naive set theory, functions, cardinality, sequences of real numbers and limits. Emphasis on formal proofs. Prerequisite: MAC 2313. (F)

MAA 4211 Advanced Calculus (3). An intense study of the foundations of calculus. Topics may include: the real number system, continuity, differentiation, Riemann-Stieltjes integration, and series of functions. Note: The student must complete MAA 3200 before attempting this course. Prerequisites: MAC 2313, MAS 3105 and MAA 3200. (S)

MAA 4212 Topics in Advanced Calculus (3). A sequel to MAA 4211. Topics may include: theory of integration; analysis in several variables; and Fourier series. Prerequisite: MAA 4211.

MAA 4402 Complex Variables (3). An introduction to complex variables, beginning with the algebra and geometry of the complex number system. Topics include: complex functions; analytic functions; Cauchy's theorem and its consequences; Taylor and Laurent series; residue calculus; evaluation of real integrals and summation of series; conformal mapping. Prerequisites: MAC 2313, and MAP 2302 or MAA 4211. (F)
MAC 2132 Pre-calculus Mathematics (3). Topics to be covered include: functions, exponential and logarithmic functions, trigonometry and the basics of analytic geometry. Prerequisite: Two years of high school algebra. (F.S.SS)

MAC 2233 Calculus for Business (3). A one-semester introduction to the basic notions of calculus. Specific topics include: Differential Calculus using polynomial, exponential and logarithmic functions, and its application to optimization; integral calculus with area and probability applications. Prerequisite: MAC 2132 or working knowledge of algebra. (F.S.SS)

MAC 2311 Calculus I (3). Introduction to derivatives, differentiation formulas, differentials, applications of the derivative; introduction to antiderivatives. Prerequisite: Trigonometry or MAC 2132, with a grade of C or better. (F.S.SS)

MAC 2312 Calculus II (5). Riemann sums, techniques of integration, applications of the integral, improper integrals, infinite series, Taylor series, polar and parametric functions. Prerequisite: MAC 2311, with a grade of C or better. (F.S.SS)

MAC 2313 Multivariable Calculus (3). This course deals with the differential and integral calculus of real valued multivariable functions. The topics include: directional and partial derivatives, gradients, and their applications; differential calculus of vector valued functions; multiple, iterated, line, and surface integrals. Prerequisite: MAC 2312 or equivalent with a grade of C or better. (F.S.SS)

MAC 2104 Discrete Mathematics (3). Sets, functions, relations, permutations, and combinations, propositional logic, matrix algebra, graphs and trees, Boolean algebra, switching circuits. Prerequisites: COP 2210 or CGS 2420 and MAC 2311. (F.S.SS)

MAC 3305 Graph Theory (3). An introduction to the study of graphs. Topics include the following: paths and circuits, connectedness, trees, shortest paths, networks, planar graphs, the coloring of graphs, and directed graphs. Applications of graphs to computer science will be discussed. Prerequisites: COP 2210 or CGS 2420 and either MAS 3105 or MAD 2104 (S.S.SS)

MAD 3401 Numerical Analysis (3). Basic ideas and techniques of numerical analysis. Topics include: finite differences, interpolation, solution of equations, numerical integration and differentiation, applications, introduction to applied linear algebra. This course will make extensive use of the computer facility. Prerequisites: COP 2210 or CGS 2420 and MAD 2312. (F.S.SS)

MAD 3512 Theory of Algorithms (3). Strings, formal languages, finite state machines, Turing machines, primitive recursive and recursive functions, recursive unsolvability. Prerequisite: MAD 2104. Computer Science majors must also take COT 3420. (F.S.SS)

MAD 4203 Introduction to Combinatorics (3). A survey of the basic techniques of combinatorial mathematics. Topics will include the Pigeonhole Principle, Binomial Coefficients, Inclusion-Exclusion, Recurrence Relations, and Generating Functions. Prerequisites: MAD 2313 or both MAD 2312 and MAD 2104. (S.S)

MAP 2302 Differential Equations (3). An introduction to differential equations and their applications, based upon a knowledge of calculus. Topics include: initial value problems of the first order, numerical solutions, systems of differential equations, linear differential equations, Laplace transforms, series solutions. Prerequisite: MAP 2312 with a grade of 'C' or better. (F.S.SS)

MAP 3103 Mathematical Modeling and Applications (3). A course to provide an understanding of the use of mathematical models in the description of the real world. Basic principles in the philosophy of formal model building as well as specific models will be considered. Prerequisites: MAS 3105 and either MAC 2313 or MAP 2302.

MAP 3104 Topics in Mathematical Modeling (3). A sequel to MAP 3103. In-depth study of techniques listed in MAP 3103. Prerequisite: MAP 3103.

MAP 4401 Advanced Differential Equations (3). A second course in differential equations. Topics may include: Bessel functions and other special functions arising from classical differential equations, Sturm-Liouville problems, partial differential equations, transform techniques. Prerequisites: MAP 2302 and MAC 2313. (S)

MAS 3105 Linear Algebra (3). An introduction to the topics in linear algebra most often used in applications. Topics include: matrices and their applications; simultaneous linear equations and elementary operations; linear dependence; vector spaces; rank and inverses; inner products and "best" approximations; numerical solutions of simultaneous linear equations; eigenvalues and eigenvectors; iterative methods for calculating eigenvalues; and systems of linear equations. Prerequisite: MAC 2312. (F.S.SS)

MAS 4213 Number Theory (3). Topics to be discussed are selected from the following: congruences, Diophantine equations, distribution of primes, primitive roots, quadratic reciprocity, and classical theorems of number theory. Prerequisites: MAC 2312 or permission of instructor. (S)

MAS 4301 Algebraic Structures (3). An introduction to abstract mathematical structures of modern algebra. Fundamental concepts of groups, rings, and fields will be studied. Note: the student must complete the classes 3200 before attempting this course. Prerequisites: MAS 3105 and MAS 3200. (S)

MAS 4302 Topics in Algebraic Structures (3). A sequel to Algebraic Structures. Topics may include: a continuation of the study of groups, rings and/or fields; polynomial domains; Euclidean domains; and Galois theory. Prerequisite: MAS 4301.

MAT 2949 Cooperative Education in Mathematical Sciences (1-3). One semester of full-time supervised work in an outside organization taking part in the University Co-op Program. A written report and supervisor evaluation will be required of each student. Prerequisites: Calculus I and COP 2210.

MAT 3905 Independent Study (VAR). Individual conferences, assigned readings, and reports on independent investigations.

MAT 3930 Special Topics (VAR). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

MAT 3949 Cooperative Education in Mathematical Sciences (1-3). One semester of full-time supervised work in an outside organization taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluation will be required of each student. Prerequisites: Calculus I and COP 2210.
port and supervisor evaluation will be required of each student. Prerequisites: Calculus II and COP 2212.

**MAT 4905 Independent Study (VAR)**
Individual conferences, assigned readings, and reports on independent investigations.

**MAT 4930 Special Topics (VAR)**
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

**MAT 4943 Mathematical Sciences Internship (VAR)**
A special program to encourage students to get on-the-job experience in computer sciences, mathematics in an industrial enterprise, governmental agency or other organization. Requirements: minimum grade of 'B' or higher in all courses in the major area, and approval by Departmental Internship Committee. Application is required at least one term in advance of registration for this course.

**MAT 4949 Cooperative Education in Mathematical Sciences (1-3)**
One semester of full-time supervised work in an outside organization taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluation will be required of each student. Prerequisites: Calculus II, a statistics course, and COP 2120.

**MGF 1202 Finite Mathematics (3)**
Study of concepts and applications involving finite mathematical processes such as sets, combinatorial techniques, formal logic, discrete probability, linear systems, matrices, linear programming. Prerequisite: Working knowledge of high school algebra. (F,S,SS)

**MHF 1202 Sets, Logic, and Writing (3)**
Intuitive set theory, introduction to symbolic logic, the relationship between them and their applications to problem-solving, involving writing as a crucial tool in the course. Prerequisite: permission of Undergraduate Studies. (SS)

**MHF 3404 History of Mathematics (3)**
Development of mathematical thought through the ages. Topics may include equation solving, trigonometry, astronomy, and calculus. Prerequisite: MAC 2312. (S)

**MHF 4102 Axiomatic Set Theory (3)**
Axioms of set theory, order and well-foundedness, cardinal numbers, ordinal numbers, axiom of choice, special topics. Prerequisites: MAA 3200 or permission of instructor. (S, alternate years)

**MHF 4302 Mathematical Logic (3)**
A study of formal logical systems and their applications to the foundations of mathematics. Topics to be selected from the following: definition of mathematical proofs; set theory; analysis formalized with the predicate calculus; theorem of Gödel and Church; recursive function theory; and idealized computers. Prerequisite: MAA 3200 or MAD 3512. (S, alternate years)

**MTG 3212 College Geometry (3)**
A study of the basic structure of Euclidean geometry together with topics from advanced Euclidean geometry and non-Euclidean geometry. Prerequisite: Calculus II or permission of the instructor. (S)

**MTG 4302 Topology (3)**
An introductory course in topology requiring a prerequisite knowledge of calculus. Topics to be discussed will be selected from the following: topological spaces, metric spaces, continuity, completeness, compactness, separation axioms, products spaces, subspaces, convergence, and homotopy theory. Prerequisites: MAC 2313, MAS 3105, and MAA 3200. (SS)

**STA 4603-STA 4604 Mathematical Techniques of Operations Research I and II (3-3)**
An introduction to those topics in mathematics associated with studies in operations research. Topics include the following: linear programming and related topics, dynamic programming, queuing theory, computer simulation, network analysis, inventory theory, decision theory, integer programming. Prerequisites: MAS 3105 and either STA 3033 or STA 3322.
Modern Languages

Moldo Watson Espener, Professor and Chairperson
Aurelio Baldor, Instructor
Pascale Becel, Assistant Professor
Jean-Robert Cadely, Assistant Professor
Isabel Castellanos, Professor
Ricardo Castells, Assistant Professor
Rodolfo Cortina, Professor
James O. Crosby, Professor Emeritus
Leonel A. de la Cuesta, Associate Professor
Yvonne Guers-Villate, Professor Emeritus
Danielle Johnson-Cousin, Associate Professor
Santiago Juan-Navarro, Assistant Professor
John B. Jensen, Professor
Peter A. Machonis, Associate Professor
Ramon Mendoza, Professor (North Campus)
Marion Montero-Demos, Associate Professor
Ana Roca, Associate Professor
Reinaldo Sanchez, Professor
Marcelle Welch, Professor
Theodore Young, Assistant Professor
Florence Yudin, Professor

Bachelor of Arts

Degree Program Hours: 120

Lower Division Preparation

Required Courses: Eighteen semester hours of elementary and intermediate foreign language or equivalent proficiency. If these courses are not completed prior to entry to the University, they will be required as part of the upper division program as non-major electives.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program: (60)

Required Courses

Foreign Language: 33 semester hours
Electives: 27 semester hours

Students in the Teacher Preparation Program carry two majors, Modern Language and Modern Language Education and must request admission to both programs. Students interested in teacher certification should contact the College of Education at 348-2721.

Requirements for all Modern Language Majors

All majors must have a designated faculty advisor, and all are required to take 33 semester hours in the Department of Modern Languages, with a grade of 'C' or higher.

Requirements For Spanish Majors

To undertake a major in Spanish, a student must demonstrate a proficiency in the language at the intermediate level. This may be done by an examination administered by the Department, or by completing SPN 2200 (non-native speakers) or SPN 3340 (native speakers).

Required credits for Major (33)

(21 credits of Core Courses and 12 credits of electives)

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPN 3301</td>
<td>Review Grammar and Writing or</td>
</tr>
<tr>
<td>SPN 2341</td>
<td>Advanced Spanish for Native Speakers 3</td>
</tr>
<tr>
<td>SPN 3422</td>
<td>Advanced Grammar and Composition 3</td>
</tr>
<tr>
<td>SPW 3820</td>
<td>Introduction to Peninsular Spanish Literature 3</td>
</tr>
<tr>
<td>SPW 3130</td>
<td>Introduction to Spanish American Literature 3</td>
</tr>
<tr>
<td>SPN 3733</td>
<td>Introduction to General Linguistics (or equivalent) 3</td>
</tr>
<tr>
<td>One additional course in Spanish Linguistics 3</td>
<td></td>
</tr>
<tr>
<td>One additional course in Spanish or Spanish American Literature 3</td>
<td></td>
</tr>
</tbody>
</table>

(Students who have advanced proficiency in Spanish may replace the six language credits with electives in Spanish at the 3000 or 4000 level with the written permission of their advisors).

Elective Courses:

Twelve credits of electives in Spanish at the 3000 or 4000 level from a range of courses in Spanish, Spanish American literature, Spanish linguistics, Hispanic culture, and Translation/Interpretation.

SPN 3733 Introduction to General Linguistics (or equivalent) is a prerequisite for other linguistics offerings.

Requirements for French Majors (33)

Basic Courses:

Grammar (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 3420</td>
<td>Review Grammar/ Writing I (non native or near-native speakers)</td>
</tr>
<tr>
<td>FRE 3421</td>
<td>Review Grammar/ Writing II</td>
</tr>
<tr>
<td>FRE 4422</td>
<td>Review Grammar/ Writing III</td>
</tr>
</tbody>
</table>

Conversation (3)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 3410</td>
<td>Advanced French Conversation (non native or near-native speakers)</td>
</tr>
<tr>
<td>FRE 3413</td>
<td>Communication Arts</td>
</tr>
<tr>
<td>FRE 3504</td>
<td>Language and Culture</td>
</tr>
</tbody>
</table>

Phonetics (3)

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 3780</td>
<td>French Phonetics</td>
</tr>
</tbody>
</table>

Advanced Courses:

Literature (at least nine credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRW 3200</td>
<td>Introduction to Literature I or</td>
</tr>
<tr>
<td>FRW 3201</td>
<td>Introduction to Literature II or</td>
</tr>
<tr>
<td>FRW 3810</td>
<td>Literary Analysis</td>
</tr>
</tbody>
</table>

Two 3-credit literature courses (FRW) preferably taken in different literary periods or genres.

Linguistics (3)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 4840</td>
<td>History of the Language I</td>
</tr>
<tr>
<td>FRE 4841</td>
<td>History of the Language II</td>
</tr>
<tr>
<td>FRE 4503</td>
<td>Francophonie</td>
</tr>
<tr>
<td>FRE 4855</td>
<td>Structure of Modern French</td>
</tr>
</tbody>
</table>

Civilization (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 3504</td>
<td>Language and Culture</td>
</tr>
<tr>
<td>FRE 3500</td>
<td>History of French Society</td>
</tr>
<tr>
<td>FRE 4501</td>
<td>Contemporary French Culture</td>
</tr>
<tr>
<td>FRE 4935</td>
<td>Senior Seminar (Civilization)</td>
</tr>
</tbody>
</table>

Elective (3)

French linguistics or literature |

Requirements for Other Language Majors

A major in a language other than Spanish or French may take only 21 credits in the major language, but completion of at least two semesters of a second foreign language is recommended. There is
no fixed sequence of courses required, and a student may enroll in any course offered for majors, provided he or she meets the course prerequisites.

**Minor in French Language and Culture**

A student majoring in another discipline may earn an academic minor in French Language and Culture by taking 1) 12 semester hours of course work in French language FRE 3410, FRE 3420/3421, FRE 3780; 2) three semester hours in French Civilization and Culture FRE 3500 or FRE 4501; 3) three semester hours of restricted electives courses in French linguistics, French Translation Skills or Introduction to Literature, FRW 3200.

**Minor in Portuguese**

A student majoring in another discipline may earn an academic minor in Portuguese by taking 12 semester hours of course work in the language at the level of POR 3420 or above, and six additional hours in Portuguese or in approved courses in a related discipline, such as linguistics or the civilization of Portuguese-speaking peoples.

**Minor in General Translation Studies**

In order to obtain an academic minor in General Translation Studies, a student takes 12 semester hours in translation/interpretation courses (FOT, FRT, or SPT prefix), with grades of B or better, and nine additional hours in courses of immediate relevance to the program, to be approved by the Director of the program. Normally these will be selected from among offerings in Political Science, Economics, International Relations, Sociology, Anthropology, Computer Science or Modern Languages. At least two of them should be taken outside of Modern Languages. Courses in basic and intermediate instruction shall not be counted for the minor.

**Minor in Spanish Language and Culture**

**Required Credits for Minor**

Fifteen credits of Core Courses and three credits of electives. Total: 18 semester hours.

**Core Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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**Elective Courses**

Three credits in Spanish at the 3000 or 4000 level in language, literature, culture, or translation/interpretation.

Students who have advanced proficiency in Spanish may replace SPN 3422 Review Grammar and Writing or SPN 2341 Advanced Spanish for Native Speakers with another upper-level Spanish elective with the written permission of their advisors.

SPN 3733 (or equivalent) is a prerequisite for other linguistics offerings.

**Basic Language Instruction**

The department offers three-semester sequences of instruction in beginning and intermediate Arabic, Chinese, French, German, Hebrew, Italian, Japanese, Portuguese, Spanish, Russian, and beginning instruction in other languages.

The courses in basic language instruction are designed primarily for persons wishing to acquire conversational ability in a foreign language; but they provide training in all four language skills listening, speaking, reading, and writing. Students are advised to consult the Departmental course listing for specific sections.

**Course Descriptions**

**Definition of Prefixes**

ARA-Arabic Language; CHI-Chinese Language; FOL-Foreign Languages; FOT-Foreign Languages in Translation; FOW-Foreign Languages, Comparative Literature; FRE-French Language; FRT-French Translation; FRW-French Literature (Writings); GER-German Language; GET-German Translation; HBR-Hebrew; ITA-Italian Language; ITT-Italian Translation; JPN-Japanese Language; LIN-Linguistics; POR-Portuguese Language; POW-Portuguese Literature (Writings); PRT-Portuguese Translation; RUS-Russian Language; SPN-Spanish Language; SPW-Spanish Literature (Writings).

(See English listing for additional Linguistics courses.)

ARA 3130 Arabic I (5). Provides training in the acquisition and application of basic language skills.

ARA 3131 Arabic II (5). Provides training in the acquisition and application of basic language skills.

ARA 3210 Intermediate Arabic (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

CHI 3130 Chinese I (5). Provides training in the acquisition and application of basic language skills.

CHI 3131 Chinese II (5). Provides training in the acquisition and application of basic language skills.

CHI 3210 Intermediate Chinese (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

FIL 5526 Spanish Film (3). The history of film in Spain and discussions of films by the most important 20th Century Directors.

FIL 5527 Latin American Film (3). The study of 20th Century films and documentaries produced by leading Latin American directors. Films are examined in relation to Latin American Society and its literary creations.

FOL 1000 Elementary Foreign Language (3). Emphasis on oral skills, contemporary language and culture. Content oriented to students
with specific professional or leisure interests. For languages not often taught, this course is not part of a series. No prerequisites.

FOL 3013 Language Skills for Professional Personnel (3). The course is geared to the special linguistic needs of community groups (medical, business, technical, etc.).

FOL 3732 Romance Linguistics (3). The common and distinctive Romance features. Survey of linguistic geography and internal/external influences.

FOL 3905 Independent Study (1-3). Project, field experience, readings, or apprenticeship.

FOL 3930 Special Topics (3). Readings and discussion of literary/linguistic topics to be determined by students and teacher.

FOL 3949 Cooperative Education in Modern Languages (3). A student majoring in one of the Humanities (English, History, Modern Languages, Visual Arts or Performing Arts) may spend one or two semesters fully employed in industry or government in a capacity related to the major. Prerequisite: Permission of Cooperative Education Program and major department.

FOL 3955 Foreign Study (3-12). Study abroad credits. Individual cases will be evaluated for approval.

FOL 4905 Independent Study (1-3). Project, field experience, readings, or research.

FOL 4930 Special Topics (3). Independent readings, research, or project.

FOL 4935 Senior Seminar (3). Topics and approach to be determined by students and instructor.

FOL 4949 Cooperative Education in Modern Languages (3). A student majoring in one of the Humanities (English, History, Modern Languages, Visual Arts or Performing Arts) may spend one or two semesters fully employed in industry or government in a capacity related to the major. Prerequisite: Permission of Cooperative Education Program and major department.

FOL 4955 Foreign Study: Advanced Language Literature (VAR 3-12). Study abroad credits. Individual cases will be evaluated for approval.

FOL 5735 Romance Linguistics (3). The common and distinctive Romance features. Survey of linguistic geography and internal/external influences.

FOL 5906 Independent Study (1-3). Project, field experience, readings, or research.

FOT 2120 Literature in Translation (3). Masterpieces of French literature in English. Comparative use of the original text. Discussion and interpretation.

FOT 3600 Translation/Interpretation Skills (3). Emphasis on basic principles and practice application.

FOT 3810 Creative Writing/Translation (3). Training through non-structured writing. Examination of various approaches to the problems and objectives of creative translation.

FOT 4130 European Literature in Translation (3). For students proficient in more than one foreign language. Content and focus to be determined by student and instructor.

FOT 4801 Professional Translation/Interpretation (3). Techniques and resources for professional translation and interpretation. Prerequisite: FOT 3800.

FOT 5125 Literature in Translation (3). Masterpieces of world literature. Open to students who are proficient in more than one language.

FOT 5805 Translation/Interpretation Arts (3). The language barrier and translation and interpretation. Types, modes, and quality of T/I: philological, linguistic, and socio-linguistic theories. History of T/I from Rome to date. The impact of T/I on Inter-American developments. Prerequisite: Graduate standing or permission of instructor.

FOW 3520 Prose and Society (3). The dynamics of participation and alienation between prose writers and their environment.

FOW 3540 Bicultural Writings (3). Experiment in linguistic pluralism. Content and focus to be determined by the international community.

FOW 3580 Intellectual History (3). The interaction or dissociation among writers in a critical historical period. Study of primary sources and their contemporary evaluations.

FOW 3582 Literature of Reform (3). The consciousness of change in verbal art.

FOW 3584 Literature of Repression (3). The consciousness of constraints, their adoption and/or rejection in verbal art.

FOW 4390 Genre Studies (3). Examination of a single literary form (e.g., short story, poetry), or the study of interaction between literary types (e.g., novel and drama).

FOW 4590 Creative Modes (3). Discussion of a single mode or a plurality of epoch styles such as classical/baroque, realism/surrealism. The peculiar/common features of expressive media.

FOW 4790 The Literary Generation (3). The real and apparent shared ideas of an artistic generation, its influence and range.

FOW 4810 Problems in Reading and Interpretation (3). The identification and appreciation of techniques for sensitive reading and discussion of literary texts.

FOW 5395 Genre Studies (3). Examination of a single literary form (e.g., short story, poetry), or the study of interaction between literary types (e.g., novel and drama).

FOW 5545 Bicultural Writings (3). Experiment in linguistic pluralism. Content and focus to be determined by the international community.

FOW 5587 Comparative Studies (3). Cross-over and distinctiveness in a multi-language problem, period, or aesthetic.

FOW 5934 Special Topics in Language/Literature (3). Content and objectives to be determined by students and teacher.

FOW 5938 Graduate Seminar (3). Topic and approach to be determined by students and instructor. (Approval of the Department required.)

FRE 1013 Language Skills for Professional Personnel (1-3). The course is geared to the special linguistic needs of community groups (medical, business, technical, etc.).

FRE 1120 French I (5). Course designed specifically for beginning university students with no previous language study. Emphasis on oral French and on acquiring basic language skills.
FRE 1121 French II (5). Emphasis on oral French and on acquiring basic language skills.

FRE 1130 Accelerated Basic French (5). Accelerated course for students who already have some basic knowledge of French. Encourages rapid acquisition by intensive exposure to the language. Prerequisites: At least one year of High School French or equivalent.

FRE 2200 Intermediate French (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

FRE 2240 Intermediate French Conversation (1). This course is designed to help students maintain and increase their conversational ability in the language while unable to continue the regular sequence. May be repeated twice. Prerequisite: FRE 1121 or equivalent.

FRE 2270 Foreign Study (3-12). Intermediate level. One semester full-time credit for foreign residence and study. Individual cases will be evaluated for approval.

FRE 2420 Oral Communication Skills (3). Development of oral skills through skills, debates, and hypothetical situations. Open to non-native speakers. Prerequisites: FRE 1121 or FRE 1130 or equivalent.

FRE 3410 Advanced French Conversation (3). To develop oral proficiency skills and a greater awareness of French culture.

FRE 3413 Communication Arts (3). Develop communicative competence through intensive oral class work. Emphasis on ability to express ideas and appreciation of multiple aspects of French culture.

FRE 3420 Review Grammar/Writing I (3). Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.

FRE 3421 Review Grammar/Writing II (3). Instruction and practice in expository writing in French, with emphasis on organization, correct syntax, and vocabulary building. Prerequisite: FRE 3420.

FRE 3440 Business French (3). Introduces the minor and non-major to the culture, economy, and commerce of modern-day France. Extensive practice in business writing and communication. Conducted in French. Prerequisite: FRE 1121.

FRE 3500 History of French Civilization (3). Open to any student who understands the target language. Emphasis on the development of a particular civilization. Emphasis on the evolution of a society, its ideas and its values.

FRE 3504 Language and Culture (3). Emphasis on oral skill applied to contemporary culture, to enhance student's knowledge and understanding of French way of life in Francophone world. Emphasis is placed on acquisition and intensive practice of vocabulary and grammar. Prerequisites: FRE 3410 or permission of instructor.

FRE 3740 Applied Linguistics (3). Examination of available linguistic materials for self-instruction. Problem solving in syntax and phonetics, through the application of modern/traditional methods.

FRE 3780 French Phonetics (3). An introductory course in French linguistics. Includes the International Phonetic Alphabet and a systematic inventory of all the sounds of French, with refinement exercises in the language laboratory. Prerequisites: FRE 2200 or equivalent.


FRE 3820 Dialectology (3). Definition and analysis. Problem-solving in dialect classification.

FRE 4422 Review Grammar/Writing III (3). A study of various aspects of forms and styles, with emphasis on expository writing in French. Prerequisite: FRE 3421.

FRE 4470 Foreign Study: Advanced Language/Literature (3-15). Full-semester credit for foreign residence and study/work. (Approval of Department required.)

FRE 4501 Contemporary French Society (3). Course designed primarily for French majors, advanced undergraduates, and graduates. Examination of the cultural, ideological, socio-political and economic fabric of France from WWI to the present. Prerequisites: FRE 3420 or permission of instructor.

FRE 4503 La Francophonie (3). Analysis of the different varieties of French spoken outside of France. Includes Quebec French, African French, and French Creoles. Also examines the political alliance of Francophone countries. Credit will not be given for both FRE 4503 and FRE 5505. Prerequisites: FRE 3780 or LIN 3010 or LIN 3013.

FRE 4791 Contrastive Phonology (3). Prerequisites: One year of French.

FRE 4800 Contrastive Morphology (3). Prerequisites: One year of French.

FRE 4840 History of the Language I (3). The internal and external history of the French language from Latin to Old French. Examination of some of the first texts written in French. Prerequisites: FRE 3780 or LIN 3010 or LIN 3013.

FRE 4841 History of the Language II (3). External and internal history of the French language from 14th to the present. Examination of first dictionaries and grammars of French. Survey of recent linguistic legislation concerning the French language. Prerequisites: FRE 3780 or LIN 3010 or LIN 3013.

FRE 4850 Structure of Modern French (3). Systematic study of the phonology, morphology, syntax, and lexicology of Modern French. Taught in English. Prerequisites: FRE 3780 or LIN 3010.

FRE 4935 Senior Seminar (3). Topic and approach to be determined by students and instructor.

FRE 5060 Language for Reading Knowledge I (3). Designed primarily for graduate students who wish to attain proficiency in M.A. and Ph.D. requirements. Open to any student who has no prior knowledge of the language.

FRE 5061 Language for Reading Knowledge II (3). Emphasis on translation of materials from the student's field of specialization. Prerequisite: FRE 5060 or equivalent.

FRE 5508 La Francophonie (3). Analysis of the different varieties of French spoken outside of France. Includes Quebec French, African French, and French Creoles. Also examines the political alliance of Francophone countries. Credit will not be
given for both FRE 4503 and FRE 5505. Prerequisites: FRE 3780 or LIN 3010 or LIN 3013.

FRE 5735 Special Topics in Linguistics (3). Content to be determined by students and instructor. (Approval of Department required.)

FRE 5755 Old French Language (3). Introduction to the phonology, morphology, and syntax of the Old French language. Reading and analysis of the 12th and 13th century texts in their original. Comparison of major medieval dialects. Prerequisite: FRE 4540 or FRE 5845.

FRE 5845 History of the Language I (3). The internal and external history of the French language from Latin to Old French. Examination of some of the first texts written in French. Credit will not be given for both FRE 4540 and FRE 5845. Prerequisite: FRE 3780.

FRE 5846 History of the Language II (3). External and internal history of the French language from 1400 to the present. Examination of first dictionaries and grammars of French. Survey of recent linguistic legislation concerning the French language. Credit will not be given for both FRE 4841 and FRE 5846.

FRE 5855 Structure of Modern French (3). Systematic study of the phonology, morphology, syntax, and lexicon of Modern French. Taught in English. Credit will not be given for both FRE 4855 and FRE 5855.

FRE 5908 Independent Study (1-3). Project, field experience, readings, or research.

FRT 3800 Basic Translation Exercises (3). Emphasis on basic principles and practice application. Prerequisite: FRT 3421.

FRT 4801 Professional Translation (3). Techniques and resources for professional translation. Prerequisite: FRT 3410.

FRT 5805 Translation/Interpretation Arts (3). Techniques of professional translation and interpretation. Prerequisite: FRT 4801.

FRW 3200 Introduction to Literature I (3). Close reading and analysis of prose and poetry from the Middle Ages to the 17th Century. Prerequisites: FRE 4321 or FRE 4422.

FRW 3280 French 19th Century Novel (3). Four major novels by major 19th century novelists will be selected to illustrate the development of novelistic techniques as well as of a different conception of the role of the novel that finally made it an important literary genre. Prerequisite: FRW 3810 or another FRW course.

FRW 3300 French Comedies (3). A study in French comedies from the 15th century to the 19th century, with special emphasis on Molière's plays. Prerequisite: FRW 3200.

FRW 3323 French 19th Century Drama (3). Plays will be chosen to illustrate various literary movements in 19th century French drama: Romanticism, Realism, Naturalism, and Symbolism. Prerequisite: FRW 3200.

FRW 3370 French 19th and 20th Century Short Stories (3). Great short stories by Maupassant, Merimée, Flaubert, Camus, and Sartre will be studied to familiarize the student with literary criticism by a close reading and analysis of short texts. Prerequisite: FRE 3421.

FRW 3532 French Romantic Literature (3). A study of French Romantic generation through the works of Lamartine, Hugo, de Musset, etc. Prerequisite: FRW 3200.

FRW 3810 Literary Analysis (3). The identification and appreciation of techniques for sensitive reading and discussion of literary texts.

FRW 3905 Independent Study (3). Project, field experience, readings, or apprenticeship.

FRW 3930 Special Topics (3). Readings and discussion of literary/linguistic topics to be determined by students and instructor.

FRW 4123 Travel, Exile, and Cross-Cultural Encounters (3). Drawing on writings from the turn of the century to the present, explores the themes of exile and escape, of cultural and visual appropriations, the repetition and deconstruction of exotic clichés.

FRW 4212 French Classical Prose (3). Study of major works of 17th century French authors such as Descartes, Pascal, La Rochefoucauld, La Bruyère, etc. Prerequisites: FRW 3200, and another FRW course.

FRW 4218 18th Century French Prose (3). Major works by the 18th century French philosophers that illustrate the evolution of socio-political and aesthetic thought leading to the French Revolution. Prerequisites: FRW 3200 or FRW 3810 and another FRW course.

FRW 4272 French Novels from the Classical Period (3). A study of major 17th and 18th century French novels. Course conducted in French. Prerequisites: FRW 3200, and another FRW course.

FRW 4281 French 20th Century Novel (3). A detailed analysis of modern novels, and a general examination of the intellectual currents which these novels illustrate or express (e.g. surrealism, existentialism, nouveau roman, post-modernism. Prerequisites: FRW 3200, and another FRW course.

FRW 4310 Seventeenth-Century French Drama (3). A study of French classical aesthetics through the plays of Corneille, Molière, and Racine. Prerequisites: FRW 3200, and another FRW course.

FRW 4324 French 20th Century Theatre (3). Focuses on the scope and variety of contemporary French theatre from Claudel, through existentialism and the theatre of the absurd, to Cixous and Cesaire. Prerequisites: FRW 3200, and another FRW course.

FRW 4390 Genre Studies (3). Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama).

FRW 4410 French Medieval Literature (3). A study in different literary forms prevalent during the 12th and 15th centuries. Read in modern French; course will be conducted in French. Prerequisites: FRW 3200, and another FRW course.

FRW 4420 Sixteenth-Century French Literature (3). A study of major authors of the French Renaissance, Rabelais, Ronsard, Montaigne, etc. Course conducted in French. Prerequisites: FRW 3810 or 3820, and another FRW course.

FRW 4583 Women Writers in French (3). Drawing on the writings of women authors in French, this course explores topics such as: the effects of narrative techniques on subject formation, the poetics of silence and of revolt, sexual differ-
ence versus cultural difference. Prerequisites: FRW 3810 or 3820, and another FRW course.

FRW 4590 Creative Modes (3). Discussion of a single mode or a plurality of epoch styles such as classical/baroque, realist/realism, and the peculiar/common features of expressive media.

FRW 4750 Francophone Literature of Africa (3). Introduction to the Francophone literatures of Africa; study of a literary tradition in French, with special emphasis on post-World War II writers. Prerequisites: FRW 3200 or another FRW course.

FRW 4751 Francophone Literature in the Caribbean (3). Introduction to the Francophone literature of the Caribbean; study of a literary tradition in French, with special emphasis on post-World War II writers. Prerequisites: FRW 3200 or another FRW course.

FRW 4905 Independent Study (1-3). Project, field experience, readings, or research.

FRW 4930 Special Topics (3). Independent readings, research, or project.

FRW 5395 Genre Studies (3). Examination of a single literary form (e.g., short story, poetry), or the study of interaction between literary types (e.g., novel and drama).

FRW 5934 Special Topics in Language Literature (3). Content and objectives to be determined by student and instructor.

FRW 5938 Graduate Seminar (3). Topic and approach to be determined by students and instructor. (Approval of the Department required.)

GER 1120 German I (5). Provides training in the acquisition and application of basic language skills.

GER 1121 German II (5). Provides training in the acquisition and application of basic language skills.

GER 2210 Intermediate German (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

GER 2240 German Intermediate Conversation (1). This course is designed to help students maintain and increase their conversational ability in the language while unable to continue the regular sequence. May be repeated twice. Prerequisite: GER 1121 or equivalent.

GER 3420 Review Grammar/Writing I (3). Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporary contexts. The course will be conducted exclusively in the target language.

GER 4905 Independent Study (1-3). Project, field experience, readings, or research.

GER 4930 Special Topics (3). Independent readings, research, or project.

GER 5060 German for Reading Knowledge (3). Designed primarily for graduate students who wish to attain proficiency for M.A. or Ph.D. requirements. Open to any student who has no prior knowledge of the language.

GER 5061 German for Reading Knowledge (3). Emphasis on translation of materials from the student's field of specialization. Prerequisite: GER 5060 or the equivalent.

GET 3100 Literature in Translation (3). Masterpieces in German literature in English. Comparative use of the original text. Discussion and interpretation.

HAI 3 Accelerated Haitian Creole (3). Emphasis on oral skills, contemporary language, and culture.

HAI 3 Accelerated Intermediate Haitian Creole (3). Builds on accelerated course by continuing and expanding communicative activities. Prerequisites: Accelerated Haitian or permission of instructor.

HBR 1120 Hebrew I (5). Provides training in the acquisition and application of basic language skills.

HBR 1121 Hebrew II (5). Provides training in the acquisition and application of basic language skills.

HBR 2200 Intermediate Hebrew (3). Provides training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

ITA 1121 Italian I (5). Provides training in the acquisition and application of basic language skills.

ITA 2210 Intermediate Italian (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

ITA 2240 Italian Intermediate Conversation (1). This course is designed to help students maintain and increase their conversational ability in the language while unable to continue the regular sequence. May be repeated twice. Prerequisite: ITA 3131 or equivalent.

ITA 4905 Independent Study (1-3). Project, field experience, readings, or research.

ITA 4930 Special Topics (3). Independent readings, research, or project.

ITA 5110 Literature in Translation (3). Masterpieces in Italian literature in English. Comparative use of the original text. Discussion and interpretation.

JPN 1120 Japanese I (5). Provides training in the acquisition and application of basic language skills.

JPN 1121 Japanese II (5). Provides training in the acquisition and application of basic language skills.

JPN 3210 Intermediate Japanese (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

LIN 3010 Introduction to General Linguistics (3). Examination and synthesis of the concepts and perspectives of major contributions to language theory.

LIN 3200 Phonetics (3). The application of phonetic theory and practice for speech refinement. Study of sound patterns in communication and creative activity. Prerequisite: LIN 3010 or equivalent.
LIN 3610 Dialectology (3). Definition and analysis. Problem-solving in dialect classification. Prerequisite: LIN 3010 or equivalent.

LIN 4326 Contrastive Phonology (3). For students proficient in more than one foreign language. Choice of languages to be determined by students and instructor. Prerequisite: LIN 3010 or equivalent.

LIN 4433 Contrastive Morphology (3). For students proficient in more than one foreign language. Content and emphasis to be determined by students and instructor. Prerequisite: LIN 3010 or equivalent.

LIN 4620 Studies in Bilingualism (3). Readings and analysis of bilingual programs and binational goals. Prerequisite: LIN 3010 or equivalent.

LIN 4702 Applied Linguistics (3). Examination of available linguistic materials for self-instruction. Problem-solving in syntax and phonetics, through the application of modern/traditional methods. Prerequisite: LIN 3010 or equivalent.

LIN 4722 Problems in Language Learning (3). Primarily designed for prospective teachers, but open to all interested students. The course will aim to devise approaches to difficulties commonly experienced in syntax, usage, reading and comprehension. Prerequisite: LIN 3010 or equivalent.

LIN 4931 Special Topics in Linguistics (3). Provides the opportunity for students and instructor to explore topics not included in the regular course offerings. Content to be determined.

LIN 5207C Acoustic Phonetics (3). Introduction to principles of acoustic and instrumental phonetics, including the physics of speech sounds and use of the sound spectrograph and other instruments. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent, plus one additional course in phonetics or phonology. Corequisite: One of the prerequisites may be counted as a corequisite.

LIN 5601 Sociolinguistics (3). Principles and theories of linguistic variation with special attention to correspondences between social and linguistic variables.

LIN 5603 Language Planning: Linguistic Minority Issues (3). Introduction to the field of language planning. Minority linguistic issues in developing and developed nations: official languages, endangered languages, and language as problem and/or resource.

LIN 5604 Spanish in the United States (3). An examination of the sociolinguistic research into Spanish in the U.S.; varieties of Spanish, language attitudes, language contact and change, and aspects of language use. Prerequisites: Prerequisites: LIN 3010, LIN 3013, LIN 5018, or the equivalent.

LIN 5613 Dialectology (3). The geography of language variation: linguistic geography, atlases, national and regional studies. Dialectology within a modern sociolinguistic framework; research approaches.

LIN 5625 Studies in Bilingualism (3). Readings and analysis of bilingual programs and binational goals.

LIN 5720 Second Language Acquisition (3). Research, theories, and issues in second language acquisition. Topics include the Monitor Model, the role of the first language, motivation, age, individual differences, code-switching, and the environment; affective variables and attitudes.

LIN 5760 Research Methods in Language Variation (3). Research in sociolinguistics, dialectology, bilingualism: problem definition, instrument design, data collection and analysis, including sampling techniques and statistical procedures. Prerequisite: LIN 5601, LIN 5625, LIN 5613 or other course in variation.

LIN 5825 Pragmatics (3). Study of the relationships between language form, meaning, and use. Special emphasis on speech act theory. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.

(See English listing for additional linguistics courses.)

POR 1000 Elementary Portuguese (3). Emphasis on oral skills, contemporary language, and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.

POR 1130 Portuguese I (5). Provides training in the acquisition and application of basic language skills.

POR 1131 Portuguese II (5). Provides training in the acquisition and application of basic language skills.

POR 2200 Intermediate Portuguese (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

POR 3131 Accelerated Beginning Portuguese (5). Accelerated course for students fluent in Spanish. Encourages rapid acquisition by intensive exposure to the language through immersion activities, videos, and culture. Prerequisite: Fluency in Spanish.

POR 3230 Accelerated Intermediate Portuguese (5). Accelerated course for students fluent in Spanish. Builds on Accelerated Beginning course by continuing and expanding communicative activities. Prerequisites: POR 3140 or equivalent.

POR 3240 Portuguese Intermediate Conversation (1). This course is designed to help students maintain and increase their conversational ability in the language while unable to continue the regular sequence. May be repeated twice. Prerequisite: POR 3131 or equivalent.

POR 3400 Advanced Oral Communication (3). Development of oral skills through a variety of activities: Readings and recitations, public speaking, debate, skits, video production and defense. Open to native and non-native speakers. Prerequisite: Oral communication ability in Portuguese.

POR 3420 Review Grammar/Writing I (3). Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in contemporary contexts. The course will be conducted exclusively in the target language.

POR 3421 Review Grammar/Writing II (3). Examination of grammatical theory; discussion of different errors. Practice in the detection and correction of errors in usage. The course will focus on current international events as content for informal talks and compositions.

POR 3500 Luso-Brazilian Culture (3). Open to any student who understands Portuguese. The development of Portuguese-speaking civilizations, with emphasis on either Portugal or Brazil: history, art, music, daily life, impact on other cultures.

POR 3930 Special Topics in Language Linguistics (3). Readings, research, and discussion of topics in
Portuguese language or linguistics to be determined by students and instructor.

POR 4470 Foreign Study: Advanced Language Literature (VAR). Up to a full semester credit for foreign residence and study/work. (Approval of Department required.)

POW 4905 Independent Study (1-3). Project, field experience, readings, or research.

POW 4930 Special Topics (3). Independent readings, research, or project.

PRT 3401 Literature in Translation (3). Masterpieces of Portuguese literature in English. Comparative use of the original text, Discussion and interpretation.

RUS 1120 Russian I (5). Provides training in the acquisition and application of basic language skills.

RUS 1121 Russian II (5). Provides training in the acquisition and application of basic language skills.

RUS 2210 Intermediate Russian (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

SPN 1000 Elementary Spanish (3). Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.

SPN 1030 Elementary Spanish for Medical Personnel (5). Conversational elementary Spanish for medical personnel. Recommended for non-native speakers of Spanish who are in nursing or other health-related professions.

SPN 1120 Spanish I (5). Course designed specifically for beginning university students with no previous language study. Emphasis on oral Spanish and on acquiring basic language skills.

SPN 1121 Spanish II (5). Emphasis on oral Spanish and on acquiring basic language skills.

SPN 2200 Intermediate Spanish (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

SPN 2230 Intermediate Readings in Spanish (3). Provides opportunities to develop fluency. Emphasis on selected literary and/or cultural readings, films and group activities intended to stimulate communication and enhance an understanding of Hispanic culture. Prerequisite: SPN 1121 or equivalent. Corequisite: SPN 2200 recommended.

SPN 2240 Intermediate Spanish Conversation (1). This course is designed to help students maintain and increase their ability in the language while unable to continue the regular sequence. May be repeated twice. Prerequisite: SPN 1121 or equivalent.

SPN 2270 Foreign Study (12). Intermediate level. One semester full-time credit for foreign residence and study. Individual cases will be evaluated for approval.

SPN 2340 Intermediate Spanish for Native Speakers (3). Improvement of spelling, grammar, vocabulary, reading, writing, and oral skills for Hispanic bilinguals educated in the U.S., with less than two years of formal training in Spanish but whose mother tongue is Spanish. Prerequisite: Ability to understand Spanish.

SPN 2341 Advanced Spanish for Native Speakers (3). Improvement of literacy skills through grammar review, composition, and selected readings of representative Hispanic writers, including Cuban, Puerto Rican, and Chicano authors. For U.S. Hispanic bilinguals with at least two years of formal training in Spanish. Prerequisite: SPN 2230 or permission of instructor.

SPN 2420 Oral Communications Skills (3). Development of oral skills through skills, debates, and contextualized communication. Prerequisites: SPN 1121 or equivalent.

SPN 3013 Language Skills for Professional Personnel (1-3). The course is geared to the special linguistic needs of the community groups (medical, business, technical, etc.).

SPN 3301 Review Grammar and Writing (3). Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language. For non-native speakers.

SPN 3401 Advanced Conversation (3). Improvement of oral proficiency and listening comprehension skills, correction of accent, vocabulary building. Use of small group conversation, pronunciation tapes, and varied outside readings.

SPN 3410 Advanced Oral Communication (3). Development of oral skills through a variety of speaking and conversational activities: public speaking, debate, drama, recitation. For native speakers and advanced non-natives. Prerequisite: Oral ability in Spanish.

SPN 3413 Communication Arts (3). Oral interpretation and dramatic reading. Original and non-original texts will be the content of the course. Study of shared modes of experience and their individual linguistic expression in an acquired language.

SPN 3422 Advanced Grammar and Composition (3). To consolidate the student’s command of oral and written Spanish. Advanced readings of authentic materials. Preparation and documentation of written monographs. For natives and advanced non-natives. Prerequisites: SPN 2341, Review Grammar and Writing or equivalent.

SPN 3440 Spanish Business Composition/Correspondence (3). Training in the special writing needs of business: letter-writing, memoranda, brochures, advertising, proposals, declarations, government documents, etc.

SPN 3520 Spanish American Culture (3). Introduction to the major artistic and cultural phenomena in Latin America. Art, music, film, and literature will be discussed in their cultural context. Prerequisite: Ability to understand Spanish at advanced level.

SPN 3702 Applied Linguistics (3). Examination of available linguistic materials for self-instruction. Problem-solving in syntax and phonetics, through the application of modern/traditional methods. Prerequisites: LIN 3010 or equivalent. (Conducted in Spanish).

SPN 3733 Introduction to General Linguistics (3). Examination and synthesis of the concepts and perspectives of major contributions to language theory. (Conducted in Spanish) Equivalent to LIN 3010.

SPN 3760 Phonetics (3). The application of phonetic theory and practice for speech refinement. Study of sound patterns in communication.
and creative activity. Prerequisite: LIN 3010 or equivalent.

SPN 3820 Dialectology (3). Definition and analysis. Problem-solving in dialect classification. Prerequisite: LIN 3010 or equivalent.

SPN 4312 Introduction to Spanish Syntax (3). An introduction to Spanish syntax. Topics include an introduction to syntactic analysis and syntactic phenomena of Spanish. Prerequisites: LIN 3010 or equivalent.

SPN 4470 Foreign Study: Advanced Language Literature (12). Full semester credit for foreign residence and study/work. (Approval of the Department required.)

SPN 4500 Spanish Culture (3). Open to any student who understands the target language. The development of a particular civilization. Emphasis on the evolution of a society, its ideas and its values.

SPN 4790 Contrastive Phonology (3). Contrasts in the sound systems of English and Spanish. Prerequisite: LIN 3010 or equivalent.

SPN 4802 Contrastive Syntax (3). Contrasts in the grammatical systems of English and Spanish with emphasis on structures with equivalent meanings. Recommended for students of translation and interpretation. Prerequisite: LIN 3010 or permission of the instructor.

SPN 4822 Hispanic-American Sociolinguistics (3). Language and society in Latin America. Sociolinguistic theory followed by consideration of specific language problems in Spanish and Portuguese speaking areas of the Americas. Prerequisite: LIN 3010 or equivalent.

SPN 4840 History of the Language (3). The internal and external history of language development. Examination of model texts from key periods of evolution. Prerequisite: LIN 3010 or equivalent.

SPN 4905 Independent Study (1-3). Project, field experience, readings, or research.

SPN 4920 Special Topics in Linguistics (3). Provides the opportunity for students and instructor to explore topics not included in the regular course offerings. Content to be determined.

SPN 4926 Senior Seminar (3). Topic and approach to be determined by students and instructor.

SPN 5060 Language for Reading Knowledge (3). Designed primarily for graduate students who wish to attain proficiency for M.A. or Ph.D. requirements. Open to any student who has no prior knowledge of the language.

SPN 5061 Language for Reading Knowledge (3). Emphasis on translation of materials from the student’s field of specialization. Prerequisite: SPN 5060 or the equivalent.

SPN 5525 Spanish American Culture (3). A graduate survey of the major artistic phenomena in Latin America. Art, music, film, and literature will be discussed in their cultural context. Prerequisite: Graduate standing and permission of the instructor.

SPN 5536 Afro-Cuban Culture (3). Explores the role played by blacks in Cuban culture. Issues studied include: Afro-Cuban religions, languages, and music, as well as the Afro-Cuban presence in literature and the arts.

SPN 5537 Special Topics in Afro-Hispanic Culture (3). Close examination of various topics related to the culture of African diaspora groups in the Hispanic world.

SPN 5705 The Structure of Spanish (3). An introduction to Spanish linguistics. Topics include Spanish phonetics, phonology, morphology, and syntax. Students who have previously taken Syntactic Structures of Spanish and/or Sound Structure of Spanish will not receive credit for this course. Prerequisites: LIN 3010 or equivalent.

SPN 5725 Syntactic Structures of Spanish and English (3). An in-depth study of syntactic structures in Spanish and English, with an emphasis on how linguistic theory can account for the similarities and differences between the two languages. Prerequisites: LIN 3010 or equivalent.

SPN 5805 Morphological Structures of Spanish and English (3). A survey of the morphologies of Spanish and English. Topics include the difference between isolating and synthetic languages, rich vs. impoverished agreement, and syntaxic ramifications of morphology. Prerequisites: LIN 3010 or equivalent.

SPN 5807 Syntactic Structures of Spanish (3). The study of syntactic structures in Spanish, topics include different syntactic approaches to current issues in Spanish syntax. Prerequisites: LIN 3010 or equivalent.

SPN 5824 Dialectology of the Spanish Caribbean (3). Study of varieties of Spanish used in the Caribbean area, including Miami-Cuban Spanish. The course will take historical and contemporary perspectives and will involve research among informants in South Florida. Prerequisites: LIN 3010 or equivalent.

SPN 5845 History of the Language (3). Historical development of the Spanish language, primarily from the point of view of internal linguistic change. Spanish as an example of general processes of language development. Prerequisites: LIN 3010, LIN 3013, or LIN 5018.

SPN 5908 Independent Study (1-3). Project, field experience, readings, or research.

SPT 3110 Literature in Translation (3). Masterpieces of Hispanic literature in English. Comparative use of the original text. Discussion and interpretation.

SPT 3800 Introduction to Translation Skills (3). Basic written translation into and out of English.


SPT 4801 Translation Practica (3). Translation of media, literary, and scientific texts.

SPT 4802 Practica in Oral Translation and Interpretation (3). Sight translation into and out of English. Introduction to the study of terminology. Prerequisite: SPT 3812 or permission of instructor.

SPT 4803 Practica in Legal Translation (3). Provides advanced training in translating most commonly used legal documents in both civil and criminal procedures.

SPT 4804 Practica in Legal Interpretation (3). Training in consecutive and simultaneous interpretation of both civil and criminal legal proceedings before Federal and State courts.

SPT 4805 Translation in Communication Media (3). Provides insight into the techniques of translation of advertising, press relations and publicity materials to be used in the mass
media such as print and broadcasting.


SPT 4813 The Interpreter and Language (3). The interpreter as a linguistics expert. The stylistic levels of language. Legal jargon and street language in English and Spanish. Dialectal problems. Practical and ethical problems. Prerequisite: SPT 3812.

SPT 4814 Conference Interpreting (3). Interpreting for international conferences and for diplomacy. Intensive practice in simultaneous interpretation. Prerequisite: SPT 3812.

SPT 4815 Interpreting for Business (3). The principles and techniques of interpreting in the context of a bilingual (Spanish/English) business setting. Consecutive, simultaneous interpretation and sight translation of business matters. Prerequisites: SPT 3800, SPT 3812 or permission of instructor.

SPT 4820 Computer-Aided Translation (3). The translating machine and computer-aided translation. Machine operation. Selected applications of computer translating texts from various disciplines. Correction of translated texts with computers. Prerequisites: SPT 3800, CDA 2310, and permission of director of program.

SPT 4940 Judicial Translation-Interpretation Internship (3). Students will spend a semester working in state and federal courts under the supervision of a professor, in order to practice in situations in which they have learned. Prerequisites: SPT 3800, SPT 3812, SPT 4801, SPT 4803, SPT 4804, SPT 4805, and SPT 4807.

SPT 4941 Professional Translation-Interpretation Internship (3). Students will spend a semester working in state and federal courts under the supervision of a professor, in order to practice in situations in which they have learned. Prerequisites: SPT 3800, SPT 3812, and permission of instructor.

SPT 5118 Literature in Translation (3). Masterpieces of world literature. Open to students who are proficient in more than one language.

SPT 5715 Hispanic Women Writers in Translation (3). Readings and analysis of Spanish and Spanish-American women writers in translation. Emphasis on cultural and linguistic considerations involved in the translation of literary texts. Prerequisite: Graduate standing or permission of instructor.

SPW 3130 Introduction to Spanish American Literature (3). Close reading and analysis of prose, poetry and drama. Selections from Spanish American Literature.

SPW 3323 Garcia Lorca's Theatre (3). Readings from representative plays by Spain's finest dramatist of the 20th century, including his three well-known tragedies and a number of short comic plays. Discussion of such themes as social and individual justice and freedom; passion and repression; and the role of poetry in the theatre.

SPW 3342 Twentieth Century Spanish Poets (3). Readings from selected poets of the 20th century, such as Antonio Machado, Miguel Hernandez, Domas Alonso, and Rafael Alberti. Close examination of the poems representative of these poets, and their contribution to the development of Spanish poetry from the Generation of 1898 to the middle of the 20th century.

SPW 3371 The Latin American Short Story (3). Readings from the 19th century authors and such 20th century masters as Borges, Cortazar, Cabrera Infante, Garcia Marquez, and Rulfo. Examination of short-story techniques and of such themes as social satire, the nature of reality, reason, and irrationality.

SPW 3423 Masterworks of the Golden Age (3). Readings from selected masterpieces of the Spanish Renaissance and Baroque, such as La Celestina, Lazorilla de Tormes, and the short novels of Cervantes. Emphasis on satire and the representation of such human problems as freedom, poverty, and the rebellion of the individual.

SPW 3520 Prose and Society (3). The dynamics of participation and alienation between prose writers and their environment.

SPW 3604 Don Quijote (3). A careful reading and discussion of Cervantes' Don Quijote, with particular attention to its multiple meanings in human terms, its innovative contributions to the novel in Europe, and the author's use of irony, characterization, and humor.

SPW 3720 The Generation of 98 (3). Based on the works of Azorin, Baroja, Ganivet, Machado, Maetz, Unamuno, and Valle-Inclan. This course will emphasize the individual thrust each author makes to foster artistic revolution and human regeneration, within a society characterized by abulia and existentialist anxiety.

SPW 3810 Problems in Reading and Interpretation (3). The identification and appreciation of techniques for sensitive reading and discussion of literary texts.

SPW 3820 Introduction to Spanish Literature (3). Close reading and analysis of prose, poetry, and drama. Selections from Spanish peninsular literature.

SPW 3930 Special Topics (3). Readings and discussion of literary linguistic topics to be determined by students and instructor.

SPW 4152 European Literature in Translation (3). For students proficient in more than one foreign language. Content and focus to be determined by students and instructor.

SPW 4263 The Spanish Novel of the Nineteenth Century (3). Within the context of literature and society, representative Spanish novels of the
epoch will be studied. Special attention
will be given to Galdos and
Clarin.

SPW 4271 Twentieth-Century Spanish Novel 1956 (3). A study
of the genre in Spain before and after the
Civil War. Emphasis will be on pre-
dominant narrative tendencies. Repre-
sentative authors will be
discussed, such as Cela, Laforet,
Sender, Matute, Medio, and others.

SPW 4304 Latin American Theatre (3). A view of Latin American
theatre from the 19th century to the pres-
ent. Representative works of the mos
trenown dramatists will be ex-
amined, with emphasis on the works of
Usigli, Triana, Marques Wolff, and
Diaz.

SPW 4324 Contemporary Spanish Drama: Buero Vallejo (3).
Chrono-
logical readings from plays written
between 1939-1980. Emphasis on
dramatic reading. An examination of
the evolution of dramatic art in the
context of censorship and free-
dom.

SPW 4334 Golden Age Poetry (3). Se-
lected readings from the major lyric
poets of the 16th and 17th centu-
ries. Special attention to the
problems of contemporary readings of
classical texts.

SPW 4343 Poetry of Garcia Lorca (3). Chrono-
logical examination of the
major works of Spain’s greatest
poet. Special attention to the lyric
and dramatic features.

SPW 4351 Spanish American Poetry I
(3). A view of Spanish American
poetry from the Pre-Colonial period un-
til 1850. Representative works of the
most renowned poets will be exam-
ined, with emphasis on Ecija, Sor
Juana, Bello, Heredia, and
Avel-
laneda.

SPW 4352 Spanish American Poetry
II (3). A view of Spanish American
poetry from 1850 to the present.
Representative works of the impor-
tant poets will be examined, and
special attention will be given to
Lezama Lima, Pastor, Paz, and
Vallejo.

SPW 4344 The Spanish American Ess-
say (3). A study of the ideological
and intellectual forces that have
shaped the Spanish American
thought, as expressed in the works of
representative authors such as
Rodrigo Morte, Martinez Estrada, Paz,
Marcach, and others.

SPW 4390 Genre Studies (3). Exami-
nation of a single literary form (e.g.,
short story, poetry), or the study of in-
teraction between literary types
(e.g. novel and drama).

SPW 4424 Golden Age Drama (3).
Close readings from the finest plays
written in Spain’s Golden Age by
Lope de Vega, Calderon, Tirso, and
others, including the Don Juan
theme. An examination of theatre as
styled conformity and as protest lit-
erature in a highly controlled society.

SPW 4460 Quevedo’s Satire (3).
An introduction to the literary world
of Spain’s great baroque poet, who
created modern satire in Spanish.
Prerequisite: A good understanding
of Spanish.

SPW 4590 Creative Modes (3). Dis-
cussion of a single mode or a plural-
ity of epoch styles such as classical/
baroque, realism/surrealism. The pec-
ular/common features of expres-
sive media.

SPW 4930 Special Topics (3). Inde-
pendent readings, research, or pro-
ject.

SPW 5408 Colonial Latin American
Literature (3). The most important
and representative literary works of
Colonial Latin America from the
Cronicas to Lizardi. Prerequisites: Up-
per level and graduate standing.

SPW 5155 Comparative Studies (3).
Cross-over and distinctiveness in a
multi-language problem, period, or
aesthetic.

SPW 5237 The Traditional Spanish
American Novel (3). Study and
analysis of the traditional Spanish
novel as a form of art, from 19th cen-
tury Lizardi’s El periquillo sarniento, to
1950. The novels and authors studied
are representative of ‘costumbriismo’,
romanticismo’, ‘naturalismo’, ‘mod-
ermismo’, and ‘criollismo’.

SPW 5277 Twentieth Century Spanish
Novel, from 1956 to the present (3).
Analysis of the Spanish novel from
Ferlois’s El Jarama to the present.
The perspective will be focused
within historical, social, and artistic
context. Representative authors
such as Cela, Martin Santos, Umbral,
Delibes, Benet, Gaytisolo, and oth-
ers will be included.

SPW 5286 Contemporary Spanish
American Novel (3). A study of the
Spanish American Novel from 1950.
The course will intensively and exten-
sively focus on the novelists who are
best known for their innovations, de-
fining and analyzing the qualities
which give originality and newness
both in themes and language.

SPW 5346 Poetry of Jorge Guillen (3).
Selected readings from the five vol-
umes of Aire nuestro. Emphasis on
the techniques of close reading and
explication. Related selections from
Guillen’s literary criticism.

SPW 5358 Graduate Seminar: Prose
and Poetry of Jorge Luis Borges’ (3).
Close readings of short stories and
poetry. Emphasis on Borges’ linguis-
tic and cultural pluralism and the in-
terplay of philosophy with fabula-
tion.

SPW 5359 Graduate Seminar: Poetry
of Pablo Neruda (3). Chronological
examination of the major works of
Chile’s Nobel Laureate. Related
readings from Neruda’s Memories.
Emphasis on the poet’s linguistic
and aesthetic innovations.

SPW 5387 Women and Poetry (3).
Women as poets and the poeti-
cized. Close reading of Peninsular
and Latin American texts, 16th - 20th
Century. Students examine the con-
tributions of women and how they
have been represented in poetry.
Prerequisite: 4000 or 5000 level
course in Hispanic Poetry.

SPW 5405 Medieval Spanish Litera-
ture (3). Readings in Medieval litera-
ture of Spain including the epic, the
learned poetry of the XIIIth and
XIVth Centuries, and the literature of
Juan II’s court. Prerequisites: Gradu-
ate standing and permission of in-
structor.

SPW 5407 The Renaissance in Spain
(3). Readings in the literature and
cultural expressions of the Spanish
Renaissance. Prerequisites: Gradu-
ate standing and permission of in-
structor.

SPW 5425 Quevedo: Poetry (3).
Close reading of selected poems by
Spain’s greatest baroque poet and
creator of modern Spanish satire,
including poems on love, death, and
metaphysical concerns, and a wide
range of humorous poems.

SPW 5426 Quevedo: Prose Satire (3).
Close reading of selected satires in
prose by Spain’s greatest baroque
satirist and creator of modern Span-
ish satire. Includes Quevedo’s pic-
uresque novel El Buscon, and his
Suenos, or Visions of Hell.

SPW 5428 Theatre in Calderon and
Lope (3). The creation of verbal the-
atrical technique in the Baroque masters Calderón de la Barca and Lope de Vega.

SPW 5436 Poetry Writing in Spanish (3). Readings from Spanish and Latin American texts: description and recreation of traditional and experimental metrics. Students will exchange critiques of original poems. Prerequisites: sample of unpublished poems; word processing literacy; permission of instructor.

SPW 5475 19th Century Latin American Literature (3). A study of the main literary works of Spanish-speaking 19th Century Latin America: Romanticism, Realism, Naturalism and Modernism. Prerequisites: Upper level and graduate standing.

SPW 5515 Advanced Studies in Hispanic Folklore (3). Studies the oral literary and linguistic tradition of the Hispanic world. Prerequisites: Graduate standing and permission of instructor.

SPW 5556 Spanish Realism and Naturalism (3). Readings In Spanish XIXth Century Novel of Realism and Naturalism including Alarcon, Perez Galdos, Pardo Bazan, Clarin and Blasco Ibanez. Prerequisites: Graduate standing and permission of instructor.

SPW 5575 Spanish American Modernism (3). An in-depth study of prose and poetry of one of the most important periods of Spanish American literature, focusing on Marti, Dario, Najera, Casals, Silva, Valencia, Lugones, and Herrera y Reissig.

SPW 5606 Cervantes (3). A comprehensive introduction to the masterpieces of Cervantes as the creator of the modern novel, and to critical theories about his art.

SPW 5735 Hispanic Literature of the United States (3). Readings in the literature of Hispanics in the United States. Prerequisites: Graduate standing and permission of instructor.

SPW 5756 Mexico in Poetry (3). Close reading of modern poets; discussion of essays on Theory and Practice. Students examine national representation in Myth, symbol and metaphor. Prerequisites: 4,000 or 5,000 level course in Culture of Literature.

SPW 5486 Modern Spanish Women Writers (3). Analysis of narrative works by Spain’s most representative women writers from the 19th century to the present. Emphasis on the novel. Includes works by Pardo Bazan, Matute, Lafuente, Martin Gaite. Prerequisites: Graduate standing or permission of instructor.

SPW 5806 Methods of Literary Research (3). Introduction to bibliography, methods of research, the composition of essays, rhetoric, and the presentation of documentation. Theory of literary criticism, and its practical application to texts in Spanish.

SPW 5934 Special Topics in Language/Literature (3). Content and objectives to be determined by student and instructor.
Music

Fredrick Kaufman, Professor and Chairperson (composition)
John Augenblick, Associate Professor (choral)
Gary Campbell, Visiting Instructor/Lecturer (saxophone)
Andres Diaz, Artist-in-Residence (cello)
Robert Diaz, Artist-in-Residence (viola)
J. Richard Dunscomb, Professor (jazz)
Orlando J. Garcia, Associate Professor (composition)
Robert Grenier, Assistant Professor (voice)

Anna Elizabeth Hinkle-Turner, Visiting Assistant Professor (composition/electronic music)
David Kim, Artist-in-Residence (violin)
Claire McElfresh, Professor (choral)
William Matthew McNlurft, Assistant Professor (bands)
Michael Orta, Visiting Instructor/Lecturer (jazz piano)
Carlos Pianlini, Professor (orchestra)
Joseph Rehm, Associate Professor (theory)
Miguel Salvador, Associate Professor (piano)
Arturo Sandoval, Professor/Artist-in-Residence (trumpet)
Carolyn Stanford, Lecturer/Instructor (voice)
Susan Starr, Professor/Artist-in-Residence (piano)

Bachelor of Music

Degree Program Hours: 128

A Bachelor of Music degree is offered with an emphasis in one or more of the following areas: Applied Music, Composition, Jazz Studies, and Music Education (students will take a dual major in Music and Music Education - see Music Education in the College of Education for specific requirements).

All entering students must provide evidence of performance ability (vocal or instrumental) through an audition. Contact the Music Department at (305) 348-2896 for more information or to schedule an audition.

Freshman/Sophomore Admission

Freshman admission requires an audition and placement test in Music Theory. Contact the Music Department at 348-2896 for an audition appointment.

Transfer Admission

To qualify for admission to the program, FIU undergraduates must meet all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Music students at the University come from a wide variety of academic backgrounds from Florida, other states and countries. Because of this diversity, the Faculty of Music gives basic preliminary examinations in order to assist the student to eliminate any deficiencies:

1. Music History - consisting of all periods of history
2. Music Theory - consisting of sight-singing, melodic and harmonic dictation and written harmonization and analysis.

Music Courses required of all Music Majors in the first two years (38)

Theory (12)
MUT 1111 Music Theory I 3
MUT 1112 Music Theory II 3
MUT 2116 Music Theory III 3
MUT 2117 Music Theory IV 3

Ear Training/Sightsinging (4)
MUT 1221 Sightsinging I 1
MUT 1222 Sightsinging II 1
MUT 2226 Sightsinging III 1
MUT 2227 Sightsinging IV 1

Music Technology (2)
MUC 1342 MIDI Technology 2

Applied Lessons (8)
Four semesters, 2 credits each semester 8

Class Piano (4)
MVK 1111 Class Piano I 1
MVK 1112 Class Piano II 1
MVK 2121 Class Piano III 1
MVK 2122 Class Piano IV 1

Piano majors/principals take two semesters of Keyboard Studies instead.

Ensembles (8)
Must enroll in at least one large ensemble each semester: Wind Ensemble, Choir, or Orchestra. Piano majors/principals must take four semesters of Accompanying MUN 2510 instead.

Recital Attendance (0)
To be taken each semester enrolled in Applied Music
MUS 1010 Recital Attendance 0

In addition, all freshmen and sophomore students must fulfill the requirements of the university Core Curriculum or General Education.

Junior/Senior Year Areas of Emphasis

The following are Junior/Senior Year areas of emphasis for Music students. Nine hours in elective courses outside the department are required by the College. Admission to each area is by faculty approval.
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<tr>
<th>Area I: Instrumental Performance (54)</th>
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<td>Required Courses</td>
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<tr>
<td>Theory: (9)</td>
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<tr>
<td>MUT 3611 Form</td>
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<tr>
<td>MUT 3401 Counterpoint</td>
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<tr>
<td>MUT 4311 Orchestration</td>
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<tr>
<td>History: (9)</td>
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<tr>
<td>MUH 3211 Music History Survey I</td>
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<tr>
<td>MUH 3212 Music History Survey II</td>
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<td>MUH 3371 Twentieth Century</td>
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<tr>
<td>Music: Exploration</td>
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<tr>
<th>Ethnomusicology (3)</th>
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<tr>
<td>MUN 2052 Music of the World</td>
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<th>Ensembles (8)</th>
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<tr>
<td>Two credits each semester enrolled in Applied Music including four semesters of Opera Workshop. Others to be determined by Advisor.</td>
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<tr>
<th>Major Applied (8)</th>
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<tbody>
<tr>
<td>MVV 3431 Senior Prin App</td>
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<td>MVV 3432 Senior Prin App</td>
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<td>MVV 4441 Senior Prin App</td>
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<th>Conducting (2)</th>
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<tr>
<td>MUG 4101 Basic Conducting</td>
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<tr>
<td>MUG 4202 Choral Conducting</td>
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<th>Recitals: (0)</th>
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<tr>
<td>MVV 3970 Junior Recital</td>
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<td>MVV 4971 Senior Recital</td>
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<tr>
<td>To be taken each semester enrolled in Applied Music</td>
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<tr>
<td>MUS 3040 Recital Attendance</td>
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<th>Diction for Singers (4)</th>
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<tr>
<td>MUS 2211 English Diction</td>
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<tr>
<td>MUS 2221 French Diction</td>
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<td>MUS 2231 German Diction</td>
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<td>MUS 2241 Italian Diction</td>
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<td>Electives outside the major</td>
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<th>Area III: Composition (56)</th>
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<td>Four semesters, 1 credit each semester</td>
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<tr>
<td>MUC 2221 Composition I</td>
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<tr>
<td>MUC 2222 Composition II</td>
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<td>MUC 3231 Composition III</td>
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<td>MUC 3232 Composition IV</td>
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<td>MUC 4241 Composition V</td>
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<tr>
<td>MUC 4932 Composition Forum</td>
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**Electives outside the major**

1 MUC 2221 and 2222 (4 credits) should be taken during the sophomore year.
2 Composition students must present a 45 minute recital of their works and a 30 minute performance recital. A final oral exam administered after the composition recital must also be successfully completed.
Area IV: Commercial/Jazz Performance (56)

Required Courses

Theory: (13)
MUT 4311 Orchestration 3
MUT 4353 Jazz Arranging 2
MUT 2641 Jazz Improvisation I 2
MUT 2642 Jazz Improvisation II 2
MUT 4643 Jazz Improvisation III 2
MUT 4663 Jazz Styles and Analysis 2

History: (9)
MUH 3212 Music History Survey II 3
MUH 3371 Twentieth Century Music: Exploration 3
MUH 2116 Evolution of Jazz 3

Ethnomusicology (3)
MUH 2052 Music of the World 3

Additional Music Courses: (20)
Ensembles (8)
Two credits each semester enrolled in Applied Music (To be determined by advisor) 8
Jazz Applied 1 (8)
Four semesters major jazz applied 7

Conducting (3)
Basic
MUG 4101 Basic Conducting 1
MUG 4202 Choral Conducting 1
or
MUG 4302 Instrumental Conducting 1
Jazz Rehearsal Techniques 1

Recitals
MUN 4784 Senior Jazz Applied Recital 0
MVS 3970 Junior Jazz Recital 0

Recital Attendance
(To be taken each semester enrolled in Applied Music)
MUS 3940 Recital Attendance 0

Commercial/Jazz (3)
MUM 4391 Business of Music 1
MUM 1114 Intro to Jazz Studies 2

Electives: (9)
To be determined by advisor

Piano majors will take four credits (two years) of Classical Applied Piano instead of Jazz Piano.
Drummers entering without Classical Applied Percussion will take four credits (two years) of Classical Applied Percussion.
Electric Bass Majors will take two credits (1 year) of Applied String Bass.

Area V: Performance (55)

Required Courses

Theory: (9)
MUT 3611 Forum and Analysis 3
MUT 3401 Counterpoint 3

History: (15)
MUH 3211 Music History Survey I 3
MUH 3212 Music History Survey II 3
MUH 3371 20th Century Music 3
MUH 2052 Music of the World 3
MUH 4400 Keyboard Literature 3

Ensembles: (8)
Two semesters of large ensemble: Choir, Wind Ensemble, Orchestra.
MUN 3463 Chamber Music (two semesters) 2
MUN 4513 Accompanying (four semesters) 4

Major Applied (8)
Four semesters, two credits each semester.

Conducting (1)
MUG 4101 Basic Conducting 1

Pedagogy (2)
MVK 4640 Piano Pedagogy 2
Recitals (0)
Junior Recital 0
Senior Recital 0
Recital Attendance (0)
MUS 3040 0

To be taken each semester enrolled in Applied Music

Electives
Music Electives 6
Electives outside of major 9

Music Education
Certification in Music Education is available through the College of Education.

Minor in Music
A Minor in Music requires 18 credits of music courses to be selected in consultation with the chairperson of the Music Department.

Course Descriptions

Definition of Prefixes


MUC 1101 Basic Music Composition (1). Elementary principles of composition including the performance of composition projects. Course includes calligraphy and notation skills. Course may be repeated for credit. Prerequisites: Freshman music majors; permission of instructor.

MUC 1342 MIDI Technology (2). Introduction to the MIDI protocol and MIDI-based software, including music notation, sequencing, patch editing, ear training, and keyboard skills software. Prerequisites: Music major or permission of instructor.

MUC 2221 Composition I (2). Creative writing utilizing 20th-century compositional techniques in Impressionism, Neoclassicism, Post-Webern Serialism, Indeterminacy, Minimalism, mixed and intermedia etc. Prerequisite: MUC 1112. Corequisite: MUC 2116.

MUC 2222 Composition II (2). Continuation of MUC 2221. Prerequisite: MUC 2221. Corequisite: MUC 2117.

MUC 2301 Electronic Music Lab I (2). Exploration of the electronic medium including the history of electronic music, digital studio techniques, analog studio techniques, digital synthesis and analog synthesis. Prerequisite: MUC 1342.

MUC 3231 Composition III (2). A continuation of Composition I to further the development of students compositional abilities through the writing of more evolved works with regard to duration, instrumentation. Prerequisites: MUC 2222 and admission to composition area.

MUC 3232 Composition IV (2). Continuation of MUC 3231. Prerequisite: MUC 3231.

MUC 3302 Electronic Music Lab II (2). A continuation of Electronic Music Lab I with an emphasis on ad-
advanced MIDI applications including samplers, digital sequencing, digital signal processing and interactive MIDI software. Includes one large composition project. Prerequisite: Electronic Music Lab I.

MUC 4241 Composition V (2). Continuation of MUC 3232. Prerequisite: MUC 3232.

MUC 4242 Composition VI (2). Continuation of MUC 4241. Prerequisite: MUC 4241.

MUC 4400 Electronic Music Lab III (2). Special projects in advanced electronic music programming environments including Csound, MAX, Interactor, HMML and CHANT. Includes one large composition project. Can be repeated four times. Prerequisite: Electronic Music Lab II and permission of instructor.

MUC 4932 Composition Forum (0). Student composers critique each other’s work and discuss topic of interest to composers. Required of all students taking Composition II. Prerequisite: Admission to Composition Program.

MUC 6251 Graduate Music Composition (1-3). The writing of evolved musical compositions with regard to each student’s strengths and aesthetic development. Graduate standing in Music Education and permission of the instructor.

MUC 6305 Electronic Music Lab I (2). Exploration of the electronic medium including the history of electronic music, digital studio techniques, analog studio techniques, digital synthesis and analog synthesis. Prerequisites: MUC 1342 or permission of instructor.

MUC 6306 Electronic Music Lab II (2). Continuation of Electronic Music Lab I with an emphasis on advanced MIDI applications including sampling, digital sequencing, digital signal processing and interactive MIDI software. Includes one large composition project. Prerequisite: MUC 6401.

MUC 6405 Electronic Music Lab III (2). Special projects in advanced electronic music programming environments including Csound, MAX, Interactor, HMML and CHANT. Includes one large composition project. Can be repeated 4 times. Prerequisite: MUC 6402.

MUE 2440C String Techniques (1). Class instruction of string instruments; tuning and care of instruments; teaching techniques, fingerings, bowings; violin, viola, cello and double bass.

MUE 2450C Woodwind Techniques (1). Class instruction of woodwind instruments; tuning and care of instruments. Teaching techniques. Single reed instruments, double reed instruments, and flute. Class one hour, laboratory one hour.

MUE 2460C Brass Techniques (1). Class instruction of brass instruments; tuning and care of instruments. Teaching techniques. Piston and valve instruments, French horn, and trombone. Class one hour, laboratory one hour.

MUE 2470C Percussion Techniques (1). Class instruction of percussion instruments; striking techniques; care of instruments; teaching techniques. Drum and mallet instruments. Class one hour, laboratory one hour.

MUE 3921 Choral Conducting Workshop (3). The study of various topics related to choral literature, conducting and techniques. Prerequisite: Permission of instructor.

MUE 3922 String Workshop (3). The study of various topics related to string literature, conducting and techniques. Prerequisite: Permission of instructor.

MUE 3923 Instrumental Conducting Workshop (3). The study of various topics related to instrumental ensemble literature, conducting and techniques. Prerequisite: Permission of instructor.

MUE 3924 Jazz Workshop (3). The study of various topics related to jazz literature, conducting and techniques. Prerequisite: Permission of instructor.

MUE 3921 Choral Conducting Workshop (3). The study of various topics related to choral literature, conducting and techniques. Prerequisite: Permission of instructor.

MUE 3922 String Workshop (3). The study of various topics related to string literature, conducting and techniques. Prerequisite: Permission of instructor.

MUE 3923 Instrumental Conducting Workshop (3). The study of various topics related to instrumental ensemble literature, conducting and techniques. Prerequisite: Permission of instructor.

MUE 5924 Jazz Workshop (3). The study of various topics related to jazz literature, conducting and techniques. Prerequisite: Permission of instructor.

MUE 5928 Workshop in Music (2). Applications of materials and techniques in music in a laboratory or field setting.

MUG 4101 Basic Conducting (1). A basic conducting course to gain fundamental technique and interpretation. A prerequisite for both advanced instrumental and choral conducting.

MUG 4202 Choral Conducting (1). With a background in basic theory and having performed in ensembles, the student will develop techniques of group conducting including madrigal, glee, choir, etc. A survey of choral literature will be included. Prerequisite: MUG 4101.

MUG 4302 Instrumental Conducting (1). With a background in basic theory and having performed in ensembles, the student will develop knowledge of baton technique, score reading, and interpretation. Prerequisite: MUG 4101. Corequisite: Orchestra or wind ensemble or both.

MUG 5105 Advanced Conducting Techniques (1). An extension of form and analysis, with interpretation both in instrumental and choral conducting. Twentieth century scoring and symbol interpretation will be studied in depth, with actual conducting experience required.

MUH 1011 Music Appreciation (3). Lives and creations of great composers in various periods of history. A multi-media course.

MUH 1018 Introduction to Jazz Studies (2). An introductory study of jazz music and musicianship. Required of all students who have been accepted into the Commercial/Jazz Studies program.

MUH 1560 African American Music (3). Examines the historical influence and development of African American music from its African roots to its dominance in the American popular culture.

MUH 2116 Evolution of Jazz (3). A history course that surveys jazz styles from mid-19th century to the present. A sociological and musical look at jazz, the personalities and their experience.
MUH 2052 Music of the World (3). Survey of folk, popular and classical musical traditions from around the world. Examination of musical style and social context with film and performance demonstrations.


MUH 3060 Latin American Music In the United States (3). Survey of Latin American musical tradition brought through immigration. Examination of musical style and social context in lecture-discussion format with film and performance demonstrations.

MUH 3061 Music of Mexico and Central America (3). A survey of folk, popular and classical musical traditions in the region. Examination of musical style and social context in lecture-discussion format with film and performance demonstrations.

MUH 3062 Music of the Caribbean (3). Survey of folk, popular and classical musical traditions and their ongoing connection with Caribbean populations in the U.S. Class includes film and performance demonstrations.

MUH 3211 Music History Survey I (3). A survey of music from antiquity to 1750. Lectures on historical styles will be supplemented with slides, recordings, and musical analysis. Prerequisite: Core for Music majors or by permission of instructor.

MUH 3212 Music History Survey II (3). A survey of music from 1750 to the present. Lectures on historical styles will be supplemented with slides, recordings, and musical analysis. Prerequisite: Music History Survey I or by permission of instructor.

MUH 3371 Twentieth Century Music: Exploration (3). An exploration of music since 1900. Lectures on style plus demonstrations will be supplemented with recordings and analysis. Prerequisites: MUH 3211 and MUH 3212.

MUH 3541 Music of Latin America: Folklore and Beyond (3). An overview of the orchestral, chamber, solo, vocal, and electronic music from Latin America written in the 20th century and its relationship to the folk music of the region.

MUH 3801 Jazz History (2). An in-depth study of jazz music from its inception to the present day. Specifically designed for music majors, in particular Jazz Studies students. Prerequisites: MUT 1112, MUT 1222.

MUH 4680 Music History Seminar I (2). Emphasizes both historical and theoretical analysis. Scholarly work under faculty direction, develops written skills and research methods. Written project required. Prerequisite: MUH 3211, MUH 3212, and permission of instructor.

MUH 4681 Music History Seminar II (2). Emphasizes both historical and theoretical analysis. Scholarly work under faculty direction, develops written skills and research methods. Written project required. Prerequisite: MUH 4680 or permission of instructor.

MUH 4682 Music History Seminar III (2). Emphasizes both historical and theoretical analysis. Scholarly work under faculty direction, develops written skills and research methods. Written project required. Prerequisite: MUH 4681.

MUH 4683 Music History Seminar IV (2). Emphasizes both historical and theoretical analysis. Scholarly work under faculty direction, develops written skills and research methods. Written project required. Prerequisite: MUH 4682.


MUH 5057 Music of the World (3). Survey of folk, popular and classical musical traditions from around the world. Examination of musical style and social context with film and performance demonstrations.

MUH 5065 Latin American Music in the United States (3). Survey of Latin American musical traditions brought through immigration. Examination of musical style and social context in lecture-discussion format with film and performance demonstrations.

MUH 5066 Music of Mexico and Central America (3). A survey of folk, popular and classical musical traditions in the region. Examination of musical style and social context in lecture-discussion format with film and performance demonstrations.

MUH 5067 Music of the Caribbean (3). Survey of folk, popular and classical musical traditions and their ongoing connection with Caribbean populations in the U.S. Class includes film and performance demonstrations.

MUH 5375 Twentieth Century Music: 'New Dimensions' (3). A technical study of music since 1900. Lectures on style plus demonstrations and practical application will be supplemented with recordings and analysis.

MUL 4400 Keyboard Literature (3). Study of solo works for the keyboard from historical beginnings to the present. Performance practices and stylistic analysis will be emphasized, with illustrations of representative works. Prerequisites: MUH 3211, MUH 3212.

MUL 4500 Symphonic Literature (3). Survey of symphonic literature from the 17th century to present day. Analysis and illustrations of representative works. Prerequisites: MUH 3211, and MUH 3212.

MUL 4630 Symphonic/Chamber Vocal Literature (1). Corequisite with MUL 4500 Symphonic Literature. A practicum surveys Symphonic & Chamber vocal music from 17th Century to present day. Includes selection of personal repertory and ensemble performance.

MUL 4662 History and Literature of Opera (3). Chronological survey of opera literature from the 17th century to present day. Analysis and performance of representative works. Prerequisites: MUH 3211, and MUH 3212.

MUL 5456 Wind Instrument Literature (3). The history and development of Wind Instrument Literature from ca. 1650 to the present day. Music appropriate for all levels of instruction from middle school through college level is included. Prerequisite: Advanced/graduate standing.

MUL 1401 Music Calligraphy (3). The correct procedures for music penmanship, the notation of notes and chords for music parts and scores.

MUL 3601 Audio Techniques I (3). Basic sound engineering, including the basic workings of P.A. equip-
ment and the interplay between the various components.

MUM 3602 Audio Techniques II (3). Studio recording techniques, microphone placement, tapping and mixing.

MUM 4301 Business of Music (1). Principles and practices of modern publishing techniques; copyright laws; wholesale and retail distribution of music. Performance rights; agreements and relations between producers, directors, performers, writers, personnel managers, and booking agents. Prerequisite: Permission of instructor.

MUM 4302 Business of Music II (3). Continuation of principles and practices of modern publishing techniques; copyright laws; wholesale and retail distribution of music. Performance rights; agreements and relations between producers, directors, performers, writers, personnel managers, and booking agents. Prerequisite: MUM 4301.

MUM 4940 Music Internship (VAR). Practical experience utilizing music theory, composition, and history in the commercial music industry. The precise nature of the work will be determined in consultation with an advisor. Prerequisite: MUM 4302.

MUN 1100, 4103, 5105 Golden Panther Band (1). A study and performance of pop, jazz, and rock musical selections for the instrumental medium. Students will demonstrate what they have learned by performing and through individualized playing examinations. Prerequisite: Permission of instructor.

MUN 1120, 3123, 5125 University Concert Band (1). Readings and performances of large concert band repertoire, including pop and show tunes. Designed to give any university student who demonstrates an acceptable level of performance on a wind or percussion instrument, the opportunity to perform in a band.

MUN 1140, 4143, 5145 Symphonic Wind Ensemble (1). Readings and performances of wind ensemble music from the 18th century to the present. Open to wind and percussion instrumentists. Prerequisite: Permission of instructor.

MUN 1210, 4213, 5215 Orchestra (1). An instrumental ensemble performing works from the symphonic repertory.

MUN 1310, 3313, 5315 Concert Choir (1). A choral ensemble performing music written and arranged for mixed voices. Prerequisite: Permission of instructor.

MUN 1340, 3343, 5345 Sunblazer Singers (1). A small ensemble of selected mixed voices performing a repertoire in the modern popular idiom. Miniature contemporary accompaniment will be utilized. Prerequisite: Permission of conductor.

MUN 1380, 3383, 4380, 5385 Master Chorale (1). A chorus performing a repertoire primarily from great choral works. Large orchestral accompaniment as well as various instrumental ensembles will be utilized. Prerequisite: Permission of conductor.

MUN 1430, 3433, 5435 University Brass Choir (1). A study and performance of literature written for the brass medium (trumpet, horn, trombone, euphonium, and tuba) from the pre-baroque, baroque, classical, romantic, and contemporary periods. May be repeated. Prerequisite: Permission of instructor.

MUN 1460, 3463, 5465 Chamber Music (1). Small ensemble in the performing of chamber music literature. Prerequisite: Permission of conductor.

MUN 1710, 3713, 5715 Studio Jazz Ensemble (1). An ensemble to provide creative professional-level experience in the contemporary popular idiom. Permission of conductor.

MUN 1790 Salsa Jazz Ensemble (1). An ensemble to provide creative professional-level experience in the salsa/Latin jazz idiom. Prerequisite: Permission of instructor.

MUN 2001 Music Theater Workshop - Voice (2). Introduction to musical comedy performance; integration of dramatic, musical and movement components studied through work on selected scenes and songs. Particular emphasis on vocal training. Corequisite: TPP 3250.

MUN 2450, 4453, 5455 Piano Ensemble (1). The presentation and performance of music literature characteristic of piano and pianos in ensemble.

MUN 2480, 4483, 5485 Guitar Ensemble (1). The presentation and performance of music literature characteristic of the Guitar Ensemble. Prerequisite: Permission of conductor.

MUN 2490, 4493, 5495 New Music Ensemble (1). A chamber group of varying instrumentation and size performing art music from the 20th century with emphasis on music from the past 20 years. Explores electronics, multimedia works, etc. Prerequisite: Permission of instructor.

MUN 2491, 4494, 5496 Latin American Music Ensemble (1). Study and performance of one or more folk and/or popular musical styles from Latin America.

MUN 2510, 4513, 5515 Accompanying (1). Accompanying instrumental and vocal students in studio and recital situations.

MUN 2711, 4714, 5716 Jazz Combo Class (1). Harmonic practice, formal procedures, rhythmic and improvisational practices of jazz performance in the small group. Prerequisites: Permission of conductor.

MUN 4784, 5785 Jazz Ensemble Rehearsal Techniques (1). An ensemble that provides its members a creative approach to jazz ensemble rehearsal techniques, literature, improvisation and related materials. Prerequisite: Permission of instructor.

MUO 1501, 4502, 5505 Opera Workshop (1). The presentation and performance of music literature indigenous to the opera stage. Prerequisite: Permission of director.

MUO 2001 Music Theater Workshop - Voice (2). Introduction to musical comedy performance; integration of dramatic, musical and movement components studied through work on selected scenes and songs. Particular emphasis on vocal training. Corequisite: TPP 3250.

MUO 3603 Elements of Stage Production (2). Aspects of technical theatre will be examined such as stage design and lighting, costumes and makeup, stage direction, prop construction, prompting, and Opera Theatre administration.
MUS 4503 Opera Theatre (3). Culmination of opera courses with emphasis on accumulation of repertoire, systematic development of a role, and rehearsal procedures and discipline. Student may perform self-directed scenes. Permission of instructor.

MUS 4504 Opera Theatre II (3). Continuation of Opera Theatre I. Student may participate in staged operatic production as performer or technical personnel. Prerequisites: MUS 4505, MUS 4455, and MUS 4315 or permission of instructor.

MUS 1010 MUS 3040 Recital Attendance (0). Students attend concerts and recitals as a corequisite to applied music. Required of music majors each semester.

MUS 2211 English Diction (1). Develop the skills in the proper enunciation of the English language as used in opera oratorio and art song literature. Corequisites: All applied MVV.

MUS 2221 French Diction (1). Develop the skills in the proper enunciation of the French language as used by singers in opera, oratorio and art song literature. Corequisites: All applied MVV.

MUS 2223 German Diction (1). Develop the skills in the proper enunciation of the German language as used by singers in opera, oratorio and art song literature. Corequisites: All applied MVV.

MUS 2241 Italian Diction (1). Develop the skills in the proper enunciation of the Italian language as used by singers in opera, oratorio and art song literature. Corequisites: All applied MVV.

MUS 3905, MUS 5905 Directed Study (VAP). Designed to provide areas of exploration and specialization beyond the basic selected study programs, such as electronic music, religious music, literature, sound techniques, etc. Prerequisite: Permission of instructor.

MUS 3910, MUS 4910, MUS 5910 Research (VAP). Research composition or performance projects, under the guidance and direction of the music faculty. (May be repeated). Prerequisite: Permission of instructor.

MUS 4249 Cooperative Education in Performing Arts (VAP). A student majoring in Performing Arts may spend several semesters fully employed in industry or government in a capacity relating to the major.

MUT 1001 Fundamentals of Music (3). A beginning music theory course in the basic elements of music theory, meter notation, key signatures, scales, intervals, and triads.

MUT 1111 Music Theory I (3). This course is designed to promote and develop comprehensive musicianship in all disciplines of the musical art, analysis, composition, performance, and listening. Corequisite: MUT 1221.

MUT 1112 Music Theory II (3). This course is designed to promote and develop comprehensive musicianship in all disciplines of the musical art, analysis, composition, performance, and listening. The second semester is a continuation of Theory I. Prerequisite: MUT 1111, Corequisite: 1222.

MUT 1221 Sightingsing I (1). Development of Basic Musicianship through aural perception, sightingsing, and ear training exercises. Corequisite: MUT 1111.

MUT 1222 Sightingsing II (1). Development of Basic Musicianship through aural perception, sightingsing, and ear training exercises. The second semester is a continuation of Sightingsing I. Prerequisite: MUT 1221. Corequisite: MUT 1112.

MUT 2116 Music Theory III (3). Continuation of Freshman Theory II seeks to promote and further develop comprehensive musicianship in all disciplines of the musical art, analysis, composition, performance, and listening. Prerequisite: MUT 1112. Corequisite: MUT 2226.

MUT 2117 Music Theory IV (3). This course further develops those skills acquired in sophomore Theory I. Prerequisite: MUT 2116. Corequisite: MUT 2227.

MUT 2226 Sightingsing III (1). Continuation of the Development of Basic Musicianship through aural perception, sightingsing, and ear training exercises. Prerequisite: MUT 1222. Corequisite: MUT 2116.

MUT 2227 Sightingsing IV (1). Continuation of the Development of Basic Musicianship through aural perception, sightingsing, and ear training exercises. Prerequisites: MUT 2226, MUT 2116, Corequisite: MUT 2117.

MUT 2641 Jazz Improvisation I (2). A beginning course in Jazz improvisation that teaches fundamental aspects, chord structures and extensions, chord scales, melodic patterns, and tunes. Course will involve both theory and practical application. A concert will be held at conclusion of the term. Prerequisite: Permission of instructor.

MUT 2642 Jazz Improvisation II (2). A follow-up course that builds on and extends all materials learned in Jazz Improvisation I. Course stresses more complex chord structures, scales, and tunes. A concert will be held at conclusion of the term. Prerequisite: MUT 2641.

MUT 3401 Counterpoint (3). A study of linear writing through species counterpoint. Two and three-part instrumental and vocal counterpoint of the 18th century. Canon, inventions, fugues. Particular emphasis will be placed on formal analysis. Prerequisite: MUT 2117, 2227, or equivalent.

MUT 3611 Form and Analysis (3). Study and analysis from the smaller forms of musical composition to multimovement forms. Prerequisite: MUT 2117, 2227.

MUT 4311 Orchestration (3). With a background of basic theory, the student will explore the techniques of writing and arranging for instruments in performing organizations. Prerequisite: Prerequisites: MUT 2117 and MUT 2227.

MUT 4353 Jazz Arranging (2). This course teaches the fundamental aspects of jazz arranging: instrumentation, transposition, section and ensemble writing, chord voicings, counterpoint, and form and analysis. The performance of an original arrangement is required as a final project. Prerequisite: MUT 2641.

MUT 4643 Jazz Improvisation III (2). A continuation of Jazz Improvisation II, this course teaches chromatic chords, advanced scales and progressions, patterns, repertoire. Individual and ensemble performance is required as a final project. Prerequisite: MUT 2642.

MUT 4663 Jazz Styles and Analysis I (2). An extensive study of the significant styles and performers in jazz history from its origins to the present. Includes instruction in layered listening, various analyses and transcribing. Prerequisites: Jazz theory or permission of the instructor.
MUT 4664 Jazz Styles and Analysis II (2). An extensive study of the significant styles and performers in jazz history from its origins to the present. Includes instruction in layered listening, various analyses and transcribing. Continuation of Jazz Styles and Analysis I. Prerequisite: MUT 4663 or permission of instructor.

MUT 5051 Graduate Theory Survey (3). Analytical, theoretical and aural skills required for successful graduate studies in music. Prerequisite: Graduate standing in Music Education or permission of instructor.

MUT 5152 Comprehensive Musical Systems (3). Examination of various comprehensive theoretical systems utilized in the analysis of music. Prerequisite: Graduate standing in Music Education or permission of instructor.

MUT 5316 Advanced Orchestration (3). A course in practical arranging for the public school teacher, including choral, band, and popular arranging. Prerequisites: MUT 2117 and MUT 2227.

MUT 5411 Modal Counterpoint (3). Develop skills necessary to write in the Renaissance style and to analyze the masterworks of Palestrina, Lassus, Victoria, and others. Prerequisite: Graduate standing in Music Education or permission of instructor.

MUT 5585 Musical Styles Through Strict Composition (3). This course is designed to develop basic compositional skills for writing works in all forms and fugues. Prerequisite: Graduate standing in Music Education or permission of instructor.

MUT 5627 Schenkerian Analysis (3). Advanced studies in Schenkerian analysis of tonal music. Prerequisite: Graduate standing in Music Education or permission of instructor.

MUT 5628 Atonal Analysis (3). Advanced studies in set theory and serial techniques of twentieth-century music. Prerequisite: Graduate standing in Music Education or permission of instructor.

MUT 5629 Analytical Techniques (3). Examination and practice of various techniques utilized in the analysis of art music from the common practice period through the 20th century. Prerequisite: Placement exam or permission of instructor.

MUT 5930 Special Topics (3). Examination of composers, compositional schools, or other areas of specialization and/or interest to the theory/composition faculty. Prerequisite: Graduate standing in Music Education or permission of instructor.

MVB 1211, 2221, 3231, 4241, 5251 Secondary Applied Trumpet (1). Individual instruction in applied music on trumpet as a secondary instrument. Prerequisite: Permission of instructor.

MVB 1212, 2222, 3232, 4242, 5252 Secondary Applied French Horn (1). Individual instruction in applied music on french horn as a secondary instrument. Prerequisite: Permission of instructor.

MVB 1213, 2223, 3233, 4243, 5253 Secondary Applied Trombone (1). Individual instruction in applied music on trombone as a secondary instrument. Prerequisite: Permission of instructor.

MVB 1214, 2224, 3234, 4244, 5254 Secondary Applied Baritone Horn (1). Individual instruction in applied music on baritone horn as a secondary instrument. Prerequisite: Permission of instructor.

MVB 1215, 2225, 3235, 4245, 5255 Secondary Applied Tuba (1). Individual instruction in applied music on tuba as a secondary instrument. Prerequisite: Permission of instructor.

MVB 1311, 2321, 3331, 4341, 5351 Principal Applied Trumpet (1-2). Individual instruction in applied music on trumpet as a principal instrument. Music majors only.

MVB 1312, 2322, 3332, 4342, 5352 Principal Applied French Horn (1-2). Individual instruction in applied music on french horn as a principal instrument. Music majors only.

MVB 1313, 2323, 3333, 4343, 5353 Principal Applied Trombone (1-2). Individual instruction in applied music on trombone as a principal instrument. Music majors only.

MVB 1314, 2324, 3334, 4344, 5354 Principal Applied Baritone Horn (1-2). Individual instruction in applied music on baritone horn as a principal instrument. Music majors only.

MVB 1315, 2325, 3335, 4345, 5355 Applied Tuba (1-2). Individual instruction in applied music on tuba as a principal instrument. Music majors only.

MVB 1411, 2421, 3431, 4441, 5451 Major Applied Trumpet (1-2). Individual instruction in applied music on trumpet as a major instrument. Music majors only.

MVB 1412, 2422, 3432, 4442, 5452 Major Applied French Horn (1-2). Individual instruction in applied music on french horn as a major instrument. Music majors only.

MVB 1413, 2423, 3433, 4443, 5453 Major Applied Baritone Horn (1-2). Individual instruction in applied music on baritone horn as a major instrument. Music majors only.

MVB 1414, 2424, 3434, 4444, 5454 Major Applied Tuba (1-2). Individual instruction in applied music on tuba as a major instrument. Music majors only.

MVB 1415, 2425, 3435, 4445, 5455 Major Applied Tuba (1-2). Individual instruction in applied music on tuba as a major instrument. Music majors only.

MVB 3970 Junior Recital - Brass (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVB 4971 Senior Recital - Brass (1). All music majors must present, before graduation, at least one half (full recital performance for majors) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVJ 1210, 2220, 3230, 4240, 5250 Secondary Jazz Piano (1). Individual instruction in applied jazz music on piano. Prerequisite: Preceding course in sequence or permission of instructor.

MVJ 1211 Principal Applied Jazz Drums (1-2). Individual instruction in applied music on jazz drums as a principal instrument. Prerequisite: Music majors only.

MVJ 1212 Secondary Latin Jazz Percussion (1). Individual instruction in applied music on Latin percussion instruments. Prerequisite: Permission of instructor.
MVJ 1213, 2223, 3233, 4243, 5253  
Secondary Jazz Guitar (1). Individual instruction in applied jazz music on guitar. Prerequisite: Preceding course in sequence or permission of instructor.

MVJ 1214, 2224, 3234, 4244, 5254  
Secondary Jazz Electric Bass (1). Individual instruction in applied jazz music on electronic bass. Prerequisite: Preceding course in sequence or permission of instructor.

MVJ 1215, 2225, 3235, 4245, 5255  
Secondary Jazz Flute (1). Individual instruction in applied jazz music on flute. Prerequisite: Preceding course in sequence or permission of instructor.

MVJ 1216, 2226, 3236, 4246, 5256  
Secondary Jazz Saxophone (1). Individual instruction in applied jazz music on saxophone. Prerequisite: Preceding course in sequence or permission of instructor.

MVJ 1217, 2227, 3237, 4247, 5257  
Secondary Jazz Trumpet (1). Individual instruction in applied jazz music on trumpet. Prerequisite: Preceding course in sequence or permission of instructor.

MVJ 1218, 2228, 3238, 4248, 5258  
Secondary Jazz Trombone (1). Individual instruction in applied jazz music on trombone. Prerequisite: Preceding course in sequence or permission of instructor.

MVJ 1219, 2229, 3239, 4249, 5259  
Secondary Jazz Percussion (1). Individual instruction in applied jazz music on percussion. Prerequisite: Preceding course in sequence or permission of instructor.

MVJ 1310 Principal Applied Jazz Piano (1-2). Individual instruction in applied music on jazz piano as a principal level. Prerequisite: Music majors only.

MVJ 1312 Principal Applied Latin Jazz Percussion (1-2). Individual instruction in applied music on Latin jazz percussion as a principal instrument. Prerequisite: Music majors only.

MVJ 1313, 2323, 3333, 4343, 5353  
Principal Jazz Guitar (2). Individual instruction in applied jazz music on guitar. Prerequisite: Preceding course in sequence or permission of instructor.

MVJ 1314, 2324, 3334, 4344, 5354  
Principal Jazz Electric Bass (2). Individual instruction in applied jazz music on electronic bass. Prerequisite: Preceding course in sequence or permission of instructor.

MVJ 1410 Major Applied Jazz Piano (1-2). Individual instruction in applied music on jazz piano at a major level. Prerequisite: Music majors only.

MVJ 1411 Major Applied Jazz Drums (1-2). Individual instruction in applied music on jazz drums as a major instrument. Prerequisite: Music majors only.

MVJ 1412 Major Applied Latin Jazz Percussion (1-2). Individual instruction in applied music on Latin jazz percussion as a major instrument. Prerequisite: Music majors only.

MVJ 1413 Major Applied Jazz Guitar (1-2). Individual instruction in applied music on jazz guitar at a major level. Prerequisite: Music majors only.

MVJ 1414 Major Applied Jazz Bass (1-2). Individual instruction in applied music on jazz bass at a major level. Prerequisite: Music majors only.

MVJ 4971 Senior Recital - Jazz (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital and pass an oral examination on the music programed. See areas of emphasis for specific requirements.

MVK 1 Keyboard Studies (1). Course designed to develop the composite keyboard skills and practical training for the piano major/principle to become a proficient sight-reader.

MVK 1111 Class Piano I (1). A course designed to teach piano skills and competencies to non-piano majors. This is a four-semester sequence for music majors. This course includes: keyboard familiarization, finger exercises and techniques, transposing, and easy literature. Prerequisite: None.

MVK 1112 Class Piano II (1). A continuation of Class Piano I, MVK 1111. Prerequisite: MVK 1111.

MVK 1211, 2221, 3231, 4241, 5251  
Secondary Applied Piano (1). Individual instruction in applied music on piano as a secondary instrument. Prerequisite: Permission of instructor.

MVK 1212, 2222, 3232, 4242, 5252  
Secondary Applied Organ (1). Individual instruction in applied music on organ as a secondary instrument. Prerequisite: Permission of instructor.

MVK 1311, 2321, 3331, 4341, 5351  
Principal Applied Piano (1-2). Individual instruction in applied music on piano as a principal instrument. Music majors only.

MVK 1313, 2323, 3333, 4343, 5353  
Principal Applied Organ (1-2). Individual instruction in applied music on organ as a principal instrument. Music majors only.

MVK 1411, 2421, 3441, 4441, 5451  
Major Applied Piano (1-2). Individual instruction in applied music on piano as a major instrument. Music majors only.

MVK 1413, 2423, 3443, 4443, 5453  
Major Applied Organ (1-2). Individual instruction in applied music on organ as a major instrument. Music majors only.

MVK 2121 Class Piano III (1). A continuation of Class Piano II. The course includes continued work in finger technique, scales and fingerings, simple accompaniments to folk songs, sight reading, and simple literature. Prerequisite: MVK 1112.

MVK 2122 Class Piano IV (1). A continuation of Class Piano III. Prerequisite: MVK 2121.

MVK 3130 Class Piano V (1). Further development of elementary keyboard techniques and musicianship: scales, harmonization, arpeggios, transposition, improvisation, sight reading, and simple literature. Prerequisite: MVK 2122 or by placement exam.

MVK 3131 Class Piano VI (1). A continuation of MVK 3130. Prerequisite: MVK 3130 or by placement exam.

MVK 3970 Junior Recital - Keyboard (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programed. See areas of emphasis for specific requirements.

MVK 4141 Class Piano VII (1). Further development of elementary keyboard techniques and musicianship: scales, harmonization, arpeggios, transposition, improvisation, sight reading, and simple literature. Prerequisite: MVK 3131 or by placement exam.

MVK 4142 Class Piano VIII (1). A continuation of MVK 4141. Prerequisite: MVK 4141 or by placement exam.
MVK 4640 Piano Pedagogy (2). A survey of current teaching methods and techniques in piano pedagogy. Supervised teaching provides hands-on experience.

MVK 4971 Senior Recital - Keyboard (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVP 1211, 2221, 3231, 4241, 5251 Secondary Applied Percussion (1). Individual instruction in applied music on percussion as a secondary instrument. Prerequisite: Permission of instructor.

MVP 1211, 2221, 3231, 4241, 5351 Principal Applied Percussion (1-2). Individual instruction in applied music on percussion as a principal instrument. Music majors only.

MVP 1411, 2421, 4441, 5451 Major Applied Percussion (1-2). Individual instruction in applied music on percussion as a major instrument. Music majors only.

MVP 3970 Junior Recital - Percussion (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVP 4971 Senior Recital - Percussion (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVS 1116 Guitar Skills (1). Emphasis on music reading and elementary techniques. Prerequisite: Permission of instructor.

MVS 1211, 2221, 3231, 4241, 5251 Secondary Applied Violin (1). Individual instruction in applied music on violin as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1212, 2222, 3232, 4242, 5252 Secondary Applied Viola (1). Individual instruction in applied music on viola as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1213, 2223, 3233, 4243, 5253 Secondary Applied Cello (1). Individual instruction in applied music on cello as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1214, 2224, 3234, 4244, 5254 Secondary Applied Double Bass (1). Individual instruction in applied music on double bass as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1215, 2225, 3235, 4245, 5255 Secondary Applied Harp (1). Individual instruction in applied music on harp as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1216, 2226, 3236, 4246, 5256 Secondary Applied Guitar (1). Individual instruction in applied music on guitar as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1211, 2221, 3331, 4341, 5351 Principal Applied Violin (1-2). Individual instruction in applied music on violin as a principal instrument. Music majors only.

MVS 1212, 2332, 4342, 5352 Principal Applied Viola (1-2). Individual instruction in applied music on viola as a principal instrument. Music majors only.

MVS 1213, 2333, 4343, 5353 Principal Applied Cello (1-2). Individual instruction in applied music on cello as a principal instrument. Music majors only.

MVS 1214, 2334, 4344, 5354 Principal Applied Double Bass (1-2). Individual instruction in applied music on double bass as a principal instrument. Music majors only.

MVS 1215, 2335, 4345, 5355 Principal Applied Harp (1-2). Individual instruction in applied music on harp as a principal instrument. Music majors only.

MVS 1216, 2336, 4346, 5356 Principal Applied Guitar (1-2). Individual instruction in applied music on guitar as a principal instrument. Music majors only.

MVS 1211, 2221, 3231, 4241, 5251 Secondary Voice (1). Individual instruction in applied music on voice as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1411, 2421, 3431, 4441, 5451 Major Applied Violin (1-2). Individual instruction in applied music on violin as a major instrument. Music majors only.

MVS 1212, 2222, 3232, 4242, 5252 Secondary Voiced Viola (1). Individual instruction in applied music on viola as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1213, 2223, 3233, 4243, 5253 Secondary Voiced Cello (1). Individual instruction in applied music on cello as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1214, 2224, 3234, 4244, 5254 Secondary Voiced Double Bass (1). Individual instruction in applied music on double bass as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1215, 2225, 3235, 4245, 5255 Secondary Voiced Harp (1). Individual instruction in applied music on harp as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1216, 2226, 3236, 4246, 5256 Secondary Voiced Guitar (1). Individual instruction in applied music on guitar as a secondary instrument. Prerequisite: Permission of instructor.

MVS 1411, 2421, 3431, 4441, 5451 Major Voiced Violin (1-2). Individual instruction in applied music on violin as a major instrument. Music majors only.

MVS 1412, 2422, 3432, 4442, 5452 Major Voiced Viola (1-2). Individual instruction in applied music on viola as a major instrument. Music majors only.

MVS 1413, 2423, 3433, 4443, 5453 Major Voiced Cello (1-2). Individual instruction in applied music on cello as a major instrument. Music majors only.

MVS 1414, 2424, 3434, 4444, 5454 Major Voiced Double Bass (1-2). Individual instruction in applied music on double bass as a major instrument. Music majors only.

MVS 1415, 2425, 3435, 4445, 5455 Major Voiced Harp (1-2). Individual instruction in applied music on harp as a major instrument. Music majors only.

MVS 1416, 2426, 3436, 4446, 5456 Major Voiced Guitar (1-2). Individual instruction in applied music on guitar as a major instrument. Music majors only.

MVS 2226 Intermediate Guitar Skills (1). Emphasis on techniques and styles such as calypso, folk, blues, classical, and jazz. Open to all FLU students. Prerequisite: MVS 1116.

MVS 3970 Junior Recital - Strings (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVS 4971 Senior Recital - Strings (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVV 1111 Voice Class (1). Class instruction on voice designed to help the student in developing performance skills and increased musical knowledge. Prerequisite: Permission of instructor.

MVV 1211, 2221, 3231, 4241, 5251 Secondary Trumpet (1). Individual instruction in applied music on trumpet as a secondary instrument. Prerequisite: Permission of instructor.

MVV 1211, 2221, 3231, 4241, 5251 Secondary Trombone (1). Individual instruction in applied music on trombone as a secondary instrument. Prerequisite: Permission of instructor.

MVV 1411, 2421, 3431, 4441, 5451 Major Trumpet (1-2). Individual instruction in applied music on trumpet as a principal instrument. Music majors only.

MVV 1412, 2422, 3432, 4442, 5452 Major Trombone (1-2). Individual instruction in applied music on trombone as a major instrument. Music majors only.

MVV 1413, 2423, 3433, 4443, 5453 Major Trumpet (1-2). Individual instruction in applied music on trumpet as a major instrument. Music majors only.
MVW 2121 Intermediate Voice Class (1). Emphasis on sight-singing, tonal production, interpretation, and other vocal exercises. Particular attention is paid to vocal and acting improvisation. Prerequisite: MVV 1111.

MVV 3630 Vocal Pedagogy (1). Research into various philosophies of vocal pedagogy with emphasis on the science of acoustics, anatomy, terminology, psychological factors which apply to the art of singing.

MVV 3970 Junior Recital - Voice (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVV 4551 Opera History Practicum (2). A performance course corequisite with History of Opera: MVV 4662 with emphasis on historical development and differentiation of operatic styles through characterization and musical interpretation. Includes ensemble experience.

MVV 4971 Senior Recital - Voice (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.


MVW 1211, 2221, 3231, 4241, 5251 Secondary Applied Flute (1). Individual instruction in applied music on flute as a secondary instrument. Prerequisite: Permission of instructor.

MVW 1212, 2222, 3232, 4242, 5252 Secondary Applied Oboe (1). Individual instruction in applied music on oboe as a secondary instrument. Prerequisite: Permission of instructor.

MVW 1213, 2223, 3233, 4243, 5253 Secondary Applied Clarinet (1). Individual instruction in applied music on clarinet as a secondary instrument. Prerequisite: Permission of instructor.

MVW 1214, 2224, 3234, 4244, 5254 Secondary Applied Bassoon (1). Individual instruction in applied music on bassoon as a secondary instrument. Prerequisite: Permission of instructor.

MVW 1215, 2225, 3235, 4245, 5255 Secondary Applied Saxophone (1). Individual instruction in applied music on saxophone as a secondary instrument. Prerequisite: Permission of instructor.

MVW 1311, 2321, 3331, 4341, 5351 Principal Applied Flute (1-2). Individual instruction in applied music on flute as a principal instrument. Music majors only.

MVW 1312, 2322, 3332, 4342, 5352 Principal Applied Oboe (1-2). Individual instruction in applied music on oboe as a principal instrument. Music majors only.

MVW 1313, 2323, 3333, 4343, 5353 Principal Applied Clarinet (1-2). Individual instruction in applied music on clarinet as a principal instrument. Music majors only.

MVW 1314, 2324, 3334, 4344, 5354 Principal Applied Bassoon (1-2). Individual instruction in applied music on bassoon as a principal instrument. Music majors only.

MVW 1315, 2325, 3335, 4345, 5355 Principal Applied Saxophone (1-2). Individual instruction in applied music on saxophone as a principal instrument. Music majors only.

MVW 1411, 2421, 3431, 4441, 5451 Major Applied Flute (1-2). Individual instruction in applied music on flute as a major instrument. Music majors only.

MVW 1412, 2422, 3432, 4442, 5452 Major Applied Oboe (1-2). Individual instruction in applied music on oboe as a major instrument. Music majors only.

MVW 1413, 2423, 3433, 4443, 5453 Major Applied Clarinet (1-2). Individual instruction in applied music on clarinet as a major instrument. Music majors only.

MVW 1414, 2424, 3434, 4444, 5454 Major Applied Bassoon (1-2). Individual instruction in applied music on bassoon as a major instrument. Music majors only.

MVW 1415, 2425, 3435, 4445, 5455 Major Applied Saxophone (1-2). Individual instruction in applied music on saxophone as a major instrument. Music majors only.

MVW 3970 Junior Recital - Woodwind (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVW 4971 Senior Recital - Woodwind (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.
Philosophy
Bruce Hauptli, Professor and Chairperson
Leke Adeole, Assistant Professor
Michelle Beer, Associate Professor
Bongkiil Chung, Associate Professor
Paul Draper, Associate Professor
Kenneth Henley, Professor
George Kovacs, Professor
Robert Noggle, Assistant Professor
Kenneth Rogerson, Associate Professor
Paul Warren, Associate Professor

Bachelor of Arts in Philosophy

Degree Program Hours: 120
Philosophy encompasses a broad range of topics and methods of inquiry: Socratic questioning of the extent and nature of human knowledge, probing the rational basis of moral and political thought, confrontation with fundamental questions of value and meaning, analysis of basic concepts underlying the theoretical and practical thought, reflection on the human existential situation, and exploring the structure of reasoning itself. The great philosophers are studied both for historical understanding and contemporary significance.

Philosophy majors may choose one of three tracks. The General Track is designed to serve students with a broad interest in philosophy. The Professional Track is designed for students considering philosophy as a professional discipline. It is especially appropriate for those considering graduate work in philosophy and those with an interest in a thorough and systematic study of the full range of philosophical thought. The Specialized Track is designed for students who are interested in philosophical reflection on a specific discipline or area such as law, religion, or psychology. It is especially appropriate for pre-law students and for dual majors who are interested in the relationship between philosophy and their other major discipline.

Lower Division Requirements:
PHI 2100 (Introduction to Logic) is recommended for all majors, and is one of the three options for satisfying the Logic requirement of the General and Specialized Tracks. During their lower division years, students are encouraged to take other courses in Philosophy according to their particular interests. PHI 2111 (Philosophical Analysis) provides students with an excellent introduction to philosophy and serves to prepare students for their major courses. To qualify for formal admission to the Philosophy Program, all students must have met all the lower division requirements (including CLAST), completed 60 semester hours, and be otherwise acceptable to the Program.

Upper Division Requirements:
The following requirements apply to all three tracks. Any course taken to fulfill a requirement for the major may not be taken with the 'pass/fail' option and must be passed with a grade of 'C' or better. PHI 2103 (Critical Thinking) and PHI 3636 (Professional Ethics) may not be used to fulfill any requirements for the major. Also, no more than six hours of Independent Study may be used to fulfill these requirements. In addition to fulfilling the requirements of the major, the College of Arts and Sciences requires that within their final 60 semester hours students take at least nine hours outside the major discipline (at least six hours must be outside the major department).

The General Track: (33 Semester Hours Required)
The General Track is designed to serve students with a broad interest in philosophy. One three-hour Logic course is required, selected from PHI 2110 (which counts within this track as part of the 33 hour total), PHI 4130, or PHI 4161. The remaining 30 hours may include any upper-division philosophy courses except PHI 2103 and PHI 3636. Students are strongly encouraged to discuss their course selections with their advisor.

The Professional Track: (33)
The Professional Track is designed for students considering philosophy as a professional discipline. It is especially appropriate for those considering graduate work in philosophy and those with an interest in a thorough and systematic study of the full range of philosophical thought. Receiving a 'C' or better in 33 semester hours of upper division philosophy courses distributed as follows will fulfill the requirements for this track:

- Logic/Probability: 3
- Epistemology/Metaphysics: 9
- Value Theory: 6
- History of Philosophy: 6

Philosophy Electives
PHI 2100 does not fulfill the Logic/Probability requirement for this track, however it may be included as a Philosophy elective.

The Specialized Track: (33)
The Specialized Track is designed for students who are interested in philosophical reflection on a specific discipline or area such as law, religion, or psychology. It is especially appropriate for pre-law students and for dual majors who are interested in the relationship between philosophy and their other major discipline. An approved Individualized Plan of Study will meet the requirements for this track. Such plans are designed by the Philosophy advisor in consultation with the student so that they can be tailored to the student's specific interests and goals. Students pursuing the Specialized Track must secure prior written approval of their course selections from their advisor. The proposed course selections must present a clear, focused, and coherent plan of study.

The Philosophy Program Brochure (available in the Department on either campus) includes several models of such plans of study, including Pre-Law Studies, Western Philosophy and its Historical Context, Social and Political Philosophy, Philosophy and Religious Thought, Philosophy and Psychology, and Philosophy and the Arts. Each such plan must include 33 semester hours, and the courses taken in accord with the plan must be passed with a grade of 'C' or better. One three-hour Logic course is required, selected from PHI 2100 (which counts within this track as part of the 33 hour total), PHI 4130, or PHI 4161. With the prior written approval of the Philosophy advisor, up to nine semester hours from other programs may be counted toward the 33 hour major (only six hours credited toward the major requirements of another major program may be counted toward the 30 hour philosophy major).

The Philosophy Minor
A student may earn a minor in Philosophy by earning a grade of 'C' or better in any four upper division philosophy courses except PHI 2103 (Critical Thinking) and PHI 3636 (Professional Ethics).
Course Descriptions

Definition of Prefixes
GRE-Ancient Greek; PHH-Philosophy, History of; PHI-Philosophy; PHM-Philosophy of Man and Society; PNP-Philosophers and Schools.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

GRE 3050 Introduction to Ancient Greek (3). Introduces the Greek language of the New Testament, and other works of the ancient period to enhance the understanding of translated texts. A portion of the Gospel of John is studied.

PHH 3042 Latin American Philosophy (3). This course will examine the development of Latin American thought, with particular attention to the 19th and 20th centuries. It will consider the traditions and initiatives of prominent Latin American philosophers in the light of problems such as personal and cultural identity.

PHI 3100 Ancient Philosophy (3). The basic concerns and teachings of representative philosophers and schools of thought, particularly in the Greek and Roman cultural settings, and linkages to their past and future are emphasized in this course.

PHH 3200 Medieval Philosophy (3). The basic concerns and teachings of representative philosophers and schools of thought in the cultural settings of the Middle Ages, and linkages to their past and future are emphasized in this course.

PHH 3420 Early Modern Philosophy (3). The basic concerns and teachings of representative philosophers and schools of thought in the period from the Renaissance to Kant and the linkages to their past and future are emphasized in this course. (F)

PHH 3440 Late Modern Philosophy (3). The basic concerns and teachings of representative philosophers and schools of thought in the period from Kant to Nietzsche and the linkages to their past and future are emphasized in this course. (S)

PHI 3602 Twentieth Century British Philosophy (3). Examines the development of 20th century British philosophy, with special attention to the justification for its aims, methods, and central concerns (e.g., knowledge, appearance and reality, memory, and the value of philosophy).

PHI 3700 American Philosophy (3). This course will examine the development of American philosophical thought, with particular attention to the 19th and 20th centuries. It will consider the traditions and initiatives of the prominent American philosophers, in the light of problems such as the relationship between theory and practice.

PHI 3840 Indian Philosophy (3). Metaphysical, epistemological and ethical theories within such major Indian philosophical systems as philosophical Buddhism, Gains, Samkhya dualism, and Vedanta transcendentalism are examined.

PHH 4600 Twentieth Century Philosophy (3). The basic concerns and teachings of representative philosophers and schools of thought in the cultural settings of the present century, and linkages to past and emerging generations are emphasized in this course.

PHH 4930 A Major Philosopher (3). This course will examine in detail the works of a major figure in the history of philosophy. Prerequisite: Permission of instructor. Course may be repeated on a different philosopher. (S)

PHI 2011 Philosophical Analysis (3). This course introduces both the tools of philosophical thinking and some of their applications to fundamental topics such as knowledge, value, meaning, and human society. (F,S,S)

PHI 2100 Introduction to Logic (3). This introductory course in logical thinking and argumentation will treat both practical and theoretical approaches to understanding human communications and solving problems. Students will be introduced to inductive and deductive logic, fallacies, and the role of logic in scientific explanation and popular expression. (F,S,S)

PHI 2101 Philosophical Logic (3). This course studies the propositional and predicate calculus and such topics as necessary truth, entailment, the ontological implications of logic, and the justification of deduction and induction.

PHI 2103 Critical Thinking (3). A course in practical reasoning designed to sharpen abilities at analyzing, evaluating, and constructing arguments. (F)

PHI 3073 African Philosophy (3). An analysis of the metaphysical, epistemic, ethical, and political thoughts constituting the African world views and cultural settings. (F)

PHI 3300 Epistemology (3). The viewpoints of various philosophers and schools of thought regarding types of knowledge, certainty, and creativity are the main emphases of this introductory course. The meaning of truth and truthfulness is analyzed from both the classical and the contemporary perspectives.

PHI 3320 Philosophy of Mind (3). An inquiry into the concept of mind and mental events and processes in humans and non-human animals. (S)

PHI 3400 Philosophy of Science (3). The philosophical background of scientific method will be examined. Attention will be given to the philosophical consequences of conceptual change in the sciences. Such topics as the growth and unity of science, explanation and prediction, and the role of science in society will be explored. (S)

PHI 3420 Philosophy of Social Science (3). An inquiry into philosophical questions raised by the social sciences. Topics include forms of social explanation, the nature of rationality, and the status of values in social science.

PHI 3500 Metaphysics (3). This introductory course examines basic metaphysical questions regarding the nature of reality, as well as the meaning of these questions for the relationship of persons with their world. Fundamental texts from classical and contemporary philosophers will be considered. (F)

PHI 3636 Professional Ethics (3). This course will examine the role of ethics in the professions. The focus will be on the moral issues arising in the professions with the aim of developing the analytical skills required to address such problems.

PHI 3638 Contemporary Ethical Issues (3). After a review of basic questions regarding ethics, this course considers special ethical problems in contemporary society from the perspective of one or more
philosophers or systems of ethics. Topics will be selected and announced in advance. (F)

PHI 3651 Ethics (3). What is intrinsically good? What ought one to do? How are moral claims justified? Competing views of major philosophers are considered. (S)

PHI 3700 Philosophy of Religion (3). This course investigates whether or not religious beliefs can be rationally justified. Such topics as the nature of God, the problem of evil, religious experience, and the relationship of faith to reason will be explored. (S)

PHI 3762 Eastern Philosophical and Religious Thought (3). This introductory course examines the development of philosophical and religious thought in the East from ancient to modern times. Hinduism, Buddhism, Confucianism, Taoism, and other major viewpoints will be considered, in themselves and in comparison with Western forms of thought.

PHI 3800 Philosophy of Art (3). An introduction to problems in Philosophy of Art, with emphasis on those problems which are especially relevant to appreciation and criticism in the arts. Typical problems include the relation between form and content, truth and falsity in art, the nature of emotion in art and of the aesthetic response, as well as the nature of art itself. This course will include a study of selections from the writings of major thinkers and the consideration of those works of art which are relevant to this study.

PHI 3810 Philosophy of Buddhism (3). Examines the central philosophy of Buddhism dealing with: 1) the question of reality and appearance, 2) the theories of causation, 3) the relation of these views to Buddhist soteriology (realism, idealism, dialectics, Hwa-yen). (S)

PHI 4130 Symbolic Logic (3). This course provides an introduction to symbolic logic. Emphasis is upon both the formal techniques of analysis of argument and upon the theoretical aspects of formal logic.

PHI 4161 Philosophy and Probability (3). An introduction to the philosophical applications of elementary probability theory. Topics include mathematical probability, rational decision making, the foundations of science, and Pascal's wager. (S)

PHI 4221 Philosophy of Language (3). The subject matter concerns the relations between language, thought, and the world. Topics to be studied include reference, meaning, speech acts, and propositional attitudes. Also to be considered are the implications of claims here for issues in other areas of philosophy.

PHI 4222 Philosophy of Dialogue (3). This course examines the meaning, the foundations, the limitations of dialogue, and the dialogical structure of expression and human relationships based on the philosophy of Martin Buber. It includes a philosophical analysis of the dialogical principle and the application of its insights to the problems of human living and knowing.

PHI 4321 Topics in the Philosophy of Mind (3). This course examines selected issues in the philosophy of mind. Topics include the nature and value of the passions, self and self-deception, theory of action, etc. May be repeated. Prerequisite: Instructor's permission or PHI 3320.

PHI 4633 Biomedical Ethics (3). After examining the foundations of ethics, this course will consider the human and ethical dimensions of current issues in the life sciences, such as the meaning of human living and suffering, ethics of genetic control, death and dying, personal responsibility in the medical and counseling professions.

PHI 4764 Religious Experience (3). An introduction to philosophical thought about religious experiences. After a brief survey of the major types of religious experiences, issues about their nature and cognitive status are examined. (F)

PHI 4836 Philosophy of Time (3). An analysis of the nature of time. Topics include the "passage" of time, the asymmetry between past and future, Zeno's paradoxes, and philosophical implications of the special theory of relativity.

PHI 4882 Philosophy in Literature (3). Philosophical implications of selected works and the impact of philosophical concepts such as the self, death, identity, alienation, responsibility, freedom, and the absurd.

PHI 4910 Independent Research (1-6). Topics will be selected to meet the academic needs of the individual student. Prerequisite: Permission of instructor.

PHI 4930 Special Topics (3). In-depth study of topics of special interest in philosophy.

PHI 4935 Philosophy Seminar (3). This seminar is designed for majors and other qualified students approved by the Department, and will be guided by one or more faculty members. Topic will be selected and announced in advance. The number of participants will be limited.

PHI 5934 Special Topics (3). Topics will be selected to meet the academic needs of groups of students.

PHM 3040 Philosophical Anthropology (3). This course attempts to interpret philosophically scientific perspectives concerning the nature of man and the human condition. It seeks to elucidate the basic qualities that make man what he is and distinguish him from other beings.

PHM 3200 Social and Political Philosophy (3). The nature of society and the state, authority of society and the state over the individual, political obligation, legitimacy of government, and idea of social contract are considered. (F)

PHM 3400 Philosophy of Law (3). After an analysis of the nature of law and judicial reasoning in the light of fundamental alternative interpretations, basic topics of legal philosophy will be considered, such as freedom and rights, responsibility and punishment, rule of law and civil disobedience, legality and justice. (F)

PHM 3500 Philosophy of History (3). After exploring the definitions, dimensions and interrelations of philosophy and history, students will examine major philosophies of history. The social responsibility of the historical narrative and the philosophical assumptions of historiographies will be discussed.

PHM 4020 Love and Sexuality (3). This course analyzes the nature and meaning of love and sexuality, and studies the basic problems in human sexual living, such as love and the mon-woman relationship, the formation of sexual union, and attitudes toward love and sexuality in contemporary society.

PHM 4050 Philosophy of Death (3). This course analyzes the meaning of death and men's attitude towards death and the dying. It examines how philosophy can shape in the new confrontation between man
and his death, and shows the ways philosophical thinking contributes to the discovery of an authentic attitude towards the phenomenon of death as part of human living.

PHM 4123 Philosophy and Feminism (3). A conceptual analysis of alternative feminist views. Topics include the goals of the feminist movement, sexist theories on women's nature, sexual stereotypes and androgyny, the nature of oppression, sexism, racism and homophobia. (F)

PHM 4360 Topics in Political Philosophy (3). Examines a selected topic in political philosophy, such as: justice, democracy, liberty, or an important thinker. May be repeated. Prerequisites. PHM 3200 or permission of the instructor.

PHM 4430 Topics in Philosophy of Law (3). Examines a focused topic in philosophy of law, such as: punishment, legislation of morality, the rule of law, or an important thinker. May be repeated.

PHP 3840 Chinese and Japanese Philosophy (3). Metaphysical and ethical theories of the three main philosophical systems of China, namely, Classical and neo-Confucianism, Taoism, and Chinese Buddhism are examined. For Japanese philosophy, Shintoism is included.

PHP 4510 Marxism (3). This course examines the philosophic insights of Marx and the main trends (anthropological, social, existential) in contemporary Marxism. It includes an analysis of the Marxist interpretation of alienation, work, and human authenticity.

PHP 4782 Phenomenology (3). This course analyzes the method, the basic philosophical insights, and the applications of 20th century phenomenology. It includes the phenomenological analysis of knowing as well as basic questions regarding the nature of reality together with the study of fundamental texts from Husserl, Heidegger, and Merleau-Ponty.

PHP 4784 Analytic Philosophy (3). This course examines the 20th century Anglo-American tradition of approaching philosophical problems by the methods of linguistic analysis. It will include study of techniques of linguistic analysis and an evaluation of their adequacy in dealing with meaning and truth, the mind-body problem, and free will.
Physics

Stephan L. Mintz, Professor and Chairperson
Werner Boeglin, Assistant Professor
Richard A. Bone, Professor
Yesim Darici, Associate Professor
Rudolf Flebig, Professor
Bernard Gerstman, Associate Professor
Kenneth Hardy, Professor
Jesus Marcano, Assistant Professor
Peter C. Markowils, Assistant Professor
Oren Maxwell, Associate Professor
John W. Sheldon, Professor
Caroline E. Simpson, Assistant Professor
Nongian Tao, Assistant Professor
Walter van Hamme, Associate Professor
Xuewen Wang, Associate Professor
James R. Webb, Associate Professor
Yifu Zhu, Assistant Professor

Bachelor of Science

Degree Program Hours: 120

This program prepares students for careers as professional physicists in industry, government, or graduate study in physics, engineering, or material science. It also prepares students for teaching careers. Students interested in teaching certification should contact the College of Education.

Lower Division Preparation

Required Courses
Algebra and trigonometry (advanced high school courses in algebra and trigonometry are acceptable); one year of general chemistry, differential and integral calculus, and physics with calculus including lab. These courses may be taken at the University if not completed at the lower division.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program (60)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 3123, PHY 3124 Modern Physics</td>
<td>6</td>
</tr>
<tr>
<td>PHY 3123L, PHY 3124L Modern Physics Labs</td>
<td>2</td>
</tr>
<tr>
<td>PHY 3503, Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHY 4221, PHY 4222 Mechanics</td>
<td>6</td>
</tr>
<tr>
<td>PHY 4323, PHY 4324 Electromagnetism</td>
<td>6</td>
</tr>
<tr>
<td>PHY 4604, PHY 4605 Quantum Mechanics</td>
<td>6</td>
</tr>
<tr>
<td>PHY 4910L, Senior Physics Lab</td>
<td>3</td>
</tr>
<tr>
<td>PHY 4905, PHY 4906, PHY 4907 Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives in experimental or theoretical physics</td>
<td>6</td>
</tr>
<tr>
<td>MAC 2313, Multivariable Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MAP 2302, Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>Electives (Physics or Non-Physics)</td>
<td>13</td>
</tr>
</tbody>
</table>

Minor in Physics

This program is designed for the students who desire additional capabilities in physics beyond the basic sequence. This program is especially recommended for chemistry, mathematics, and engineering/technology majors.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 2048, PHY 2049 Physics with Calculus</td>
<td>10</td>
</tr>
<tr>
<td>PHY 2048L, PHY 2049L Physics with Calculus Lab</td>
<td>2</td>
</tr>
<tr>
<td>PHY 3123, PHY 3124 Modern Physics</td>
<td>6</td>
</tr>
<tr>
<td>PHY 3123L, PHY 3124L Modern Physics Labs</td>
<td>2</td>
</tr>
</tbody>
</table>

Cooperative Education

Students seeking the baccalaureate degree in physics may also take part in the Cooperative Education Program conducted in conjunction with Career Planning & Placement. The student spends several semesters fully employed in an industrial or governmental physics laboratory. For further information contact the Department of Physics or Career Planning & Placement.

Course Descriptions

Definition of Prefixes

AST-Astronomy; MET-Meteorology
PhS-Physics/Specialized; PHY-Physics; PHZ-Physics; PSC-Physical Sciences; ENU-Nuclear Engineering.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

AST 2037 Intelligent Life in the Universe (3). Examines the possibility of extraterrestrial life in terms of the probability of the existence of planets in other solar systems, the conditions necessary for life, and means of communication. (F or S)

AST 2100 Solar System Astronomy (3). General principles of Astronomy with emphasis on the structure and evolution of the Solar System, the laws of planetary motion, and the physical aspects of the sun, planets, and interplanetary debris. Prerequisites: College Algebra and Geometry. (F, S, SS)

AST 2100L Solar System Astronomy Laboratory (1). Laboratory section of AST 2100. Outdoor observing of the moon, planets and indoor exercises including celestial positions and time, the moon's orbit, planetary motions, comparative planetology. Corequisite: AST 2100. (Lab fees assessed) (F, S, SS)

AST 2201 Stellar Astronomy (3). General principles of Astronomy with emphasis on the structure and evolution of stars, stellar systems, galaxies and the universe. Topics include stellar birth and death, neutron stars and black holes, galactic distances and the expansion of the universe. Prerequisites: College Algebra and Geometry. (F, S, SS)

AST 2201L Stellar Astronomy Laboratory (1). Laboratory section of AST 2201. Outdoor observing of stars, constellations, binary and variable stars, star clusters, nebulae and indoor exercises including radiative properties of the stars, spectra, stellar and galactic distances, Hubble's Law. Corequisite: AST 2201. (Lab fees assessed) (F, S, SS)

AST 3213 Modern Astrophysics (3). An introduction to the structure of stars and galaxies and the evolution of the universe as a whole. Topics will include atomic spectra, stellar classifications, galactic structure, and cosmology. Prerequisites: PHY 2048, 2049. (F or S)

AST 5215 Stellar Astrophysics (3) Topics in Stellar Astrophysics, in greater detail and depth than similar topics in AST 3213. Emphasis on current stellar structure, evolution models and the underlying observational data. Prerequisites: PHY 3124, PHY 3503, PHY 4324, PHY 4222 or equivalent. (F or S)

AST 5405 Extragalactic Astrophysics (3). Topics in extragalactic astrophysics, in greater detail and depth than similar topics in AST 3213. Emphasis on galactic structure and evolution, quasars and cosmology. Prerequisites: PHY 3124, PHY 3503, PHY 4324, PHY 4222 or equivalent. (F or S)
AST 5507 Celestial Mechanics (3). Principles of classical Newtonian mechanics applied to the motions of planets, satellites, and interplanetary space probes. Prerequisites: PHY 4222 or equivalent. (F or S)

ENU 4101 Introduction to Nuclear Reactors (3). An elementary course in nuclear fission reactor theory and power plant operation. An overview of the relevant nuclear processes and their application to reactor design. Prerequisites: PHY 2048, 2049.

MET 2010 Meteorology and Atmospheric Physics (3). Physics of the Earth’s atmosphere and weather including energy and heat transfer, radiation, temperature and pressure changes and the development of storms, atmospheric optical effects, and weather forecasting. Prerequisite: High school algebra. (F, S)

MET 2010L Meteorology and Atmospheric Physics Laboratory (1). Practical weather analysis including fronts, local severe weather, hurricanes, and also elementary analyses and interpretation of weather maps, satellite imagery, radar data. Corequisite: PHY 2010. (F, S)

PHS 4303 Nuclear Physics (3). A treatment of the current state of the nuclear theory problem and a discussion of modern experimental methods. Prerequisites: PHY 3123, 3124.

PHY 2023 Survey of General Physics (3). Units, quantities, Newton’s laws, work, momentum, fluids, heat, gas laws, waves, charge and current, electric fields, circuits, light, atomic and nuclear physics. Prerequisites: Algebra, trigonometry (high school). (F, S, S)

PHY 2048, PHY 2049 Physics with Calculus (5, S). Basic physics with calculus sequence. PHY 2048 will cover kinematics, Newton’s Laws, conservation laws, gravitation, fluids, sound, and thermodynamics. Prerequisite: MAP 2311. Pre- or Co-requisite: MAC 2312. PHY 2049 will cover electricity and magnetism, held theory, geometrical and wave optics. (F, S, S) PHY 2048L, PHY 2049L, General Physics Laboratory I, II (1, 1). Laboratory sections of PHY 2048, 2049, PHY 2053, 2054. Prerequisites: or Corequisites: PHY 2048, PHY 2049, PHY 2053, PHY 2054 (Lab fees assessed). (F, S, S)

PHY 2053, PHY 2054 Physics without Calculus (4, 4). A general introductory course using a non-calculus approach. PHY 2053 covers kinematics, Newtonian mechanics, properties of fluids, thermodynamics, and wave motion. PHY 2054 covers electricity and magnetism, geometrical and wave optics and the structure of matter. Prerequisites: College algebra, trigonometry, and analytic geometry. (F, S, S)

PHY 3123, PHY 3124 Modern Physics I and II (3, 3). Modern developments in physics are discussed. Subject matter includes: discussion of classical mechanics, special relativity, vectors, wave-particle duality, the hydrogen atom, many electron atoms, nuclear instrumentation, nuclear structure, nuclear reactions, elementary particles, introduction to quantum mechanics, and solid state physics. Prerequisite: PHY 2049. (F) (Modern Physics I); (S) (Modern Physics II)

PHY 3123L, PHY 3124L Modern Physics Laboratory I and II (1, 1). Laboratory courses accompanying Modern Physics I and II consisting of experiments in atomic and nuclear physics. Pre- or corequisites: PHY 3123 and PHY 3124. (F) (Modern Physics Lab I); (S) (Modern Physics Lab II)

PHY 3424 Optics (3). General formulation of geometrical optics including matrix techniques, interference phenomena, and the theory of Fraunhofer and Fresnel diffraction are among the topics covered. Prerequisites: PHY 2048, 2049.

PHY 3503 Thermodynamics (3). Fundamental principles of thermodynamics, the first, second, and third laws, free energy, entropy, the chemical potential, phase rule and its applications. Prerequisites: PHY 2048, 2049, CHM 1045, 1046. (F)

PHY 3772 Electronics (3). Solid state theory and the theory of circuits, circuit operation and design in lecture and laboratory sessions. Prerequisites: PHY 2048, 2049.

PHY 3949, PHY 4949 Cooperative Education in Physics (1-3). One semester of full-time supervised work in an outside laboratory taking part in the University Co-Op Program. Limited to students admitted to the Co-Op Program. A written report and supervisor evaluation will be required of each student. (F, S, S)

PHY 4221, PHY 4222 Intermediate Classical Mechanics I & II (3, 3). Laws of motion, statics of particles and rigid bodies, motion of particles in one, two, and three dimensions, systems of particles, rigid bodies in a plane, central forces. Accelerated reference systems, rigid body in three dimensions, generalized coordinates, Lagrangian and Hamiltonian formulations of mechanics, vibrating systems, and normal coordinates. Prerequisites: MAC 2313, PHY 2048, 2049. (F) (Intermediate Classical Mechanics I); (S) (Intermediate Classical Mechanics II)

PHY 4323, PHY 4324 Intermediate Electromagnetism I and II (3, 3). The theory of electromagnetic fields and waves is developed from basic principles. Vector calculus, Coulomb’s law, Gauss’s Law, electrostatic potential, dielectrics, solutions to Laplace’s and Poisson’s equations, magnetic induction, vector potential, magnetic materials, Maxwell’s equations, and propagation of waves in space and various media are discussed. Prerequisites: MAC 2313, PHY 2048 and 2049. (F) (Intermediate Electromagnetism I); (S) (Intermediate Electromagnetism II)


PHY 4604 Quantum Mechanics I (3). A comprehensive introduction to quantum mechanics. Wave mechanics applied to standard one dimensional problems and the hydrogen atom. Prerequisites: PHY 3124 or permission of instructor and MAP 2302, MAC 2313, and PHY 2049. (F)

PHY 4605 Quantum Mechanics II (3). General matrix formalism, angular momentum, symmetries, perturbation theory and variational methods, an introduction to relativistic theory and theory of fields. Prerequisite: PHY 4604. (S)

PHY 4752C Introduction to Scientific Instrumentation (3). The student learns to set up and operate such standard pieces of laboratory apparatus as bridges, amplifiers, oscilloscopes, frequency counters, flowmeters, and thermocouple circuits utilizing chart recorders. Background in general physics is required.
PHY 4810L Senior Physics Lab (3). Advanced laboratory topics are treated. Modern physics laboratory equipment is used and the student is introduced to current laboratory practice. Prerequisites: PHY 2048 and 2049. (S)

PHY 4905, PHY 4906, PHY 4907 Independent Study (3). The student works under the supervision of a faculty member on subject matter of mutual interest. Instructor’s permission is required.

PHY 4936, PHY 4937, PHY 4938 Special Topics (VAR). A study of topics of special physics interest.

PHY 5115 Mathematical Physics I (3). Methods of solution for problems in mathematical physics: Variational principles, complex variables, partial differential equations, integral equations, and transforms. Prerequisites: MAC 2313, MAP 2302. (F)

PHY 5116 Mathematical Physics II (3). Additional solution methods in mathematical physics: Perturbation methods, Laplace’s and Poisson’s Equations, waves, special functions, vector fields, vector waves. Prerequisite: PHY 5115. (S)

PHY 5235 Nonlinear Dynamics and Chaos (3). Introduction to the universal behavior of classical systems described by nonlinear equations. Prerequisites: PHY 4222, MAA 4421. (F or S)

PHY 5240 Advanced Classical Mechanics (3). Advanced formulations of the equations of motion and their applications: the central field problem, rigid body dynamics, oscillations and continuous systems. Prerequisite: PHY 4222. (F)

PHY 5346 Advanced Electromagnetic Theory I (3). Advanced treatment of classical electromagnetism: Electrostatics, Green’s function, Laplace’s equation, multipole expansion, magnetostatics, Maxwell’s equations, waves. Prerequisite: PHY 4324. (F)

PHY 5347 Advanced Electromagnetic Theory II (3). Additional topics in classical electromagnetism: Wave guides, radiating and diffracting systems, Kirchhoff’s integral for diffraction, covariant formulation of field equations. Prerequisite: PHY 5346. (S)

PHY 5446 Laser Physics (3). Principles of lasers and laser applications, including atom-field interactions, stimulated emission and dipole oscillators, optical resonators and electromagnetic modes, semiclassical laser theory, and specific laser systems. Prerequisite: PHY 4605. (F or S)

PHY 5930 Seminar in Physics (1-3). A series of specialized lectures/seminars on selected topics in Physics/Astro-Physics. Prerequisites: Permission of Department.

PHY 5936 Special Topics Research (1-10). Participation in an original investigation in theoretical or experimental physics/astro-physics under direct faculty supervision. Prerequisite: Permission of instructor.

PHY 5937, PHY 5938 Seminar in Special Topics (3). Seminar work under the supervision of a faculty member on subject matter of mutual interest.

PHY 5940 Physics Graduate Teaching Workshop (1). The teaching of physics laboratories. Includes practice of lab experiments, use and adjustment of lab equipment and explanation of departmental grading policy. Supplemented by outside lectures on university policies. (F)

PHY 4710 Introduction to Biophysics (3). Physical investigation of biological molecules with special reference to structure and function of protein, biomembranes and visual receptors. Prerequisite: PHY 3124 or CHM 3411.

PHY 5130 Theoretical Treatment of Experimental Data (3). Statistical analysis of physical processes and statistical tests, with particular emphasis on instrumentation-related problems. Mathematical modeling and computer simulation. Prerequisite: Undergraduate statistics course, or equivalent, or permission of instructor.

PHY 5234 Atomic and Molecular Collision Phenomena (3). Investigation of atomic and molecular collision phenomena: Kinetic theory, elastic scattering, inelastic scattering, excitation and ionization, heavy particle collisions. Prerequisites: PHY 4605 and PHY 4222. (F or S)

PHY 5304 Advanced Nuclear Physics (3). Fundamental properties of nuclei, nuclear forces, nuclear models, radioactivity, weak processes and nuclear reactions. Prerequisite: PHY 4604. Corequisite: PHY 4605. (F or S)

PHY 5405 Solid State Physics (3). Crystalline form of solids, lattice dynamics, metals, insulators, semi-conductors, crystalline surfaces, and amorphous materials. Prerequisites: PHY 3124 or CHM 3411. (F or S)

PHZ 5505 Low Energy Plasma Physics (3). The investigation of the kinetics of rarefied gases and thermal plasmas: Phase space, random currents, orbit theory, plasma sheaths, radiation, the pinch effect. Prerequisites: PHY 3503, PHY 4324, and PHY 4222.

PHZ 5506 Plasma Physics (3). An introduction to plasma fundamentals, the Boltzmann equation, the hydrodynamic equations, orbit theory, the interaction of electromagnetic waves with plasmas, the pinch effect and instabilities. Prerequisite: PHY 2049.

PHZ 5506 Special Relativity (3). A detailed study of special relativity: Lorentz transformations, relativistic electrodynamics. Prerequisite: PHY 3124.
Political Science

John Stock, Professor and Chairperson
Virginia Chonley, Assistant Professor
Ronald Cox, Associate Professor
Bruce Detwiler, Associate Professor
Eduardo Gamara, Associate Professor
Joye Gottlieb, Associate Professor
Ivelaw Griffith, Associate Professor
Kevin Hill, Assistant Professor
Heidi Hobbs, Assistant Professor
Antonio Jorge, Professor
Daria Morena, Associate Professor
Brian Nelson, Associate Professor
Nicole Roe, Associate Professor
William Reno, Assistant Professor
Mark Rosenberg, Professor
Cheryl Rubenbergs, Associate Professor
Rebecca Salovar, Associate Professor
Judith H. Stiehm, Professor
Mary Volcansek, Professor
Christopher Warren, Associate Professor

Bachelor of Arts in Political Science

Degree Program Hours: 120

The major in Political Science provides students the opportunity to acquire a broad education that will equip them to adapt to a wide variety of careers. The program for majors is designed to encourage the analysis of theories, institutions, and processes of political systems in the context provided by the social sciences; to stimulate a grasp of the broad sweep of political science as a discipline; to develop a continuing and responsible interest in political activity and public affairs; to provide the opportunity to acquire a fundamental understanding of political science as a basis for citizenship, a career in government, or professional study and service; and to stimulate the qualified student's interest in graduate study in political science.

The curriculum is designed to expose students to the various areas of political science and to allow for some specialization. Students are encouraged to create a blend of courses that fit their interests. You should work with the undergraduate advisor in selecting courses.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and be otherwise acceptable into the program.

If a student has completed a minimum of 24 semester hours of general education credits, it is still possible to be accepted into this program. However, the general education deficiencies must be completed prior to graduation from the University.

Curriculum for Political Science Majors

Students should obtain and read "Political Science Advising Guide" from the department office. A minimum of 30 credit hours of upper division study (3000 and 4000 level) are required for a major in Political Science. In addition, POS 2042-Ameri can Government, or (its equivalent), is required but does not count toward the 30 credit minimum. The American Government course at the community college meets this requirement. Students who have not met this requirement should take this course in their first semester at FIU. No specific upper division courses are required. Rather, courses in Political Science must be distributed so that five courses meet the Breadth requirement, three courses meet the Depth requirement, and two remaining courses meet the Political Science Electives requirement. The student must earn a grade of 'C' or better in all Political Science courses credited toward the major. Students choosing to major in Political Science must officially declare their major by completing applicable forms. See the department secretary for assistance.

Requirements for a Major

I. Breadth Requirement

This is designed to acquaint all majors with the five general fields of Political Science. One three-semester hour course must be taken in each of the following fields, for a total of 15 semester hours.

American Politics (AP)-This Breadth area can be met only by one of the following courses:
- POS 3142 Urban Politics 3
- POS 3424 The Legislative Process 3
- POS 3443 Political Parties 3
- POS 3413 The Presidency 3

Judicial Politics (JP)-This Breadth area can be met only by one of the following courses:
- POS 3283 The Judicial Process 3
- POS 3603 Constitutional Law: Powers 3
- POS 3604 Constitutional Law: Limits 3

Comparative Politics (CP)-This Breadth area can be met only by one of the following courses:
- CPO 2002 Introduction to Comparative Politics 3
- CPO 3055 Authoritarian Politics 3
- CPO 3103 Politics of Western Europe 3
- CPO 3204 African Politics 3
- CPO 3304 Politics of Latin America 3
- CPO 3403 Government and Politics of the Middle East 3
- CPO 3643 Russian Politics 3

International Politics (IP)-This Breadth area can be met only by one of the following courses:
- INR 2002 Dynamics of World Politics 3
- INR 3102 American Foreign Policy 3

II. Depth Requirement

This is designed for student specialization in one of these areas. Students must take three courses in any one of these areas of concentration.

1. American/Judicial Politics (AP, JP)

Courses chosen may be all AP or JP or a mix of both.

2. Comparative/International Politics (CP, IP)

Courses chosen may be all CP or IP or a mix of both.
3. Political Theory And Methodology (PT)

III. Political Science Electives Requirement

Any two 3000, 4000, or 5000 level courses in political science.

Minor in Political Science

A Political Science minor consists of any five courses in Political Science with a 'C' or better grade. POS 2042-American Government or its equivalent is a pre-requisite for a minor and does not count towards the five (5) courses. Neither independent study nor internships will count toward the minor. Students should select specific courses in consultation with their major advisor and a Political Science advisor. Students must apply for a minor by completing a Request for Minor Form and have it signed by their Major Advisor and Minor Advisor.

Pre-Law Students

The Department of Political Science recognizes the interests and needs of the Political Science major who plans to attend law school. The basic skills important to a pre-law student include:

1. how to think logically,
2. how to read intelligently, and
3. how to express oneself clearly.

These skills are developed in a number of disciplines. Beyond these basic skills, the department encourages students to acquire a broad background in political science rather than to select only courses which deal with public law. Some pre-law students choose American or Judicial politics as their depth area, but the other two depth areas are equally useful for pre-law students. The department’s pre-law advisors will counsel students on specific pre-law concerns.

In selecting electives, students should remember that the LSAT and law school require the ability to read with comprehension of concepts and logic and to express oneself with clarity and precision. Whether or not a given student will benefit from a particular elective is a question best answered by the student in close consultation with an advisor. Courses in History, Philosophy, Economics, Sociology, Psychology, Math and English will probably all give the student practice in relevant skills. Breadth of preparation is important. Whether a particular course in logic, writing or another area is the best choice can only be answered on an individual basis.

Public Affairs Internships

The Department provides opportunities for practical work-study experiences in governmental and nongovernmental agencies. Three categories of internships are available to qualified students:

1. Judicial Internships (Prerequisite: POS 3283-Judicial Process or equivalent)
2. Legislative Internships (Prerequisite: POS 3424-Legislative Process or equivalent)
3. Campaign Internships (In election year)

Standards for enrollment as an intern student include:

a. Enrollment is by permission of instructor only. A student wishing to enroll as a public affairs intern should consult with the appropriate faculty member early in the preceding semester and receive written permission to enroll. Ordinarily, specific courses must be taken prior to, or concurrent with, the internship.

b. A Political Science major may count a maximum of six credit hours in internships toward his/her major.

c. All public affairs internships in political science will be on a Pass/Fail basis. For further information on internships, contact your political science advisor.

Upper Division Transfer Credit

As a general rule, students will receive transfer credits for junior and senior level courses in political science with a grade of 'C' or higher. These courses may then be applied to the 30 credit hours requirement for majors in political science.

Major Advising Program

All new majors meet with the Department Undergraduate Advisor.

Course Descriptions

Definition of Prefixes

CPO-Comparative Politics; INR-International Relations; POS-Political Science; POT-Political Theory; PUP-Public Policy.

CPO 2002 Introduction to Comparative Politics (CP) (3). Analysis of major theories of comparative politics including development, state building, institutions, patterns of political interaction and comparative elites. Focus on Latin America and the Third World.

CPO 3055 Authoritarian Politics (CP) (3). The purpose of this course is to identify the conceptual and empirical characteristics of authoritarian regimes. An ideal typical authoritarian regime will be established, followed by case studies of modern authoritarian systems, like those of Brazil, Mexico, and Portugal. The course is designed to analyze the circumstances giving rise to non-totalitarian modern dictatorships, their political dynamics, and their survival capability.

CPO 3103 Politics of Western Europe (CP) (3). Studies of political systems of the major European countries on a comparative basis. Attention is focused on such factors as political party systems, the cabinet form of government, and the politics of the Common Market. Considers the implications of the impact of mass society on these nations. Enables the students to better understand the nations which have supplied many of the theoretical foundations of modern politics.

CPO 3204 African Politics (3). Compares the politics of Sub-Saharan Africa, and the Republic of South Africa and addresses questions of economic development, the colonial legacy, and the impact of traditional social patterns.

CPO 3304 Politics of Latin America (CP,PT) (3). This course analyzes the multiple structures, processes, and groups which are relevant to an understanding of Latin American political economy. Of special interest are the political impacts of land and wealth inequality and economic dependency. The dynamics of Latin American politics are considered, with an emphasis on the role of the military and the church. Alternate strategies for modernizing the region are considered.

CPO 3403 Politics of the Middle East (CP) (3). This course will focus on the social, cultural, and political aspects of the Middle East region. Through an understanding and an interweaving of these complex facets, a student should gain a foundation and background for comprehensive of the contemporary conflict which pervades this mercurial region.

CPO 3502 Politics of the Far East (CP) (3). An intensive examination of
the major political institutions of China, Japan, and Korea. A critical analysis of changing aspects of traditional relationships in Far Eastern political culture and major reform movements in contemporary Far Eastern politics. Allows the student to better understand nations whose political development will be an important factor in global development.

CPO 3541 Politics of China (CP) (3). This course introduces students to China's political history from 1840 and analyzes politics in the People's Republic of China with special emphasis on political and economic development, socio-economic and political conflict, ideology, and foreign policy.

CPO 3553 Government and Politics of Japan (3). Introduction to Japanese politics. Special attention is given to the Japanese variant of democracy, the capitalist state, and foreign policy.

CPO 3643 Russian Politics (CP) (3). Examines the political structure and institutions of Russia. Attention is paid to the historical and cultural aspects of the structure and use of power.

CPO 4010 Theory in Comparative Politics (CP) (3). This course introduces students to research strategies, concepts, and theories of comparative politics. There will be a focus on the three predominant types of modern political systems (democracy, authoritarianism, and totalitarianism), followed by an examination of the current theoretical approaches to studying cross-national political behavior.

CPO 4034 The Politics of Development and Underdevelopment (CP, IP) (3). This course is an analysis of the causes of development and underdevelopment in third and fourth world countries. It includes an analysis of major theoretical approaches to understanding development problems, as well as an analysis of the roles of major national and non-national actors.

CPO 4053 Political Repression and Human Rights (CP) (3). Examination of domestic factors resulting in political repression and violations of human rights. American, European, and South American examples will be used.

CPO 4057 Political Violence and Revolution (CP, PI) (3). An examination of major historical instances and modern expressions of political violence; discussion of revolution from a comparative perspective. Attention will focus on the social origin and political determinants of such events.

CPO 4062 Comparative Judicial Politics (JP, CP) (3). An examination of the various modes of dispute settlement and rule adjudication cross-culturally. Emphasis is on the similarities and differences of judicial behavior, judicial decision-making, judicial recruitment, and judicial powers in cross-national analysis.

CPO 4072 Comparative Electoral Behavior (CP) (3). Public opinion, voting choice, and electoral patterns from a comparative and historical perspective. Attention will focus on West Europe and Latin America. Differences from North American trends and patterns will also be detailed.

CPO 4165 Italian Politics (CP) (3). An examination of the political structure and traditions of Italy since WW II. Particular attention is given to the internal development of democracy as a model for other nations. Emphasis on the politics of pluralism.

CPO 4303 Politics of South America (CP) (3). A cross-national discussion of the political systems and cultures of the Latin American nations, with special emphasis on the larger countries. Attention is given to the role of the military and to the problem of violence. Designed to give the student an overview of the political life of the nations with whom we share this hemisphere.

CPO 4323 Politics of the Caribbean (CP) (3). Studies the political system of the major British, French, Dutch, and Spanish areas in the Caribbean basin. Attention is focused on such factors as political party democracies in a non-industrial setting, the paradoxes between modernity and tradition throughout the developing Caribbean, and the relationship between politics, economics, and culture are discussed. The student is helped to understand the dynamics of change in an important area of the world and to compare these dynamics with change in his own country.

CPO 4333 Politics of Central America (CP) (3). This course analyzes the historical and contemporary political dynamics of the two countries of Central America. Special attention is given to problems of development and modernization within the context of the region's economic dependence on the United States. Special attention is given to the problem of political restraints on the modernization process and to those regional arrangements which have been created to solve the area's problems. The student will develop a better understanding of a region which has close ties to the United States.

CPO 4340 Politics of Mexico (CP) (3). This course analyzes the structure and process of the Mexican political system from four perspectives: 1) Mexico's revolutionary heritage; 2) its formal governmental structure; 3) formal political relations; and 4) the structure and process of Mexican political economy.

CPO 4360 Cuban Politics (CP) (3). Examines the course of twentieth century Cuban politics. The course is subdivided into five parts covering the three periods of relatively stable politics and the two major revolutions.

CPO 4401 The Arab-Israeli Conflict (CP, IP) (3). This course provides the student with an introduction to the political roots of the Middle East conflict, and examines the dilemmas of finding a solution by focusing on the domestic and international constraints imposed upon the major actors.

CPO 4404 Politics of North Africa (3). An examination of the politics of the Arab-Islamic countries of North Africa. Attention is given to pre-colonial politics and subsequent European penetration as bases for understanding contemporary politics.

CPO 4461 Politics of Eastern Europe (CP) (3). An examination of the historical and contemporary political dynamics of the countries of Eastern Europe. Special attention is given to the process of "democratization" and the effort to move towards a liberal-democratic, capitalist order.

CPO 4741 Comparative Political Economy (3). Examines the theoretical approaches used to assess the relationship between political institutions and private economic interests in advanced, industrial countries and the less developed world.

CPO 4930 Topics in Comparative Politics (CP) (3). An intensive examination of a topic in comparative
Politics. Subject matter varies according to the instructor. Topic to be announced in advance.

CPO 5036 Politics of Development (3). This course examines divergent explanations for development and underdevelopment. Of central importance are the concepts and theories which emphasize the political dimensions of development, including theory and concepts, processes of development, and actors in the development process.

CPO 5045 Seminar in American Politics (3). The advanced study of U.S. politics. Students read and discuss the major works and theories concerning American politics and government.

CPO 5091 Seminar in Comparative Politics (3). A foundation in the development of the field of comparative politics and in the major schools of thought that have molded the perspectives on comparative political analysis.

CPO 5716 Foundations of Political Science (3). Prepares students for the advanced study of politics. Areas of study include history of Political Science as a discipline, comparison of classical and modern sciences of politics and realpolitik, epistemological foundations.

CPO 5935 Topics in Comparative Politics (3). A rigorous examination of a topic in comparative politics. Subject matter varies according to instructor. Topic will be announced in advance.

CPO 5936 Seminar in Comparative Political Parties (3). Students read and discuss major works on parties by conservative, liberal, and marxist authors.

INR 2002 Dynamics of World Politics (IP) (3). An examination of the political forces which shape the actors, institutions, and processes of world politics. Special attention is given to the role of transnational forces.

INR 3102 American Foreign Policy (IP, AP) (3). An examination of the legal, administrative, and political structure by which American foreign policies are formulated and implemented. Includes a discussion of the objectives and consequences of United States foreign policy in selected regional, social-economic, and ideological areas. Enables the student to understand the procedures by which foreign policy is made and implemented in the United States.

INR 4084 Ethnicity in World Politics (IP) (3). This course examines the political dimensions of ethnic conflict from a comparative perspective. It evaluates the dynamics of ethnic conflict in Western Europe, Africa, Latin America, and the United States, through a series of case studies.

INR 4204 Comparative Foreign Policy (CP, IP) (3). This course is an analysis of the development of foreign policy-making process in the United States, Britain, France, West Germany, and Italy. Particular attention is directed to the domestic and international factors which affect the making of foreign policy.

INR 4244 Latin America in World Politics (CP, IP) (3). This course will be primarily concerned with Latin America's role in the world political system. Of special interest will be the impact of the North-South split on Latin America, and in particular Latin America's relationship to the United States. Key issues of international politics concerning Latin America, including the Panama Canal, will be selected for study.

INR 4350 International Environmental Politics (3). Addresses environmental politics from an international perspective. Ecological problems and issues are becoming international, environmental problems are crossing national borders, and public attitudes. Prerequisites: Introduction to International Relations and Introduction to Environmental Science (recommended).

INR 4407 Political Foundations of International Law (IP, JP) (3). An examination of the interaction between politics and international law, with particular emphasis on such interaction during the present century. The role of international institutions in the modifying of existing international law concepts and the developing of such concepts is also examined.

INR 4501 Multinational Organizations (IP) (3). The course examines contemporary international politics through an analysis of inter-governmental and non-governmental actors. It emphasizes the prominent role played by increasing levels of transnational relations, interdependence, and global dominance in world politics.

INR 4521 Politics of Regional Integration (3). Examines regional economic blocs - European Union, NAFTA and Pacific rim. Forces influencing regional integration and effects on global trade are studied.

INR 4702 Politics of World Economy (IP) (3). The politics of world economy with emphasis on the role played by transnational political-economic institutions.

INR 4926 Model United Nations (3). Students participate in a UN simulation. Attention is given to the workings of the UN, negotiating skills, and critical international issues. Prerequisite: Permission of instructor.

INR 4933 Topics in International Politics (IP) (3). An intensive examination of a topic in international politics. Subject matter varies according to the instructor. Topic to be announced in advance.

INR 5007 Seminar in International Politics (3). An advanced graduate course designed to give students a specialized knowledge of the classics in international politics. The course traces the development of international politics from Thucydides to the present.

INR 5087 Ethnicity and the Politics of Development (3). This course examines the conceptual and substantive dimensions of ethnicity in the context of world politics and political development. The course will highlight ethnicity and ethnic groups as critical factors in North-South politics.

INR 5105 American Foreign Policy (3). Compares different perspectives in foreign policy analysis. Provides a comprehensive understanding of major issues in U.S. policy.

INR 5414 Topics in International Law (3). An intensive examination of the political dimensions of international law in the context of rapidly changing global political relations.

INR 5934 Topics in International Politics (3). A rigorous examination in international politics. Subject matter varies according to instructor. Topic to be announced.

POS 2042 American Government (3). Power distribution and policymaking in U.S. Politics include political change: role of majorities; minorities; media, elections in U.S. politics; national institutions; and Florida state and local government.

POS 3142 Urban Politics (AP) (3). An examination of the processes by
which social conflicts in American urban areas are represented and regulated. Emphasis is placed on how urban problems are identified; and the way proposed solutions are formulated, legitimated, and administered by urban policy-making processes. Includes a discussion of urban political culture. Enables the student to understand major problems confronting communities in urban areas.

POS 3283 The Judicial Process (JP) (3). An introduction to the study of public law. Examines the relationship between politics and judicial structure and process. Emphasizes the judicial system as a particular kind of policy-making system, and evaluates its strengths and weaknesses from a policy-making perspective.

POS 3413 The Presidency (AP) (3). An examination of the various interpretations of the Presidency. Attention is directed to the role of the President in a technocratic society. Enables the student to understand one of the most visible political institutions.

POS 3424 The Legislative Process (AP) (3). Examines the context and process of legislative decision-making, including the impact of elections, groups, bureaucracies and the norms of legislative behavior. Evaluates legislatures in light of various theories of representation and contact-management.

POS 3443 Political Parties (AP) (3). Studies the internal structure, political functions, and behavior of modern political parties. Attention is given to the relationships between political parties and various economic, ethnic, and regional interest. Enables the student to understand the problems of expressing and structuring political demands to facilitate or obstruct governmental decision-making.

POS 3603 Constitutional Law: Powers (JP) (3). An examination of the basic principles of American government, as defined through constitutional process. Focus will be on the nature of the federal, states, national government powers, separation of powers, state government powers, and powers of the respective branches of government.

POS 3604 Constitutional Law Limitations (JP) (3). An examination of the limitations on government as defined by the Supreme Court through constitutional law. Focus will be on the limitations of government with respect to the rights of the individual, of groups, and of the states. Particular attention will be paid to civil rights, civil liberties, the rights of the accused, political rights, and economic liberties.

POS 3703 Methods of Political Analysis (PT) (3). An introduction to the principal concepts and techniques of data collection and organization in political science, includes practical exercises in data collection and organization. Highly recommended for those planning graduate study.

POS 3949 Cooperative Education in Political Science (3). A student majoring in Political Science may spend several semesters fully employed in industry or government in a capacity relating to the major.

POS 4034 Political Change and the 1960s (AP) (3). A study of the theories of political change in America and their application to the political movements of the 1960s. Emphasis on the civil rights movement, the New Left and the counterculture.

POS 4071 Corporate Power and American Politics (AP) (3). An examination of the informal and formal linkages between the private and public sectors and the sets of relationships which govern each. Particular attention is devoted to the exploration of the political role of business and the close but uneasy relationship between private enterprise and democracy.

POS 4074 Latino Politics (3). Presents an overview of the role of Hispanics in the U.S. Political System. It explores the historical and socio-economic dimensions of Latino Politics.

POS 4122 State Government and Politics (AP) (3). A study of the political processes, structure, and development of state systems. This course attempts to provide the student with an understanding of the basic structure of state government and political processes.

POS 4154 Topics in Urban Politics and Policy (AP) (3). An intensive examination of a topic in urban politics and policy. Subject matter varies according to instructor. Topic will be announced in advance.

POS 4152 Conflict and Change in American Cities (AP) (3). A study of social conflict in American cities. Emphasis is on how urban problems are identified and proposed solutions are formulated, legitimized and administered by policy-making processes.

POS 4173 Politics in the American South (AP) (3). An examination of the politics of the American South with particular attention to the role of political parties, the Civil Rights movement, and the impact of Reconstruction.

POS 4205 American Political Culture (3). Examines American political culture and the forces that shape it. Specific focus on competing theories, and the role of political socialization, ideology, the economy, media, and schooling.

POS 4314 American Ethnic Politics (AP) (3). This course examines American ethnic politics from conceptual and substantive perspectives. Special attention is devoted to the theoretical dynamics of ethnicity as well as an intensive investigation of Irish, Italian, Jewish, and Black ethnic politics.

POS 4463 Interest Group Politics (AP) (3). An examination of the various types of voluntary associations which seek to influence the political process. Special attention is given to the role of private power in a pluralist system. Enables the student to understand the ambivalent American attitude towards pressure groups and lobbying activities in the legislative and administrative arenas.

POS 4605 Gender Justice (AP,JP) (3). The development of gender law in the U.S. and legal strategies by which courts both initiate and respond to demands for social change. Emphasis on various legal definitions of justice and equality.

POS 4627 Equality and the Constitution (JP) (3). An examination of the Supreme Court's interpretations of the Constitution in relation to social and political equality. Questions of equal justice pertaining to race, alienage, gender, sexual orientation, political representation, and economic status are explored.

POS 4905 Independent Study (3). Designed for advanced students who wish to pursue specialized topics in political science. Arrangements must be made with instructor during the prior semester.

POS 4930 Topics in Public Law (JP) (3). An intensive examination of a topic dealing with public law. Sub-
object matter varies according to instructor. Topic will be announced in advance.

POS 4931 Topics in Politics (AP) (3). An intensive examination of a topic in politics. Subject matter varies according to instructor. Topic will be announced in advance.

POS 4935 Honors Seminar (3). A rigorous examination of a political topic designed for advanced political science majors. Subject matter varies according to instructor. Topic to be announced in advance.

POS 4941 Legislative Internship (AP) (VAR). An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between the student and advisor.

POS 4944 Judicial Internship (JP) (VAR). An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between the student and advisor.

POS 4949 Cooperative Education in Political Science (3). A student majoring in Political Science may spend one or two semesters fully employed in industry or government in a capacity relating to the major.

POS 5075 Politics of the Caribbean (3). Examines the structural and institutional aspects of the politics of the Caribbean in both domestic and international contexts. Prerequisite: Graduate standing.

POS 5158 Topics in Politics (3). Subject matter varies according to instructor.

POS 5208 Seminar in Political Behavior (3). Analyzes the literature in political behavior. Special emphasis is on voting, socialization, attitudes, partisanship, campaigning, the media, and political participation in the developed democracies. Prerequisite: Seminar in Political Science Methodology.

POS 5447 Seminar in U.S. Political Parties (3). Students read and discuss the major works and theories on U.S. Political Parties.

POS 5638 Topics in Public Law (JP) (3). A rigorous examination of a topic in public law. Subject matter varies according to instructor. Topic will be announced in advance.

POS 5702 Teaching Political Science (1). Introduces graduate students to the pedagogical and practical aspects of teaching political science. Topics will include selecting books, writing a syllabus, lecturing, running discussion groups, and testing and grading. Covers professional ethics, and student rights and responsibilities.

POS 5706 Methodology (3). This course is an introduction to the principal concepts and techniques of quantitative and non-quantitative methodology in the Social Sciences. It is designed to familiarize the student with the language and format of quantitative and non-quantitative applications in order to permit students to deal effectively with the literature of the their field.

POS 5909 Independent Study (3). Designed for advanced students who wish to pursue specialized topics in political science. Arrangements must be made with instructor during prior semester.

POS 5932 Topics in Urban Politics (3). An extensive examination of the processes by which social conflicts in American urban areas are represented and regulated. Emphasis is on the ways in which urban problems are identified and proposed solutions formulated, legitimated, and administered by urban policy-making processes, includes a discussion of urban political culture. Enables the student to understand the major problems confronting communities in urban areas.

POS 2002 Introduction to Political Theory (3). Introduction to various ways of thinking about the political. Includes an examination of explanations offered for political phenomena and an analysis of political prescriptions. Special attention given to assumptions underlying political beliefs.

PO 3013 Ancient and Medieval Political Theory (PT) (3). A study of the major political philosophers of the ancient and medieval periods. Primary emphasis is given to the Greek experience. The nature of political theory as a tradition of discourse is examined.

PO 3054 Modern Political Theory (PT) (3). An analysis of the thought of the great political thinkers since Machiavelli, culminating with the nineteenth century theorists. Basic themes and ideas common to all these political theorists will be discussed in detail. The problem of 'modernity' will receive special attention.

PO 3064 Contemporary Political Theory (PT) (3). An overview of the major conceptual frameworks used by political theorists to describe, explain, and evaluate political behavior and processes. Stress is placed on political theory, not only as a basis for inquiry, but also as a base for political action. This course enables the student to develop analytical abilities with which to interpret the political events of his or her time.

PO 3204 American Political Thought (PT) (3). An examination of American political thought from its 17th century origins to the contemporary period. The continuities and discontinuities in the development of American political ideas since colonial times will receive special attention.

PO 3302 Political Ideologies (PT) (3). An analysis of modern political ideologies since the French Revolution, including liberalism, conservatism, and socialism. Particular emphasis will be given to Marxism. The contemporary link between ideology and totalitarianism will be examined.

PO 3621 Theories of Justice (PT, JP) (3). An analysis of major theories of justice from Plato to the present. Emphasis on the implications of theory for U.S. constitutional law, the role of judges, and the nature of the good society.

PO 4309 Sex, Power and Politics (PT) (3). Theories examined that explain differences between women's and men's power in the political arena. Their internal consistency and "fit" with reality are also explored.

PO 4930 Topics in Political Theory (PT) (3). An intensive examination of a topic in political theory. Subject matter varies according to instructor. Topic will be announced in advance.

PO 5007 Seminar in Political Theory (3). An examination of writings from a diverse list of some of the major political theorists in the western tradition from antiquity to the present.

PO 5307 Feminist Political Theory (PT) (3). Examines feminist political the-
ory in the second half of the twentieth century with the focus on the work of U.S. scholars.

POT 5326 Seminar in Class Analysis (3). The theoretical and empirical issues associated with class divisions in contemporary societies. Theoretical debates regarding definitional problems of class identity and empirical case studies highlighting class conflict and stratification.

POT 5934 Topics in Political Theory (3). An intensive examination of selected topics dealing with political theory. Subjects will vary, depending upon the desires of students and faculty. Allows the student to choose topics of particular interest to him or her.

PUP 4004 Public Policy: U.S. (AP) (3). An intensive examination of the theory and practice of formulating, legitimizing, administering, and evaluating public policy. Includes a discussion of the role of administrators, legislators, courts, interest groups and political parties in their processes. Gives the student an analytical basis for understanding and participating in the making of public policy in a variety of policy areas. Prerequisite: Prior work in American institutions. The Congress, Presidency, or Judicial.

PUP 4203 Environmental Politics (AP, JP) (3). Examines US Environmental Politics in terms of political institutions.

PUP 4323 Women in Politics (AP) (3). Examines the role of women in the political system as they act within, and are affected by, politics. Special attention to current and enduring political issues which particularly affect women.

PUP 4931 Topics in Public Policy (AP) (3). An examination of a topic in public policy. Subject matter varies according to instructor. Topic to be announced in advance.

PUP 5934 Topics in Public Policy (3). An intensive examination of a topic in public policy. Subject matter varies according to instructor. Topic will be announced in advance.

URP 4149 Planning and Human Ecology (AP) (3). Environmental planning and design utilizing a human ecology perspective. Examines issues of open space planning, urban design, neighborhood planning, and citizen participation.

**Psychology**

**Scott Fraser, Associate Professor and Chairperson**
Lorraine Bahnick, Associate Professor
Milton Blum, Professor Emeritus
Margaret Bull-Kovara, Assistant Professor
Brian Culler, Associate Professor
Marvin Dunn, Associate Professor
Joon Erber, Professor
Lusch Escobar, Associate Professor
Gordon Finley, Professor
Ronald Fisher, Professor
Arthur Flexser, Associate Professor
Leslie Fraizer, Assistant Professor
Jacob Gewirtz, Professor
Edward Girden, Distinguished Professor Emeritus

Fernando Gonzalez-Reigosa, Associate Professor
Margaret Kovara, Assistant Professor
Lowell Krookoff, Associate Professor
William Kurtines, Professor
Mary Levitt, Associate Professor
Michael Markham, Assistant Professor
Gary Moran, Professor
Janet Parker, Professor
James Ratton, Associate Professor
Juan Sanchez, Associate Professor
Bernard Saper, Professor
Bennett Schwarz, Assistant Professor
Wendy Silverman, Professor
Jonathan Tubman, Assistant Professor
Chackalingam Viswevaran, Assistant Professor

**Bachelor of Arts**

Degree Program Hours: 120

**Required Course**
Completion of Introductory Psychology with a grade of "C" or higher. This requirement can be fulfilled by the completion of PSY 2020 at the University, or with a comparable course from another accredited college or university.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

**Upper Division Program**
The Psychology major requires 36 hours of upper division psychology coursework, including STA 3111. All courses must be taken for a letter grade. A "C" or better is required for all courses that count toward the major.

The program has the following three major psychology components and a fourth, general component for graduation:

I. **Specific Required Courses in the Following Sequence:** (12)
   A. Statistics (offered by the Department of Statistics):
      STA 3111 Statistics I
      Note: COP 2210 is recommended for students planning to enter graduate school.
   B. PSY 3213 Research Methods in Psychology (Prerequisites: STA 3111)
   C. Advanced laboratory or field experience (Prerequisites: STA 3111 and PSY 3213)
      Note: Because the three courses in this component of the program must be taken in sequence, the first course (STA 3111) should be taken no later than the first semester of the junior year.

II. **Distribution Requirement Courses:** (15 semester hours)
   To fulfill this requirement component, each student must take one course or a laboratory/field experience from each of the five areas (A-E) listed below.

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<tr>
<th>Lecture Courses</th>
<th>Laboratory/Field Experiences</th>
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<tr>
<td>Area A: Experimental</td>
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<tr>
<td>EXP 3523</td>
<td>EAB 3002</td>
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<td>EXP 4204</td>
<td>PSB 4003</td>
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<td>EXP 4605</td>
<td>EXP 4214</td>
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<td>Area B: Social</td>
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<td>SOP 3004</td>
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<td>SOP 4522</td>
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<td>Area C: Applied</td>
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<td>CYP 3003</td>
<td>INP 4203</td>
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<td>SOP 4712</td>
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<td>Area D: Personality/Abnormal</td>
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<td>CLP 3003</td>
<td>CLP 4374</td>
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<td>CLP 4144</td>
<td>DEP 4213</td>
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<td>PPE 3003</td>
<td>EAB 3765</td>
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<td>Area E: Developmental</td>
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<td>DEP 3402</td>
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<td>DEP 4164</td>
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<td>DEP 4014</td>
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III. Required Psychology Course Electives: (9)

Any psychology course taken for a letter grade can be used to fulfill the requirement for electives.

Note: In some cases a student may fulfill a distribution area requirement with a laboratory course and may not therefore take a lecture course in that area. In such a case, the student must take four (12 hours) elective courses so that the total number of upper division hours for the psychology major reaches the required number of 35 credit hours.

IV. Electives to Complete the requirement of 60 credit hours: (24)

A student may, but is not required to, take additional upper division psychology courses beyond the required 36 hours towards the fulfillment of the 60 upper division credit hours needed for graduation. Students may, with the permission of the instructor, take PSY 4900 and PSY 4916, which are given Pass/Fail grades. These courses can therefore not count in the category of Required Psychology Electives, but they can be used as additional credit towards graduation. There is a College requirement that at least nine hours of elective credit (not including STA 3111) must be outside of Psychology.

Remarks: (1) The student is strongly urged to contact the Psychology Department for advisement in curriculum planning; (2) Limited funds are available through the to students with demonstrated scholastic ability and financial need; (3) Psychology majors are allowed to transfer a maximum of ten upper division semester credit hours toward the psychology degree.

Bachelor's Degree with Honors

Application must be made and departmental approval granted, to undertake an independent project which must be approved by and carried out under the supervision of a member of the Department. Upon completion of the study, a satisfactory oral defense of the work must be presented to a Department Committee.

Note: The Bachelor's degree offered in this program is a liberal arts degree and not a professional degree. While it is possible to concentrate courses in one's area of interest, it is not possible at the present time to obtain a 'professional specialization' of the undergraduate level in psychology.

Minor in Psychology

A Minor in Psychology requires 15 upper division semester hours of approved psychology credits. Students seeking the minor must meet with a psychology faculty member for advisement and should file with the Psychology Department a written notice of intention to minor in psychology. A grade of 'C' or higher is required in all courses counted toward the minor.

Course Descriptions

Definition of Prefixes

CLP-Clinical Psychology; CYP-Community Psychology; DEP-Developmental Psychology; EAB-Experimental Analysis of Behavior; EDP-Educational Psychology; EOP-Experimental Psychology; INP-Industrial and Applied Psychology; LING-Linguistics; PCO-Psychology for Counseling; PPE-Psychology of Personality; PSB-Psychobiology; PSY-Psychology; SOC-Sociology; SOP-Social Psychology; SPA-Speech Pathology and Audiology.

CLP 3003 Personal Adjustment (3).

Study of personal adjustment in the social and occupational life of the individual. Emphasis on interpersonal aspects of effective behavior.

CLP 4144 Abnormal Psychology (3).

Various forms of behavior pathology are examined in the light of traditional and current concepts of mental health and illness. Problems of diagnosis and treatment are discussed. The role of social mores is examined.

CLP 4374 Psychotherapy (3).

Current approaches to the treatment and improvement of psychological disorders are critically surveyed. Emphasis is placed on the examination of the various techniques of psychotherapy and behavior therapy. Broader strategies of prevention and mental health promotion, like consultation, counseling, and programmed agency services, are also studied.

CLP 4444 Personality Disorders (3).

Studies personality disorders according to current concepts of mental health and illness. Emphasis given to current theoretical and diagnostic categories. Prerequisite: CLP 4144.

CLP 5166 Advanced Abnormal Psychology (3).

Advanced study of the causes, psychopathology manifestations, and social and personal consequences of behavior disturbance. Emphasis is placed on the critical examination of current research on the biological, psychological, and social aspects of these disorders. Clinical approaches to diagnosis, course, and prognosis in the contemporary mental health context (including 'practicum' assignments if feasible) are covered.

CLP 5169 Proseminar in Developmental Psychopathology (3).

A comprehensive review of topics in developmental psychopathology including history, scope, methods, individual and contextual influences, developmental course, long-term outcomes, and resilience. Prerequisites: Graduate standing or permission of instructor.

CLP 5175 Personality Dynamics (3).

A review of different approaches to the study of personality. Prerequisites: Successful completion of a course in theories of personality, or equivalent. Permission of instructor.

CLP 5185 Current Issues in Mental Health (3).

A critical, intensive examination of selected, important issues in mental health. Emphasis is given to the empirical study of contemporary problems related to the making of mental patients; planning, programming, and administering mental health services; political, ethical, and legal constraints on the operation of mental health facilities; interdisciplinary cooperation among helping and human service professionals; and evaluation of preventive care and treatment services. Prerequisite: Abnormal Psychology or permission of the instructor.

CYP 3003 Introduction to Community Psychology (3).

An introduction to the issues and scope of Community Psychology. Students will be exposed to the development of Community Psychology as a growing discipline. Particular emphasis will be placed on the role of the community psychologist as an agent of social change.

CYP 4953 Community Psychology Field Experiences I (5).

Students will be organized into task-oriented teams or will work independently in the community, for the purpose of becoming familiar with various community institutions and developing an action plan for assisting institutions in implementing change. Prerequisite: PSY 3213 or STA 3123. (Lab fees assessed.)
CYP 5534 Groups as Agents of Change (3). Theory and practice in utilizing groups as agents of change or development in communities and organizations. Didactic presentation and structured exercises focus on relevant issues. Students design and implement problem-focused interventions, using class as client system.

CYP 5954 Community Psychology Field Experiences II (5). Same orientation and description as Field Experiences I. Students in this course will be able to pursue their work with community institutions in more depth. Prerequisite: Students enrolled in this course must have completed Community Psychology Field Experiences I.

DEP 2000 Human Growth and Development: Introductory Developmental Psychology (3). An introductory study of the development of personality, intelligence, and motivation from childhood to adulthood. Emphasis is on development of cognitive systems through social learning. The full life span of human growth and development will be considered. Prerequisites: PSY 2020 or equivalent.

DEP 2001 Psychology of Infancy and Childhood (3). An introduction to human development focusing on infancy and childhood. Particular attention will be devoted to intellectual, personality, and social development. Consideration will be given to both theoretical and empirical perspectives.

DEP 3115 Development in Infancy: The Basis of Human Knowledge (3). Provides a comprehensive review of current methods, theories, and findings in cognitive and perceptual development in the first year of life. Special emphasis on the bases of knowledge: object and event perception, memory, and imitation. Prerequisites: PSY 2020 and one developmental course, any level recommended.

DEP 3303 Psychology of Adolescence (3). An examination of psychological, sociological, and biological factors contributing to the changes from childhood to adolescence, and biological factors contributing to the changes from childhood to adolescence, and from adolescence to young adulthood.

DEP 3402 Psychology of Adulthood (3). The transition from youth to middle age is studied. Focus is on changing roles in family, work, and societal settings, as these factors influence personality and other aspects of psychological function.

DEP 4014 Psychology of Parenting & Parenthood (3). An intensive examination of the reciprocal influences of parents on the development of their children and of children on the adult development of their mothers and fathers.

DEP 4032 Life-Span Cognitive Development (3). Course covers all facets of cognitive growth, change, and decline from infancy through adulthood, and old age. Prerequisite: ADEP 2000, DEP 2001, DEP 4164, or DEP 4464.

DEP 4044 Psychology of Moral Development (3). A review of psychological theories and research concerning the development of moral attitudes and behavior.

DEP 4164 Children's Learning (3). Learning in infancy and childhood, with particular emphasis on simple conditioning, discrimination shifts, mediation, transposition, observational, and concept learning. Prerequisite: Students enrolling in this course should have completed successfully at least one prior course in developmental psychology.


DEP 4213 Childhood Psychopathology (3). Various forms of abnormal behavior in infancy, childhood, and adolescence are examined within the context of traditional and contemporary psychological theory. Problems of differential diagnosis and forms of remediation are discussed.

DEP 4464 Psychology of Aging (3). An examination of the factors that contribute to the psychological profile characterizing old age. Biological and sociological components are considered, and their impact on perceptual, cognitive, and personality processes is analyzed.

DEP 4704 Developmental Psychology; Lecture (2) DEP 4704L Developmental Psychology Laboratory (3). Lecture/Laboratory observation exercises illustrative of the concepts and research techniques used in developmental psychology. Particular emphasis is given to cognitive and social-cognitive development. This course is for seniors who have completed PSY 3213, one developmental psychology course, and STA 3111. (Lab fees assessed)

DEP 5044 Psychology of Moral Development (3). Introduction to the literature on moral development. Review and discussion of recent developments in this area. Prerequisites: Graduate standing or permission of instructor.

DEP 5056 Issues in Life-Span Developmental Psychology: Infancy through Old Age (3). A survey in depth of theories, issues, methods, and data in life-span developmental psychology through the entire age range. Prerequisites: DEP 2001 or DEP 4464, or their equivalents, are recommended.

DEP 5058 Biological Basis of Behavior Development (3). Introduction to theory and research underlying behavioral development. Covers such pre-and post-natal determinants as evolution, genetics, neuroendocrine, as well as social development, behavioral ecology, and sociobiology. Prerequisite: Graduate standing or permission of instructor. Corequisite: Proseminar courses.

DEP 5068 Applied Life-Span Developmental Psychology (3). This course is designed to acquaint the student with various applications in life-span developmental psychology. An overview of general issues and areas of application is offered, and specific applications are considered. Prerequisite: Graduate standing or permission of instructor.

DEP 5099 Proseminar in Infancy, Childhood, and Adolescence (3). Provides a comprehensive review of issues in perceptual, cognitive, social, emotional, and personality development from infancy through adolescence. Prerequisite: Graduate standing or permission of instructor. Corequisite: Pro-seminars.

DEP 5118 Current Issues in Cognitive and Perceptual Development in Infancy (3). Provides an in-depth analysis of current issues, methods, research and theory of cognitive and perceptual development during the first year of life. Special emphasis on object and event perception, memory, and imitation. Prerequisites: Two courses in developmental psychology - any level recommended.
DEP 5185 Emotional Learning & Its Reversal (3). Theoretical analyses and methodological issues in the study of emotional learning. Prerequisites: Graduate standing or permission of instructor.

DEP 5315 Proseminar in Parent-Child Relations (3). Provides an overview of key issues in parent-child relations including culture, socialization/genesis, fatherhood, timing, adaptation, work, effects of children on parents, and parent training. Prerequisite: Graduate standing or permission of instructor.

DEP 5405 Proseminar in Psychology of Adulthood and Aging (3). A comprehensive review of topics in adulthood and aging including: biological changes, social processes, work, family, cognition, memory, personality, and psychopathology. Prerequisite: Graduate standing or permission of instructor.

DEP 5608 Theoretical Perspectives in Developmental Psychology (3). The focus of this course is on the major paradigms, models, and theories that have been influential in developmental psychology, both historically and contemporaneously. Meta-theoretical issues, paradigmatic influences, and specific theories are considered. Prerequisite: Graduate standing or permission of instructor.

DEP 5725 Research Seminar in Psychosocial Development (1). This course is designed to develop research skills and competencies in the area of psychosocial development. The emphasis of the course is an involvement in original research. Prerequisite: Permission of instructor. Corequisite: Senior undergraduate or graduate standing.

DEP 5796 Methods of Developmental Research (3). Survey of issues and methods at all stages of lifespan developmental research including theory, methods, design, and data reduction. Prerequisite: Graduate standing or permission of instructor. Corequisite: proseminars.

EAB 3002 Introduction to the Experimental Analysis of Behavior (3). An introduction to and survey of the principles, methods, theories, and applications of the experimental analysis of behavior. PSY 2020 or PSY 2012.

EAB 3765 The Application of Behavior Analysis to Child Behavior Problems (3). The applications of the theories and methods of behavior analysis to various childhood behavior disorders including anxiety and phobia, attention deficit disorders, autism and obesity. Prerequisite: EAB 3002.

EAB 4034 Advanced Behavior Analysis (2).
EAB 4034L Advanced Behavior Analysis Lab (3). Strategies and tactics in the scientific approach to behavioral research, both basic and applied. Both lecture and laboratory sessions are involved. Prerequisite: EAB 3002 or equivalent. Corequisite: EAB 4034L.

EAB 4794 Principles and Theories of Behavior Modification (3). Studies different approaches to the modification of problem behavior, through the application of learning principles and theories. Prerequisite: EAB 3002.

EAB 5098 Proseminar in the Experimental Analysis of Behavior (3). An advanced survey of the principles of respondent and operant conditioning and the bases of action in both social and non-social settings. Prerequisites: EAB 3002, EAB 4034, or equivalents.

EAB 5655 Advanced Methods of Behavior Change (3). An intensive study of selected methods of modifying human behavior, emphasizing the applications of the principles of respondent and operant conditioning, as well as those derived from modern social learning theories. Practice and role playing opportunities are provided in behavior therapy, relaxation therapy, behavior modification, biofeedback or similar behavioral approaches. Prerequisites: EAB 4794, CLP 4374, CYP 4144; enrollment in an authorized program; equivalent background; or permission of instructor.

EAB 5797 Single-Case Research Methods (3). Intensive study of designs, strategies, and methods of single-case behavioral research. Prerequisites: Graduate standing or permission of instructor.

EXP 3304 Motivation and Emotion (3). Introduces several perspectives from learning theory, perception, and personality theory to explore ways in which people move through their physical and social environment.

EXP 3523 Memory and Memory Improvement (3). This introduction to human memory considers the topics from a number of points of view. The following issues are addressed: the nature of memory and its phenomena; the capabilities and limitations of an ordinary and an extraordinary memory; and the skills that can aid an ordinary memory.

EXP 4005 Advanced Experimental Psychology (2)
EXP 4005L Advanced Experimental Psychology Lab (3). Lecture and laboratory course investigating experimental research in the fundamental processes of human behavior. Includes perceptual, cognitive, and linguistic processes. Prerequisites: PSY 3213 and STA 3111. (Lab fees assessed)

EXP 4204 Sensation and Perception (3). Basic concepts in sensation and perception are explored, with emphasis on models of peripheral and central neural processing. Topics such as receptor function, brightness and color vision, movement and object perception, perceptual memory and pattern recognition are considered. Psychophysical techniques, such as subjective magnitude estimation and signal detection theory, are covered. (Lab fees assessed)

EXP 4214C Human Perception: Lecture (2) and Laboratory (3). Lectures concern the methods researchers use to learn about the phenomena of sensation and perception. Laboratory exercises allow students to apply these methods and to experience the perceptual phenomena under investigation. Prerequisites: PSY 3213 and STA 3111.

EXP 4404C Human Learning and Remembering: Lecture (2) and Laboratory (3) (5). Lectures on the research and theoretical contributions to the understanding of human learning and remembering; and laboratory exercises illustrative of the concepts and techniques used in conducting experimental studies of human learning and remembering. Prerequisites: PSY 3213 and STA 3111. (Lab fees assessed)

EXP 4605 Cognitive Processes (3). Investigation of the mental processing underlying experiences and behavior. Topics include: games, puzzles, and problems; intuitive and creative thought; conceptualization, reasoning and clinical diagnosis; choices and decisions; conceptions of time and space; and thought in abnormal or altered states of consciousness.
EXP 4934 Current Experimental Theories (3). The stress in this course is on current specific theories determining the nature and direction of the research and interest in several important areas, such as psychophysics, learning and remembering, developmental patterns and motivation, personality, etc. Topics to be covered will be announced at the beginning of the academic year. May be taken twice for credit toward the major.

EXP 5099 Proseminar in Experimental Psychology (3). Provides a comprehensive review of current research and theory in areas such as learning, memory, cognition, sensation, and perception. Prerequisite: Graduate standing or permission of instructor.

EXP 5406 Theories of Learning (3). The major theoretical systems of learning are covered, with the intent of determining how well each accounts for the phenomena of learning. Emphasis is placed on exploring the controversial issues raised by extant theories, and the experimental resolution of these theoretical controversies. The impact of theory on current thinking about learning is considered.

EXP 5508 Applied Cognitive Psychology (3). Covers the basic theories of cognitive psychology, perception, attention, memory, learning and knowledge, with emphasis on application to real-world problems. Prerequisite: Graduate standing.

EXP 5524 Cognitive Neuroscience (3). Investigation of the relation between mind and brain. Discuss literature from both patient studies and from the growing research in neuroimaging. Prerequisite: Graduate standing.

EXP 5527 Memory and Consciousness (3). The relation of memory and consciousness is explored with emphasis on issues of current research and theoretical work from both a cognitive and a neuroscientific perspective. Prerequisite: Graduate standing.

INP 4055C Industrial/Organizational Psychology Laboratory (2). Students gain experience with the use of psychometric instruments in the areas of job analysis, personnel selection, performance appraisal, job satisfaction, criteria analysis, and management training and development. Prerequisites: PSY 3213; STA 3111; and INP 2002 or INP 4203, or Personnel Management (Lab fees assessed).

INP 4203 Personnel Psychology (3). Techniques and procedures applicable to the selection, placement, utilization, and evaluation of personnel in organizations are considered. The emphasis will be on empirical procedures, rather than the management function in the personnel area. Topics such as quantitative methods and models for selection, criteria analysis, performance appraisal, management training, and job satisfaction are discussed. Prior course in statistics strongly recommended.

INP 5095 Proseminar in Industrial Psychology (3). Provides coverage of industrial and personnel psychology topics such as job analysis, personnel recruitment and selection, legal aspects of employment, performance appraisal, and training design and evaluation. Prerequisites: Acceptance to Master's or Ph.D. program in Psychology.

LIN 4710 Language Acquisition (3). An examination of the way children acquire language, based on experimental findings from contemporary linguistics, psycholinguistics, and behavioral theory.

LIN 5701 Psychology of Language (3). An overview of the psychology of language and the psychological 'reality' of linguistic structure. Behavioral vs. cognitive views of psycholinguistics are examined. Consideration is given to the biological bases of language and thought, language acquisition, and language pathology.

PPE 3003 Theories of Personality (3). An examination of various theories of personality. Consideration is given to traditional and contemporary approaches to personality development.

PPE 3502 Psychology of Consciousness (3). Normal and altered states of human consciousness are analyzed from the perceptual and neuro-psychological viewpoint. Broad topic areas include physiologically determined levels of:
- arousal, from deep sleep to intense excitement; selective attention; perceptual plasticity; illusions; sensory deprivation; biofeedback; psychosomatic disease; hypnotism and suggestibility; as well as a critical treatment of the phenomena of parapsychology.

PPE 3670 Psychology of Myth (3). Mythology is studied from various psychological viewpoints. The process of Myth, Creation and the role of ritual in psychological enhancement are emphasized. Course focuses on classical mythology.

PPE 4104 Humanistic Psychology (3). Studies the methodology, research findings of the humanistic orientation in psychology. Topics such as counseling, encounter groups, higher consciousness, biofeedback, intentional communities, education, mysticism, and religion are examined from the humanistic viewpoint. Prerequisite: Prior completion of a course in Theories of Personality is recommended.

PPE 4325C Differential Psychology: Lecture (2) and Laboratory (3). Lectures and laboratory field experiences in the principles and methods underlying the administration, construction, and evaluation of psychological tests. Practice in the administration and interpretation of selected psychological tests. Prerequisites: STA 3111 or an equivalent introductory course in statistics, and PSY 3213. (Lab fees assessed)

PPE 4514 Psychology of Dreams and Dreaming (3). An in-depth examination of the most important psychological theories of dream function and of the use of dreams in different therapeutic approaches. The current research on the physiology and psychology of sleep is also evaluated. Prerequisite: Theories of Personality or its equivalent.

PPE 4604 Psychological Testing (3). An introduction to the rationale underlying the use of psychological tests. Topics include basic test terminology, test administration, interpreting standard scores, reliability, validity, tests of intelligence, interest inventories, personality tests, the ethics of testing, and the fairness of tests for different segments of the population. Prerequisites: STA 3111 or equivalent.
PPE 4930 Topics in Personality (VAR). Special topics will be announced in advance.

PSB 4003 Introductory Bio-Psychology (3). A study of the more important psychobiologic correlates of behavior in basic psychological phenomena.

PSY 2020 Introductory Psychology (3). Psychological principles underlying the basic processes of sensation, perception, cognition, learning, memory, life-span developmental, social behavior, personality, abnormal behavior, and psychotherapy.

PSY 3213 Research Methods in Psychology (3). Basic methods in contemporary psychology. Emphasis on the role of methodology and experimentation in subfields of psychology. Students evaluate different designs and conduct original research projects. Prerequisite: STA 3111. (Lab fees assessed)

PSY 3930 Psychology of Humor (3). A study of the development of sense of humor in comedians and audiences; its expression in the production and appreciation of comedy, etc.; its psycho-physiologic-social correlates; its effect in maintaining well-being and preventing illness; and its role in human relations.

PSY 4801 Metatheory in Psychology (3). Issues related to the metatheoretical foundation of psychology, and history and systems of psychology.

PSY 4900 Independent Readings in Psychology (VAR). Limited to qualified students who have permission from a faculty member and who present a plan of study including area and objectives. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their study. Offered for Pass/Fail only.

PSY 4914 Honors Research Project (VAR). Limited to qualified seniors seeking honors in psychology. Students must submit a research plan and have a research advisor's approval of the research project prior to enrollment in the course. A written report of the research in the A.P.A. publication style must be submitted for evaluation before credit will be awarded. Offered for Pass/Fail only.

PSY 4916 Independent Research in Psychology (VAR). Limited to qualified students who have permission from a faculty member and who present a written proposal for research. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their research.

PSY 4930 Special Topics in Psychology (VAR). Special topics will be announced in advance.


PSY 4932 Psychology of Human Communication (2).

PSY 4932L Psychology of Human Communication Lab (3). This course covers psychological theory, research and application in the area of human communication. Prerequisite: STA 3111, PSY 3213. (Lab fees assessed)

PSY 4941 Independent Field Experiences in Psychology (VAR). Limited to qualified students who have permission from a faculty member and who present a plan of study including area and objectives. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their experiences.

PSY 5206C Fundamentals of Design of Experiments (3). CRD and RCB designs, Latin square designs. Factorial, nested and nested-factorial experiments. Fixed, random and mixed models. Split-plot designs. Covariance analysis. Prerequisites: STA 2122 and 3123, or their equivalents.

PSY 5216 Proseminar: History and Systems of Psychology (3). An examination of the historical foundations of modern psychology and survey of current systems and schools of psychology. Prerequisites: Graduate standing or permission of instructor.

PSY 5246C Multivariate Analysis in Applied Psychological Research (3). Covers basic techniques of multivariate analysis, emphasizing the rationale and applications to psychological research. Includes multiple regression, Hotelling's T2, MANOVA, principle component analysis, and factor analysis. Prerequisite: STA 3123 or equivalent; linear algebra recommended.

PSY 5908 Directed Individual Study (VAR). Under the supervision of an instructor in the graduate degree program, the graduate student delves individually into a topic of mutual interest which requires intensive and profound analysis and which is not available in a formal offering. May be repeated once. Prerequisite: Permission of instructor.

PSY 5917 Psychology Research Proseminar (3). Specialized research and presentation to faculty members in his or her major research area. Seminar style. This course is intended as a core course for the masters program in psychology. Prerequisite: Full graduate admission.

PSY 5918 Supervised Research (VAR). Research apprenticeship under the direction of a research professor or a thesis advisor. Prerequisite: Full graduate admission.

PSY 5939 Special Topics in Psychology (VAR). Special topics will be announced in advance.

SOP 2772 Psychology of Sexual Behavior (3). An examination of the nature, development, decline, and disorders of sexual behaviors, primarily from the perspectives of normal adjustment and interpersonal relations. Discussion also addresses love, intimacy, and similar emotionally charged socio-psychological topics. Modern and popular treatment approaches - including the "new sex therapies" - are critically evaluated.

SOP 3004 Introductory Social Psychology (3). Introduction to the study of the relationship of the individual to social systems, including topics such as social behavior, attitude development and change, social conflict, group processes, mass phenomena, and communication.

SOP 3015 Social and Personality Development (3). This course provides a survey of social and personality development throughout the life cycle. Emphasis will be placed on the interaction between psychological and environmental variables in life-span development changes.

SOP 3742 Psychology of Women (3). An examination of women from various perspectives, such as biological, anthropological, mythological, religious, historical, legal, sociological, and psychoanalytical points of view. Discussions of ways in which these various perspectives influence the psychological development of contemporary women.
SOP 3932 Psychology of Drugs and Drug Abuse (3). This course will cover some basic information about the nature and effects of drugs abused, the social and personal dynamics involved in the phenomena of drug abuse and the various rehabilitation programs currently being employed to combat drug abuse.

SOP 4050 Social Psychology in Latin America (3). Upper division seminar on Social Psychology in Latin America. The course will provide the student with the opportunity to survey the literature and research in social psychology from differentcountries in Latin America and to compare that material with on-going research and literature in the United States. Prerequisites: SOP 3004 and reading knowledge of Spanish.

SOP 4215 Experimental Social Psychology: Lecture (2) and Laboratory (3) - (5). The primary purpose of this course is to have students conduct actual social psychological experiments. Lecture material will be secondary to (and in the interest of) allowing students to execute representative experiments in areas such as attitude measurement and change, group structure, and communication, etc. Prerequisites: PSY 3213 and STA 3111. (Lab fees assessed)

SOP 4522 Social Motivation (3). Focuses upon those sources of human motivation that are a consequence of man’s social-interpersonal environment and his striving to obtain valued goals. Topics discussed include test-taking anxiety, alienation and affiliation motivation, internal vs. external motivation, achievement motivation, etc. The measurement of social motives and their roots and consequences for behavior are discussed.

SOP 4525 Small Group Behavior (3). Introduction to the study of the structure and function of groups, emphasizing the behavior of individuals as affected by the group. The course focuses on experimental evidence concerning such topics as social facilitation, group decision making, phases in group development, physical factors in group behavior, etc.; rather than upon student experience in sensitivity or encounter training.

SOP 4645 Consumer Psychology (3). This course addresses the psychological components contributing to satisfaction and dissatisfaction in buying and selling transactions. The consequences of such transactions, as they affect the environment in which we live as well as society in general, are examined. The interface between business, labor, government, and the consumer as all four groups are involved in consumer affairs is analyzed objectively.

SOP 4649 Experimental Consumer Psychology: Lecture (2) and Laboratory (3) - (5). Using the interactional workshop and objective observational methods, students will be required to conduct original research projects related to solving consumer affairs problems. Laboratory requirements include both on-and off-campus work. The former emphasizes techniques and evaluation. The latter is necessary for the gathering of data. Prerequisites: PSY 3213 and STA 3111. (Lab fees assessed)

SOP 4712 Environmental Psychology (3). An introduction to the study of human-environment transactions, with an emphasis on applications of physiological, psychological, and social theories.

SOP 4714 Environment and Behavior: Lecture (2) and Laboratory (3) - (5). Students gain experience with laboratory and field techniques used in the study of the reciprocal relationship between the physical environment and human behavior. Prerequisite: PSY 3213 or permission of instructor. (Lab fees assessed)

SOP 4834 Psychology of Health and Illness (3). Course provides an overview of the field of behavioral medicine, the interface of psychology with health and health care. Psychological factors in illness, health, and health delivery systems will be covered. Prevention and early intervention will be stressed.

SOP 4842 Legal Psychology (3). Particular emphasis will be given to interpersonal courtroom processes. Topics considered include scientific jury selection, proximics, persuasive argumentation, witness demeanor, eyewitness testimony, and similar influences upon juror decision making.

SOP 5085 Proseminar in Social Psychology (3). An in-depth examination of the role of social psychology in the social sciences and the major substantive problems as they relate to contemporary societal issues. Minimum prerequisite. An introductory course in social psychology or its equivalent.

SOP 5316 Theories and Methods of Cross-Cultural Research (3). An intensive analysis of contemporary theories and methods of cross-cultural research in psychology including topics such as: culture as a research treatment, differential incidence of personality traits, the use of ethnographies, "etic" vs. "emic" distinction. Prerequisite: Graduate standing or permission of instructor.
Religious Studies

Nathan Katz, Professor and Chairperson
Paul Draper, Associate Professor
Christine Gudorf, Professor
James Huchinson, Associate Professor
Erik Larson, Assistant Professor
Lesley Northup, Assistant Professor
Theodore Weinberger, Assistant Professor

Affiliated Faculty
Thomas A. Breslin
Bongkil Chung
Daniel A. Cohen
Mitchell B. Hart
Marilyn Hader-Salmon
Rosita Kenigsberg
David L. Lee
Joseph F. Patrouch
Felix Pomerantz

Bachelor of Arts in Religious Studies

Degree Program Hours: 120

Lower Division Preparation
To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Recommended Courses: Religion, Philosophy, History.

Upper Division Program: (60)

Required Areas
Religious Studies majors are to take one course in each of the following areas (the area numbers are indicated by parentheses at the end of each course description):

The Study of Religion (1) 3
Sacred Texts (2) 3
Judaism & Christianity (3) 3
Ethics (4) 3
Religion & Culture (5) 3
Islam & Non-Western Religious Traditions (6) 3
Additional Religious Studies Courses 15

General Electives 27

The College of Arts and Sciences requires for the bachelor's degree that a student take at least nine hours outside the major discipline, of which six hours must be taken outside the major department.

Remarks: A complete description of the Religious Studies Program is contained in a brochure available at the Department of Religious Studies.

Students should refer to the brochure for specific requirements of the major program. Students select their required courses in religious studies with the approval of a faculty member of the Department.

Students are also encouraged to consider a dual major i.e., simultaneously to meet the requirements of two academic majors.

The Department serves the community and professional groups by offering courses off campus. For further information concerning these courses consult the department.

Minor in Religious Studies
A student majoring in another academic discipline can earn an academic minor in religious studies by taking at least four REL courses (12 upper division semester hours). Students are normally encouraged to take REL 3050 as one of these courses.

Course Descriptions

Definition of Prefixes
GRE-Ancient Greek; REL-Religion; PHI-Philosophy.

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

REL 3050 New Testament Greek I (3). Introduces the Greek language of the New Testament, and other works of the ancient period to enhance the understanding of translated texts. A portion of the Gospel of John is studied.

REL 3051 New Testament Greek II (3). Continuation of New Testament Greek I. Prerequisites: New Testament Greek I or permission of instructor.

HBR 3 Biblical Hebrew I (3). Introduces the language of the Hebrew Scriptures, portions of which are read in class.

HBR 3 Biblical Hebrew II (3). A continuation of Biblical Hebrew I. Prerequisite: Biblical Hebrew I.

REL 2210 Bible I: The Hebrew Scriptures (3). This course introduces the literature and thought of the Old Testament, especially as these were shaped in interaction with political, social, and historical currents of the times. (2)

REL 2240 Bible II: New Testament (3). This course introduces the thought and literature of the New Testament in its contemporary setting. Attention is given to Jesus and Paul and to later developments in first-century Christianity. (2) F

REL 2362 Islam (3). Explores the Qur'an; the exemplary life of Muhammad; the Caliphate; Islamic law, exegesis, science, art, theology and mysticism; and contemporary Islam in Morocco, India, Indonesia. (6)

REL 2936, 4936 Special Topics (1-6). In-depth study of topics of special interest in religion.

REL 3392 Jewish Mysticism (3). An overview of the history and philosophy of Kabbala and an exploration of selected practices and techniques of Jewish mysticism. (3)

REL 3625 Introduction to Talmud (3). Through close readings (in English translation) of specific Talmudic texts, this course introduces students to the Talmud - the magnum opus of Rabbinic Judaism. (2)

REL 3002 Ritual in Religion and Culture (3). Examines ritual and its roots, functions, analysis, and meaning, both in religious contexts and as it is assimilated and adapted in the wider culture. (1) (5)

REL 3091 Joseph Campbell and the Power of Myth (3). Examines the nature of myth, particularly from the perspective of mythologist Joseph Campbell, and focuses on his contribution to the study of myth. (1)

REL 3100 Introduction to Religion and Culture (3). This course explores both the ways religion uses culture to express its basic concerns and the ways that culture and lifestyle reflect religious perspectives. Attention will be given to traditional and popular expressions of American culture. (5)

REL 3111 Religion in Film (3). Students examine religious themes, images, symbols and characters in various feature and short films, a specific method of critical analysis, and
the religious and societal effects of contemporary films. (5)

REL 3120 Religion in America (3). Historical survey of the development and influence of religions in the U.S. with emphasis on the unique role of religion in American culture. (5)

REL 3131 New Religions in America (3). Explores the American tendency to generate new religious movements and examines a variety of these sects and cults. (5)

REL 3145 Women and Religion (3). Explores the involvement, portrayal, and roles of women in religion, from early goddess religions through the cult of Mary to contemporary feminist theology. (5)

REL 3160 Science and Religion (3). The methods, assumptions, goals of religion will be compared with those of the natural and human sciences. Specific issues, such as evolution, sociobiology, and the new astronomy will be considered to illustrate similarities and differences between the two approaches. (5)

REL 3170 Religion and Ethics (3). This course will examine the nature of ethics in its relationship to faith orientation. After considering the various religious foundations of ethics in the thought of influential thinkers, attention will be given to the application of these perspectives to pressing ethical problems in contemporary society. (4)

REL 3171 AIDS, Ethics and Religion (3). Examines ethical issues in AIDS as framed by churches, by persons with AIDS (PWA) networks, and by AIDS workers. (4)

REL 3172 Reproductive Ethics (3). Surveys U.S. religion on family, surrogacy, artificial insemination and in vitro fertilization, contraception, abortion, and fetal hazards in workplace. (4)

REL 3178 Christian Sexual Ethics (3). Surveys the dialogue between Christian churches and the sciences regarding homosexuality, conception, genital activity and sex roles. (4)

REL 3180 Medical and Bioethics (3). A survey of religious treatment of ethical issues in medical science. (4)

REL 3194 The Holocaust (3). Examines different responses to the Holocaust—both during the years when it took place and afterwards. What does it mean to be a Jew—a Chris- tian, a human being in the shadow of the Holocaust? (3)

REL 3197 Topics in Race and Religion (3). Examines the role of religion in specific historical events such as the US civil rights movement, the rise/fall of South African apartheid, or the subjugation of the Amerindians. (5)

REL 3209 The Dead Sea Scrolls (3). Surveys scholarship on the Dead Sea Scrolls, including their significance for the study of the Bible and the history of Judaism and Christianity. (2)

REL 3270 Biblical Theology (3). Explores the ideas of God, man, redemption, ethics, and the after-life, tracing each through its development from earliest Hebrew thought to the rise of post-biblical Judaism and Christianity. (3)

REL 3302 Studies in World Religions (3). Examines the origins, teachings, and practices of selected world religions. The specific religions selected for examination may vary from semester to semester. (1 F, S)

REL 3305 Religions of Classical Mythology (3). Examines the beliefs and practices of ancient Egyptian, Semitic, Greek, and Germanic religions, their influences on later civilization and religious thought, and the possible continuing insights offered by each. (5)

REL 3330 Religions of India (3). The myriad religions of India, from prehistoric origins to contemporary poli
tized Hinduism, Schismatic movements (Buddhism, Jainism) and "Indianized" extrinsic religions (Judaism, Christianity, Islam, Zoroastrianism). (6) (F)

REL 3363 Islamic Faith and Society (3). A survey of the major facets of Islamic religion and societies from the time of Muhammad to the present. (6)

REL 3492 Nature and Human Values (3). This course will explore resources from philosophy and religion that could contribute to a solution of the current environmental crisis. Ethical issues of the environment will especially be examined in the light of these resources. (4) (S)

REL 3505 Introduction to Christianity (3). Introduces the basic beliefs and practices of Christianity in its historical and modern forms, including both common and distinctive elements of Catholicism, Protestantism, and Eastern Orthodoxy. (3)

REL 3510 Early Christianity (3). This course will survey the First development of Christian thought and practice from its beginnings as a primitive church to its establishment as a major faith in the Middle Ages. It will then consider the relevance of this early experience for modern movements of this faith. (3) (S)

REL 3520 Medieval Christianity (3). Surveys Christianity during the middle ages, including its development, medieval theology and religious practices, and its on-going influence in Christianity. (3)

REL 3530 Protestantism (3). Surveys Protestantism from the Reformation to the present, including the formation of Protestant theology, the relationship of Protestantism to culture and contemporary developments. (3)

REL 3532 Reformation (3). The lives and thoughts of the leaders of the Protestant Reformation will be the focus of this course. Significant attention will be given to the personal experiences and theological perspectives which directed the actions of such persons as Luther, Calvin, and Zwingli, as well as the movements they founded. (3)

REL 3564 Modern Catholicism (3). Surveys Catholicism from the Vatican Council to the present, including developments in liturgy, theology, and the relationship of the Church to the world. (3) (S)

REL 3600 Judaism (3). This course is an introduction to this major world religion. Following a survey of the history of Judaism, major themes in Jewish religious thought will be highlighted, especially as they relate to modern movements of this faith. (3) (F)

REL 3601 The Ethics of Judaism (3). Examines Jewish approaches to ethical issues. Takes into account both traditional and nontraditional approaches which claim, in some way, to be authentically Jewish. (4) (F)

REL 4030 Methods in the Study of Religion (3). This course examines a number of the most important methods used in the academic study of religion, together with representative examples of the use of these methods. Prerequisite: Religious Studies major status or permission of instructor. (1)
REL 4146 Feminist Theology and Ethics (3). Surveys major Christian and Jewish feminists on revelation, sexuality and body, liturgy, religious community and other topics. (4)

REL 4173 Technology and Human Values (3). This course will explore the sources and impact of modern technology from philosophical and religious perspectives. Topics to be discussed include the effects of technology upon the understanding of human nature, and the relationship among technology, the natural environment, and hopes for a livable human future. (5)

REL 4205 Current Methods in Biblical Studies (3). This course introduces the Bible and the methods and tools of biblical study, including translations, word studies, historical studies, and the use of appropriate secondary resources. Prerequisite: REL 2210, REL 2240 or permission of instructor. (2)

REL 4224 The Prophets and Israel (3). Examines the setting of the prophets in the history of Israel, their contributions to biblical religion, and their use in later religious and renewal movements. (2)

REL 4251 Jesus and Paul (3). Examines the historical settings, teachings, significance, and later interpretations of Christianity’s founder and its foremost interpreter. (3)

REL 4311 Religious Classics of Asia (3). Classical religious texts of Asian traditions. Content may vary. Course may be repeated with change in content. (2)

REL 4340 Survey of Buddhism (3). The course will explore the central themes of the main schools of Buddhism developed in India, China, Japan, and Korea. The themes will be examined from religious, moral, and philosophical points of view. (6) (5)

REL 4345 Zen Buddhism (3). This course explores Zen (ch’an) Buddhism in its historical, theoretical, and practical dimensions with a specific aim of examining the theme that the Buddhist mind can be actualized by awakening to one’s own Buddha-nature. (5)

REL 4420 Contemporary Religious Thought (3). A survey of major figures in contemporary theology for the purpose of understanding their thought and its application to current issues in religion and society. (1)

REL 4425 Contemporary Issues in Christian Theology (3). Examines contemporary efforts to reflect on traditional topics in Christian theology, such as God and human nature, and explores the role of theology in addressing selected social and cultural issues. (3)

REL 4441 Religion and the Contemporary World (3). An examination of reflection by religious thinkers and others who employ religious perspectives, concerning select conceptual issues of critical importance in the contemporary world. (1)

REL 4460 Topics in the Philosophy of Religion (3). Examines a specific topic in the philosophy of religion, such as faith and reason, religious experience, or an important thinker. It may be repeated with permission of instructor. (1)

REL 4481 Contemporary Latin American Religious Thought (3). The major trends of religious thought in Latin America and their impact on the society of the area will be investigated. Special reference will be made to Post-Vatican II theology and to very recent theologies of liberation. (1)

REL 4613 The Modernization of Judaism (3). Explores the ways in which religious beliefs and traditional concepts of Jewish self identity have changed as a result of emancipation and the participation of Jews in the modern Western world. (3)

REL 4910 Independent Research (1-6). Topics will be selected to meet the academic needs of the individual student. Prerequisite: Permission of instructor.

REL 4931 Religious Studies Seminar (3). This seminar is designed for majors and other qualified students approved by the Department. The specific topic will be selected and announced in advance. The number of participants will be limited.

REL 5130 North American Religion (3). Historical examination of the religious groups and influences in North America focusing on their contributions and cultural impacts. Prerequisites: Graduate standing or permission of instructor.

REL 5023 Religious Ritual (3). Examines the critical relationship of ritual, religious practice and belief, and culture, while introducing the principles and methods of both ritual studies and liturgics. Prerequisite: Graduate standing.

REL 5131 Sects, Cults, and New Religions (3). Explores and critically analyzes the multiplicity of New American religious movements and the unique combination of factors that has encouraged them. Prerequisites: Graduate standing or permission of instructor.

REL 5147 Women and Religion (3). Examines the influence of religion on social construction of gender and the definition of woman’s nature and role, with a focus on Western developments. Prerequisite: Graduate standing.

REL 5159 Science and Religion (3). Surveys the interaction between science and religion from conflict models to integration; special attention to specific natural sciences including cosmology and biology. Prerequisite: Graduate standing.


REL 5331 Religions of India (3). Topics include: religion in prehistoric and ancient India, classical Hindu texts and schismatic movements, medieval theism, the acculturation of extrinsic religions, Hindu-Muslim-Sikh syncretism, and the modern period.

REL 5461 Religion and Philosophy (3). Examines the use of philosophical reasoning to justify religious belief or its rejection. Such topics as natural theology, atheism and disbelief will be examined. Prerequisite: Graduate standing.

REL 5507 Myth and Religion (3). Investigates the role, function, and meaning of myth in religious experience and practice through an examination of specific myths, mythic patterns, and critical theories. Prerequisite: Bachelor’s degree.

REL 5515 History of Early Christianity (3). Origin and growth of Christianity from the first to the fifth century, and the adaptation of its message to the Greco-Roman world. Prerequisites: Graduate standing or permission of instructor.

REL 5565 Modern Catholicism (3). Theology and liturgical practice in the Roman Catholic Church from Trent (16th c) to the present, with pri-
mary and secondary sources. Prerequisite: Graduate standing.

REL 5600 Studies in Judaism (3). Historical overview of Jewish beliefs and practice with special consideration of Jewish ritual life. Prerequisites: Graduate standing or permission of instructor.

REL 5614 Modernization of Judaism (3). Explores the ways in which religious beliefs and traditional concepts of Jewish self identity have changed as a result of emancipation and the participation of Jews in the modern Western world. Prerequisite: Bachelor's degree.

REL 5911 Independent Research (1-5). Topics are selected to meet the academic needs of the individual student. Prerequisite: Permission of Instructor.

REL 5937 Special Topics (3). Topics will be selected to meet the academic needs of groups of students.

REL 6395 Seminar in Asian Religions (3). Asian religious traditions - texts, rituals or artifacts. Content may vary. May be repeated with change in content.

REL 6971 Thesis (1-6). For students working on the thesis for the M.A. in Religious Studies. Prerequisites: Graduate standing or permission of instructor.

Sociology and Anthropology

Stephen M. Fjellman, Professor and Chairperson
G. Janice Allen, Assistant Professor
Jerald B. Brown, Associate Professor
Janel M. Chernela, Associate Professor
Chris Girard, Associate Professor and Director, Comparative Sociology, Graduate Program
Hugh Gladwin, Associate Professor and Director, Institute for Public Opinion Research
Guillermo J. Grenier, Associate Professor and Director, Center for Labor Research
James P. Illo-Adler, Assistant Professor
Antonio Jorge, Professor
A. Douglas Kincaid, Associate Professor and Associate Director, LACC
Lilly M. Langer, Assistant Professor
Abraham D. Lavender, Associate Professor
Barry B. Levine, Professor
Kathleen Logan, Associate Professor
Shearon A. Lawry, Associate Professor
Anthony P. Maingot, Professor
James A. Mau, Professor and Provost
Betty Hearn Morrow, Associate Professor
William T. Osborne, Associate Professor
Walter Gillis Peacock, Associate Professor and Program Director at the International Hurricane Center
Lisandro Perez, Associate Professor and Director, Cuban Research Institute
Alex Stepick, Professor and Director, Immigration and Ethnicity Institute
Richard Tardanico, Associate Professor
William T. Vickers, Professor
Lois West, Assistant Professor

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable to the program.

Required Courses

Introduction to Anthropology, Introduction to Cultural Anthropology, or Introduction to Sociology. If the student does not have one of these courses, it will be required as part of the upper division program.

Recommended Courses

Other anthropology and sociology courses: ecology, economics, geography, history, political science, psychology, arts, biology, English, foreign languages, mathematics, philosophy.

Upper Division Program (60)

Required Courses (27)

Core Courses

ANT 3086 Anthropological Theories 3
SYA 3300 Research Methods 3
SYA 4010 Sociological Theories 3
ISS 3330 Ethical Issues in Social Science Research 3

Area Courses: Either Anthropology or Sociology 15

Electives: with the approval of the faculty advisor 33

A grade of ‘C’ or higher is required for all courses that make up the major (12 semester hours of core courses and 18 semester hours of area courses in Sociology and Anthropology).

Minor in Sociology and Anthropology

Prescribed Courses

Fifteen credits in the Department of Sociology/Anthropology including two courses from the following:

ANT 3086 Anthropological Theories 3
SYA 3300 Research Methods 3
SYA 4010 Sociological Theories 3
ISS 3330 Ethical Issues in Social Science Research 3
Course Descriptions

Definition of Prefixes

ANT = Anthropology; ISS = Interdisciplinary Social Sciences; SYA = Sociological Analysis; SYD = Sociology of Demography and Area Studies; SYG = Sociology, General; SYO = Social Organization; SYP = Social Processes.

Fall-Fall semester offering: S = Spring semester offering; SS = Summer semester offering.

ANT 2000 Introduction to Anthropology (3). This course surveys the four subfields of anthropology, including physical anthropology and human evolution, archaeology, cultural anthropology, and linguistics. Introduces basic anthropological theories and concepts. (F, S, SS)

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

ANT 3100 Introduction to Archaeology (3). The history of archaeology is traced from its origins to its emergence as a scientific discipline within anthropology. Students are familiarized with the concepts and methods of modern archaeology, and with the scientific goals of archaeological research. (F, S)

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

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

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

ANT 3302 Male and Female: Sex Roles and Sexuality (3). Cross-cultural ethnographic data will be utilized to examine the enculturation of sex roles, attitudes, and behavior; cultural definitions of maleness and femaleness; and varieties of human sexual awareness and response. (F)

ANT 3304 Voices of Third World Women (3). Deals with the literature in the social sciences and humanities written by women of the Third World or others who have recorded their testimony. (F)

ANT 3403 Cultural Ecology (3). Systems of interaction between man and his environment; the role of social, cultural, and psychological factors in the maintenance and disruption of ecosystems; interrelations of technological and environmental changes. (S, S, S)

ANT 3409 Anthrooplogy of Contemporary Society (3). The application of classical anthropological methods and concepts to the analysis of contemporary American culture. Investigation of a unique cultural scene will involve the student in field work and the preparation of an ethnographic report. (F, S)

ANT 3442 Urban Anthropology (3). Anthropological study of urbanization and urban life styles, with particular emphasis on rural-urban migration and its impact on kinship groups, voluntary associations, and cultural values. (F)

ANT 3462 Medical Anthropology (3). A survey of basic concepts: examination of preliterate and non-western conceptions of physical and mental health and illness; emphasis on cultural systems approach to the study of illness and health care. Background in biology, medicine, or nursing helpful. Prerequisite: Permission of instructor. (S)

ANT 3476 Movements of Rebellion and Revitalization (3). Cross-cultural study of revolutionary, messianistic, and revitalization movements in tribal and peasant societies. Case materials include Negro-slave revolts, cargo cults, and peasant wars of the twentieth century (Mexico, China, Vietnam). (F)

ANT 3500 Introduction to Physical Anthropology (3). A study of the biological history of man as interpreted through the theory of evolution, anatomy and the fossil record, contemporary population genetics, and the concept of race. (F)

ANT 3642 Language and Culture (3). An examination of the relationship between language and culture, the implications of language for our perceptions of reality, and the socio-cultural implications of language differences for interethnic relations and international understanding. (F)

ANT 3780 Anthropology of Brazil (3). Anthropological perspective on Brazilian society and culture. Covers classic and contemporary studies of Brazil including such topics as race, ethnicity, national identity, regionalism, and social organization. (S)

ANT 4211 - 4228 Area Studies (3). Ethnological survey of selected indigenous cultures. Areas to be studied include: (1) North America; (2) Africa; (3) Asia or Southeastern Asia; (4) China. Topics will be announced and will vary depending on current staff. (F, S)

ANT 4224 Tribal Art and Aesthetics (3). This course deals with the social and cultural context and functions of art in preliterate societies as in sub-Saharan Africa, New Guinea, and North America. Topics include wood carving, bronze casting, singing, dancing, drumming, masquerading, theatrical performance, and all forms of oral literature. (F)

ANT 4273 Law and Culture (3). A cross-cultural examination of the practical and theoretical relationships between the legal system and other aspects of culture and society. (S)

ANT 4305 Explorations in Visual Anthropology (3). An examination of the use of film in anthropology, both as a method of ethnographic documentation and as a research technique for analyzing non-verbal modes of communication. Documentary films and cross-cultural data on paralanguage, kinesics, proxemics, and choreometrics will be reviewed and discussed. (F)

ANT 4306 The Third World (3). An interdisciplinary, cross-cultural survey of the factors contributing to the emergence of the Third World. Significant political, economic, pan-national and pan-ethnic coalitions are analyzed. (F)

ANT 4312 American Indian Ethnology (3). An examination of the socio-cultural patterns of selected American Indian groups as they existed in the indigenous state, prior to European contact. (F)

ANT 4324 Mexico (3). An interdisciplinary examination of the major social, cultural, economic, and
political factors contributing to the transformation from the Aztec empire to colonial society to modern Mexico. (F)

ANT 4328 Maya Civilization (3). A survey of the culture and intellectual achievements of the ancient Maya civilization of Mesoamerica. Course includes: history and social-political structure, archaeology, agriculture and city planning, mathematics, hieroglyphics, astronomy, and calendars. (F,S)

ANT 4330 Contemporary Maya Cultures (3). Studies the Maya cultures of Mexico and Central America from the Conquest to the present. Investigates the political, social, economic, religious, and cultural life of contemporary Maya peoples. (F)

ANT 4332 Latin America (3). Native cultures of Mexico, Central and South America; the lowland hunters and gatherers, and the pre-Columbian Inca and Aztec Empires; the impact of the Spanish conquest. (F)

ANT 4334 Contemporary Latin American Women (3). The lives of 20th century Latin American women and gender analysis along class and ethnic dimensions. Discussion of religion, family, gender roles, machismo, and women's roles in sociopolitical change. (F)

ANT 4335 Inca Civilization (3). A survey of Incan culture and emphasis on Inca and pre-Inca civilizations. Includes discussion of peoples of South America, habitats, and the transition from foraging to village settlements, and the rise of indigenous empires. (S)

ANT 4340 Cultures of the Caribbean (3). An ethnological survey of native cultures and of the processes of culture contact and conflict in the Caribbean and Circum-Caribbean region. (F)

ANT 4343 Cuban Culture and the Revolution (3). Cultural history of Indian, African, and Spanish populations; the Revolution and traditional Cuban society; the problems and prospects of the Cuban community in the United States. (C)

ANT 4352 African Peoples and Cultures (3). This course includes a survey of the cultures and civilizations of sub-Saharan Africa. It includes discussions of history, geography, sociopolitical structures, religion, art, music, and oral literature. (F)

ANT 4406 Anthropology of War and Violence (3). The purpose of this course is to introduce the scientific study of human aggression and warfare from an evolutionary and cross-cultural perspective in order to gain a better understanding of the causes and consequences of such behavior, and to evaluate proposed options for the control of warfare. (F)

ANT 4422 Kinship and Social Organization (3). Comparative study of kinship systems and the social organization in tribal, peasant, and industrial societies. Emphasis on the anthropological record in anthropological psychology and psychiatry is reviewed. (S)

ANT 4433 Psychological Anthropology (3). Cross-cultural studies in cognition, possession states, myth making and world view are examined. The interface of anthropology, psychology, and psychiatry is explored. (F,S)

ANT 4451 Racial and Cultural Minorities (3). The study of selected ethnic and cultural groups, with particular emphasis on patterns of inter-ethnic and intercultural relationships. Minority groups studied may include Afro-Americans, American Indians, Chicanos, Cubans, women, senior citizens or prisoners. (F,S)

ANT 4461 Hallucinogens and Culture (3). Cross-cultural examination of the political, religious, and socio-cultural factors related to altered states of consciousness, including dreams and images. Applications to contemporary psychology are explored. (S)

ANT 4552 Primate Behavior and Ecology (3). This course covers the evolution of primates, and primate ecology, social organization, and intelligence. The course will provide students with opportunities to observe and study living primates. (F)

ANT 4723 Education and Socialization (3). A cross-cultural examination of educational and socialization processes, their functions in the larger society, and the value systems they transmit. (F)

ANT 4907 Directed Individual Study (VAR). Supervised readings and/or field research and training. Permission of instructor. (F,S,SS)

ANT 4908 Directed Field Research (VAR). Permission of instructor required. (F,S,SS)

ANT 4930 Topics in Anthropology (3). Special courses dealing with advanced topics in the major anthropological subdisciplines: (1) social and cultural anthropology, (2) applied anthropology, (3) physical anthropology, (4) linguistics, and (5) archaeology. Instruction by staff or visiting specialists. Topics to be announced. Instructor’s permission required. May be repeated. (F,S)

ANT 5318 American Culture and Society (3). Anthropological analysis of the cultures and subcultures of the United States, focusing on the social, ethnic, and regional organizations and their corresponding value and symbolic systems. Prerequisite: Graduate standing or permission of instructor. (S)

ANT 5496 Social Research and Analysis (3). A graduate overview of the scientific methods used in intercultural studies. Includes the philosophical basis of science, research design, and hypothesis testing using both secondary and original data. (S)

ANT 5548 Ecological Anthropology (3). Theories of human adaptation, including environmental determinism, possibilism, cultural ecology, materialism, and evolutionary ecology. Credit for both ANT 3403 and ANT 5548 will not be granted. Prerequisite: Graduate standing or permission of instructor. (S)

ANT 5908 Directed Individual Study (VAR). Supervised readings and/or field research and training. Permission of instructor. (F,S,SS)

ANT 5915 Directed Field Research (VAR). Permission of instructor required. (F,S,SS)

ISS 3330 Ethical Issues in Social Science Research (3). An introduction to the problems of possibilities of ethical premises in the perspectives and work of social scientists. Examination of historical interrelationships between moral philosophies and developing scientific methodologies. Analyses of contemporary social ethicists' attempts to assume moral postures while examining social relations. Case studies involving issues such as nation building in areas of accelerated change including Africa and Asia. (F,S)

SYA 3300 Research Methods (3). An introduction to the scientific method
and applying these inferences to concrete situations. Also acquaints the student with the use of computers in research in the behavioral sciences. (F)

SYA 4354 Historical Sociology (3). The authenticity and meaning of historical data for sociological research. Systematic theories in history are analyzed for their utility in sociology. Particular emphasis on the sociological uses of the comparative method in history.

SYA 4621 Sociology of the 20th Century (3). An examination of the sociological implications evident in the events of our modern world. Heavy reliance is placed on intellectual materials other than social science, especially literature.

SYA 4905 Directed Individual Study (VAR). Supervised readings and/or field research and training. Prerequisite: Permission of instructor. (F, S, SS)

SYA 5135 Sociology of Knowledge (3). The study of the theoretical basis of knowledge and the interrelatedness of knowledge and social factors, particularly as knowledge relates to institutional forms of behavior. (S)

SYA 5909 Directed Individual Study (VAR). Supervised readings and/or field research and training. Prerequisite: Permission of Instructor. (F, S, SS)

SYD 3600 The Community (3). The social group known as the community is identified and analyzed for its distinctive qualities. By distinguishing it from other social groups, its dominating force on the behavior of its members is isolated. Attention is given to the interaction of individuals and groups as they exist within the community. (S)

SYD 3620 Miami: An Urban Laboratory (3). Study of Miami and Dade County using sociological and anthropological techniques and theory, fieldwork assignments, readings and guest speakers. (F)

SYD 4410 Urban Sociology (3). Study of the urban community, with particular attention to the problems associated with urban life. The development of urban societies is reviewed historically, and factors associated with this development are identified. (F)

SYD 4601 Community Organization (3). An intensive study of how communities are organized, with special emphasis on the interactive processes of the various components of a community. Special study, permitting students to concentrate on interest areas, is required.

SYD 4610 Area Studies: Social Structures and Problems (3). Special courses on the social structures and related problems of specific geographical and cultural areas. To be offered at various times.

SYD 4630 Latin American and Caribbean Social Structures (3). Exploration of the types of social structures, statuses, and roles, and the resulting distributions of power and authority in the hemisphere.

SYD 4700 Minorities/Race and Ethnic Relations (3). The study of social groups identified by racial or ethnic characteristics. Particular emphasis is given to the role of minorities in society, and the interactive process resulting from their contact with the majority. Social behaviors of minorities are reviewed and related to institutional structures and their accepted norms. (F, S)

SYD 4704 Seminar in Ethnicity (3). An upper-level seminar, stressing a comparativist sociological approach to the study of two or more racial-ethnic groups. Emphasis on the interrelations of ethnic communities within the same society and the socio-political effects of these interrelations. Prerequisites: SYD 4700 or permission of Instructor. (S)

SYD 4801 Sociological Theories of Gender (3). Examines theories of gender in classical and contemporary sociological theory. Prerequisites: SYA 4010 or permission of Instructor.

SYD 4810 Sociology of Gender (3). An examination of women's and men's roles, statuses, and life opportunities in society. Consideration of current theories of gender inequality. (S)

SYD 4820 Sociology of Men (3). Examines the nature of the social construction of male gender identity in American society. (F)

SYD 5045 Demographic Analysis (3). Study of the processes that determine the size and composition of human populations. Emphasis on demographic transition theory and the antecedents and conse-
quences of differential growth rates throughout the world.

SYG 2000 Introduction to Sociology (3). This course introduces the sociological perspective and method, and the basic areas of sociological interest such as socialization, sex roles, social groups, race and ethnic relations, deviance and social control, social stratification, and urban life. (F.S.S.S.)

SYG 2010 Social Problems (3). An introduction to the concept of a social problem and the approaches used to understand more fully the total dimensions of some specific problems. Special emphasis is given to clarifying one's understanding of the underlying nature of selected social problems, an analysis of those aspects amenable to remedy, and an inventory of the knowledge and skills available. (F.S.S.S.)

SYG 3002 Basic Ideas of Sociology (3). The course introduces the student to the ideas of community, authority, status, alienation, and the sacred, as used in sociological literature. (F.S.S.S.)

SYG 3320 Social Deviancy (Deviant Behavior) (3). The study of behavior that counters the culturally accepted norms or regularities. The social implications of deviancy are reviewed, and theoretical formulations regarding deviant behavior are analyzed. (S.S.S)

SYG 4003 Sociology Through Film (3). Popular and documentary films as data for the analysis of various sociological problems. (F)

SYG 4060 Sociology of Sexuality (3). Applies sociological perspectives to sexual attitudes and behavior, examining various world cultures. Topics include premarital and extramarital sex, sexual orientation, and prostitution. (F.S.)

SYO 3120 Marriage and the Family (3). An introduction to the intensive study of the major relationships of man known as family. The family is studied from the viewpoint of a social unit, and behavior variations of this social unit are analyzed and associated with special functions. Contemporary modifications of the family and the dynamic changes indicated are considered. (F.S.S.S.)

SYO 3250 School and Society (3). A specialized course dealing with the problems of social control within the educational institution. Emphasis is placed upon the role

SYO 4130 Comparative Family Systems (3). The study of family organization and function in selected major world cultures. Emphasis is given to the inter-relationships of the family, the economic system, urbanization, and human development. (F.S.S.S.)

SYO 4200 Sociology of Religion and Cults (3). The study of religion's institutions, their structure and function in various societies. Leadership qualities, participation, and practices, and the relationship of religious institutions to other social institutions are studied. (F)

SYO 4300 Political Sociology (3). The underlying social conditions of political order, political process, and political behavior are explored. Examples are drawn from empirical and theoretical studies of power, elites, social class and socialization. (S.S.S)

SYO 4360 Industrial Sociology (3). Concentrated study of industrialization and the sociological theory involved. Manpower, unemployment, apprenticeship programs, and classification theories are studied. (S.S)

SYO 4410 Sociology of Mental Illness (3). Contemporary issues in mental health and illness from a sociological perspective. Includes differential prevalence, health, and illness behaviors, organization of care, social policy, and social control. (F)

SYO 4420 Comparative Sociology of Health Care Systems (3). Health care policies, organization, and systems from a cross-national perspective, focusing on issues such as access, insurance, corporation, and spiraling costs. (S)

SYO 4530 Social Stratification (Mobility) (3). The study of society structured hierarchically with particular attention to the form and content of the various levels. Problems in the social order and differential human behaviors associated with stratification are analyzed. (S)

SYO 4571 The Problems of Bureaucracy in the Modern World (3). The course deals with the micro-sociological problems of the internal organization of bureaucracies; the relation between bureaucracies and personality; the macro-sociological problems of the emergence of the bureaucratic form, bureaucratization and contemporary life; general problems of affluence; meaningful activity; ways to beat the bureaucracy; and bureaucracy and atrocity. (S)

SYO 4800 Sociology of Criminology (3). Analysis of the social, political, and cultural impact of mass communications. (S)
### Statistics

**Bachelor of Science in Statistics**

**Degree Program Hours: 120**

**Lower Division Preparation**

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

**Lower or Upper Division Preparation:** (17)

- MAC 2311 Calculus I 3
- MAC 2312 Calculus II 5
- MAC 2313 Multivariable Calculus 3
- MAS 3105 Linear Algebra 3
- COP 2210 Introduction to Programming or CGS 2420 FORTRAN 3

**Upper Division Program**

**Required Courses:** (33)

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>STA 3163</td>
<td>Statistical Methods I</td>
</tr>
<tr>
<td>STA 3164</td>
<td>Statistical Methods II</td>
</tr>
<tr>
<td>STA 3321</td>
<td>Introduction to Mathematical Statistics I</td>
</tr>
<tr>
<td>STA 3322</td>
<td>Introduction to Mathematical Statistics II</td>
</tr>
<tr>
<td>STA 4202</td>
<td>Introduction to Design of Experiments</td>
</tr>
<tr>
<td>STA 4234</td>
<td>Introduction to Regression Analysis</td>
</tr>
<tr>
<td>STA 4664</td>
<td>Statistical Quality Control</td>
</tr>
<tr>
<td>ENC 2210</td>
<td>Technical Writing</td>
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</table>

Six additional credit hours of approved statistics courses

Three additional credit hours in an approved statistics, mathematics, or computer science course

A grade of 'C' or higher in each of these courses is necessary for the major.

**Electives**

The balance of the 120 semester hour requirement for graduation may be chosen from any courses in the University approved by the student's advisor.

**Remarks:** The student must consult his or her advisor to determine which courses, in addition to the required courses listed above, satisfy the requirements for a statistics major. The following courses are not acceptable for credit toward graduation, unless a student has passed the course before declaring a statistics major: MAC 2233, STA 1013, STA 3033, STA 3111, STA 3112, STA 2122, STA 3123, STA 3132, and QMB 3150 (College of Business Administration).

### Minor in Statistics

**Lower or Upper Division Preparation:** (3, 4, or 5)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>STA 3111</td>
<td>Statistics I or</td>
</tr>
<tr>
<td>STA 2122</td>
<td>Introduction to Statistics I or</td>
</tr>
<tr>
<td>STA 3132</td>
<td>Business Statistics or</td>
</tr>
<tr>
<td>STA 2312</td>
<td>Calculus II</td>
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</table>

**Upper Division Program:** (12)

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>STA 3163</td>
<td>Statistical Methods I</td>
</tr>
<tr>
<td>STA 3164</td>
<td>Statistical Methods II</td>
</tr>
<tr>
<td>STA 3321</td>
<td>Introduction to Mathematical Statistics I</td>
</tr>
<tr>
<td>STA 3322</td>
<td>Introduction to Mathematical Statistics II</td>
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<tr>
<td>STA 4202</td>
<td>Introduction to Design of Experiments</td>
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</tr>
<tr>
<td>ENC 2210</td>
<td>Technical Writing</td>
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</tbody>
</table>

Two additional courses from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STA 3033</td>
<td>Introduction to Probability and Statistics for CS or</td>
</tr>
<tr>
<td>STA 3321</td>
<td>Introduction to Mathematical Statistics I</td>
</tr>
<tr>
<td>STA 3322</td>
<td>Introduction to Mathematical Statistics II</td>
</tr>
<tr>
<td>STA 4202</td>
<td>Introduction to Design of Experiments</td>
</tr>
<tr>
<td>STA 4234</td>
<td>Introduction to Regression Analysis</td>
</tr>
<tr>
<td>STA 4502</td>
<td>Introduction to Nonparametric Methods</td>
</tr>
</tbody>
</table>

### SYP 4410 Social Conflict (3).

The study of conflict in society and its place in social relationships. A study of causes and resolutions, with particular emphasis on methods of resolution and their influence on social change. (F)

### SYP 4421 Man, Society, and Technology (3).

The study of contemporary society, man's role in it, and effects of technological change. A study of interrelationships, with special attention given to vocational study and instruction within the framework of the relationships perceived. (S)

### SYP 4441 Sociology of the Underprivileged Societies (3).

An examination of the various theories concerning what is happening in the 'under-developed world.' The political, social, and economic events of these societies are subjected to sociological analysis.

### SYP 4562 Domestic Violence (3).

Applies sociological perspectives to the topic of domestic violence. Analyzes cultural roots and social structures that promote and reinforce violence in intimate relationships. Prerequisites: SYG 2000 or ANT 2000. (F)

### SYP 4600 Sociology of Art and Literature (3).

This course approaches the question of art and society through an analysis of: the social production of art; the relationship between imagination and society; the role of the artist; and the ideological impact of aesthetic theory.

### SYP 4601 Symbols and Society (3).

An analysis of the effect of culture on the individual and on society. The roles of popular and intellectual culture will be examined.

### SYP 4730 Sociology of Aging (3).

The social impact of aging on individual and group interaction patterns, particularly in the areas of retirement, family relations, community participation, and social services. Explores the major sociological theories of aging in light of current research. (F)

### SYP 4740 Sociology of Death (3).

An introduction to 'death' as a social phenomenon. Attention given to various approaches which systematically study death, with primary emphasis given to the sociological approach. Major attention is given to an exploration of attitudes toward death, and an assessment of the implications for the respective groups involved.
Undergraduate Catalog

STA 4664 Statistical Quality Control 3

STA 3321 has MAC 2313 as a prerequisite.

A grade of 'C' or higher in each of these courses is necessary for the minor.

Remarks: No courses in statistics, mathematics or computer science can be applied to more than one minor in these disciplines, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a course is required both in a major and a minor, the student should see his or her advisor for an appropriate substitution for the requirement of the minor.

Certificate Program in Actuarial Studies

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

Course Description

Definition of Prefixes

MAP - Mathematics, Applied; STA - Statistics.

MAP 5117 Mathematical and Statistical Modeling (3). Study of ecological, probabilistic, and various statistical models. Prerequisite: MAC 2313, COP 2210 or CGS 2420, MAS 3105; and STA 3322 or STA 3164 or STA 3033.

STA 1013 Statistics for Social Services (3). This is an elementary course in statistics, covering graphical and numerical condensation of data as well as the most basic parametric and non-parametric methods. Emphasis is placed on the interpretation of statistical results, rather than on ways to analyze experimental data. Prerequisite: MAC 2132 or MGSP 1202 or Junior standing. (F.S.S.S)

STA 1061 Introduction to SPSS for Data Analysis (1). Data coding and entry for use on the mainframe. How to input data, create variables, select subsets of data. Use procedures such as: PRINT, FORMAT, MEANS, FREQ, SUMMARY, TEST, CORR, UNIVARIATE and PLOT. Prerequisite: Basic statistics, DCL and EDIT.

STA 2122-STA 3123 Introduction to Statistics I and II (3-3). A course in descriptive and inferential statistics. Topics include: empirical and theoretical probability distributions; point and interval estimation; hypothesis testing; analysis of variance, regression, correlation, and basic non-parametric tests. Credit not allowed for both STA 3112 and STA 3123. Subsequent credit for STA 3123 or 3111 will not be granted for STA 2122. Prerequisite: MAC 2132 or MGF 1202 or Junior standing. (F.S.S.S)

STA 3033 Introduction to Probability and Statistics for CS (3). Basic probability laws, probability distributions, basic sampling theory, point and interval estimation, tests of hypotheses, regression and correlation. Minitab will be used in the course. Prerequisite: MAC 2132. (F.S.S.S)

STA 3060L Statistics Laboratory (1). A laboratory course designed to illustrate important statistical concepts through experiments. Data are analyzed using statistical software packages. Prerequisite or Corequisite: A statistics course.

STA 3111 Statistics I (4). Descriptive statistics, frequency distributions, probability distributions, point and interval estimation, hypothesis testing, one-way analysis of variance, correlation. Subsequent credit for STA 2122 or STA 3112 will not be granted. Prerequisite: MAC 2132 or MGF 1202 or Junior standing. (F.S.S.S)

STA 3112 Statistics II (2). Analysis of variance, non-parametric methods, linear regression, analysis of categorical data. Computer software will be used. Subsequent credit for STA 3123 will not be granted. Prerequisite: STA 3111. (F.S.S.S)

STA 3132 Business Statistics (3). Starting with an introduction to probability, the course provides an introduction to statistical techniques used in management science. It includes descriptive statistics, probability distributions, estimation and testing of hypotheses. Subsequent credit for STA 2122 or STA 3111 will not be granted. Prerequisites: MAC 2132 or MGF 1202 or Junior standing. (F.S.S.S)

STA 3163-STA 3164 Statistical Methods I and II (3-3). This course presents tools for the analysis of data. Specific topics include: use of normal distribution, tests of means, variances and proportions; the analysis of variance and covariance (including contrasts and components of variance models), regression, correlation, sequential analysis, and non-parametric analysis. Prerequisite: MAC 2132 or a course in statistics. (F.S)

STA 3321-STA 3322 Introduction to Mathematical Statistics I and II (3-3). This course presents an introduction to the mathematics underlying the concepts of statistical analysis. It is based on a solid grounding in probability theory, and requires a knowledge of single and multivariable calculus. Specific topics include the following: basic probability concepts, random variables, probability densities, expectations, moment generating functions, sampling distributions, decision theory, estimation, hypothesis testing (parametric and non-parametric), regression, analysis of variance, and design of experiments. Prerequisite: MAC 2313. (F.S)

STA 3905 Independent Study (VAR). Individual conferences, assigned readings, and reports on independent investigations.

STA 3930 Special Topics (VAR). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

STA 3949 Cooperative Education in Statistics (1-3). One semester of either part-time or full-time work in an outside organization. Limited to students admitted to the Co-op program. A written report and supervisor evaluation are required of each student. Prerequisite: 2 courses in statistics and permission of Chairperson.

STA 4102 Introduction to Statistical Computing (3). Data manipulation and statistical procedures using popular software, simulation, and statistical algorithms. Prerequisites: STA 3164 or STA 3123 or STA 3112, and COP 2210 or CGS 2420.

STA 4173-HSC 4510 Statistical Applications in Health Care (3). A course in descriptive and inferential statistics for the Health Sciences. Topics include probability distributions, point and interval estimation, hypothesis testing, regression and correlation, and contingency table analysis. Prerequisite: STA 1013 or equivalent college mathematics course.

STA 4182 Statistical Models (3). This is a specialized course in the use of
statistical models, to represent physical and social phenomena. The emphasis is on providing tools which will allow a researcher or analyst to gain some insight into phenomena being studied. An introductory knowledge of probability theory and random variables is assumed. Specific topics include: introduction to discrete and continuous probability distributions, transformation of variables, approximation of data by empirical distributions, central limit theorem, propagation of moments, Monte Carlo simulation, probability plotting, testing distributional assumptions. Prerequisites: STA 3033 or STA 3321.

STA 4202 Introduction to Design of Experiments (3). Completely randomized, randomized block, Latin square, factorial, nested and related designs. Multiple comparisons. Credit will not be given for both STA 4202 and STA 5206. Prerequisite: STA 3322 or STA 3164 or STA 3033 or STA 3163 and STA 3321.

STA 4234 Introduction to Regression Analysis (3). Multiple and polynomial regression, residual analysis, model identification and other related topics. Credit will not be given for both STA 4234 and STA 5236. Prerequisite: STA 3164 or STA 3123 or STA 3112.

STA 4502 Introduction to Nonparametric Methods (3). Sign, Mann-Whitney U, Wilcoxon signed rank, Kruskal-Wallis, Friedman and other distribution-free tests. Rank correlation, contingency tables and other related topics. Credit for both STA 4502 and STA 5505 will not be granted. Prerequisite: First course in statistics.

STA 4664 Statistical Quality Control (3). This course presents the simple but powerful statistical techniques employed by industry to improve product quality and to reduce the cost of scrap. The course includes the use and construction of control charts (means, percentages, number defectsives, ranges) and acceptance sampling plans (single and double). Standard sampling techniques such as MIL STD plans will be reviewed. Prerequisite: Introductory course in statistics.

STA 4905 Independent Study (VAR). Individual conferences, assigned readings, and reports on independent investigations.

STA 4949 Cooperative Education in Statistics (1-3). One semester of either part-time or full-time work, in an outside organization. Limited to students admitted to the Co-op program. A written report and supervisor evaluation are required of each student. Prerequisite: STA 3322, STA 3164 and permission of Chairperson.

STA 5106 Intermediate Statistics I (3). Power, measures of assoc., measurement, ANOVA, one-way and factorial, between and within subjects expected mean squares, planned comparisons, o-priori contrasts, fixed, random, mixed models. This course may be of particular interest to behavioral sciences. Prerequisites: STA 3111 and graduate standing. (F)

STA 5107 Intermediate Statistics II (3). Correlation and regression both simple and multiple, general linear model, analysis of covariance, analysis of nominal data, analysis of categorical data. This course may be of particular interest to behavioral sciences. Prerequisite: Permission of instructor. (S)


STA 5206 Design of Experiments I (3). Design and analysis of completely randomized, randomized block, Latin square, factorial, nested and related experiments. Multiple comparisons. Credit for both STA 4202 and STA 5206 will not be granted. Prerequisite: STA 3322 or STA 3164 or STA 3033 or STA 3163 and STA 3321.

STA 5207 Topics in Design of Experiments (3). This applied course in design of experiments covers topics such as split-plot design, confounding, fractional replication, incomplete block designs, and response surface designs. Prerequisite: STA 5206.

STA 5236 Regression Analysis (3). Simple, multiple and polynomial regression, analysis of residuals, model building and other related topics. Credit for both STA 4234 and STA 5236 will not be granted. Prerequisites: STA 3164 or STA 3123 or STA 3112, or STA 6167.

STA 5446-STA 5447 Probability Theory I and II (3-3). This course is designed to acquaint the student with the basic fundamentals of probability theory. It reviews the basic foundations of probability theory, covering such topics as discrete probability spaces, random walk, Markov Chains (transition matrix and ergodic properties), strong laws of probability, convergence theorems, and law of iterated logarithm. Prerequisite: MAC 2313.

STA 5505 Nonparametric Methods (3). Distribution-free tests: sign, Mann-Whitney U, Wilcoxon signed rank, Kruskal-Wallis, Friedman, etc. Rank correlation, contingency tables and other related topics. Credit for both STA 4502 and STA 5505 will not be granted. Prerequisite: STA 3322.

STA 5593 Stochastic Processes for Engineers (3). Probability and conditional probability distributions of a random variable, bivariate probability distributions, multiple random variables, stationary processes, Poisson and normal processes. Prerequisites: STA 3033, MAC 2313, MAP 2302.

STA 5826 Stochastic Processes (3). This course is intended to provide the student with the basic concepts of stochastic processes, and the use of such techniques in the analysis of systems. Subjects include: Markov Processes, queuing theory, renewal processes, birth and death processes, Poisson and Normal processes. Applications to system reliability analysis, behavioral science, and natural sciences will be stressed. Prerequisite: STA 5447.

STA 5906 Independent Study (VAR). Individual conferences, assigned reading, and reports on independent investigation.
Theatre and Dance

Therald Todd, Associate Professor and Chairperson
Lee Brooke, Associate Professor
Joanne Brown, Instructor
Phillip Church, Associate Professor
Robert Jones, Instructor
Douglas Molash, Assistant Professor
Leslie Neal, Associate Professor
Wayne Robinson, Assistant Professor
Brian Schriner, Instructor
Andrea Seidel, Associate Professor
Marilyn Skow, Associate Professor
Leslie Ann Timlick, Assistant Professor

Bachelor of Fine Arts in Theatre

Degree Program Hours: 128

The goal of the theatre program is to provide intensive theatre training through classes and productions conducted with professional theatre discipline and the highest possible aesthetic standards. In addition to completion of course work, theatre majors are required to participate in all of the major productions presented while the student is enrolled in the Theatre Program.

Students will complete the core courses and select a specialization in either Acting or Production.

The degree requirements represent a four year program. Upper division transfers must have their lower division preparation evaluated by the department and will be advised accordingly.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

For students for whom English is a second language must have a minimum TOEFL score of at least 550 plus an interview with department personnel to determine adequacy of English writing and speaking skills for the major.

Required Courses: (47)

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>THE 1020</td>
<td>Freshman Theatre Seminar</td>
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<tr>
<td>TPA 2210</td>
<td>Stagecraft I</td>
<td>3</td>
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<td>TPA 2010</td>
<td>Introduction to Scenic and Lighting Design</td>
<td>3</td>
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<td>TPA 3230</td>
<td>Stage Design I</td>
<td>3</td>
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<td>Technical Theatre Lab III</td>
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<td>Technical Theatre Lab IV</td>
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<tr>
<td>TPP 2111</td>
<td>Acting I</td>
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<td>TPP 2710</td>
<td>Theatre Voice I</td>
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<td>TPP 2810</td>
<td>Theatre Movement I</td>
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<td>TPP 1120</td>
<td>Introduction to Performance</td>
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<tr>
<td>TPP 3310</td>
<td>Directing I</td>
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<td>TPP 3650</td>
<td>Playscript Analysis</td>
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<td>THE 4110</td>
<td>Theatre History I</td>
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<td>THE 4111</td>
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<td>THE 4970</td>
<td>Senior Project I</td>
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<td>THE 4971</td>
<td>Senior Project II</td>
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<tr>
<td>THE 4370</td>
<td>Modern Dramatic Literature</td>
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<td>THE 4930</td>
<td>Senior Seminar</td>
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Additional required courses for the Acting specialization: (18)

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<td>TPP 3112</td>
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<tr>
<td>TPP 4114</td>
<td>Acting IV</td>
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<tr>
<td>TPP 4920</td>
<td>Actor's Workshop I</td>
<td>3</td>
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<tr>
<td>TPP 3711</td>
<td>Theatre Voice II</td>
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<td>TPP 3511</td>
<td>Theatre Movement II</td>
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<td>TPP 3164</td>
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Additional required courses for the Production specialization: (18)

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<td>TPA 3061</td>
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<td>TPA 3220</td>
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<td>TPA 4061</td>
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<td>TPA 2211</td>
<td>Stagecraft II</td>
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<td>TPA 4221</td>
<td>Stage Lighting II</td>
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<tr>
<td>TPA 4231</td>
<td>Stage Costuming II</td>
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<tr>
<td>THE 4950</td>
<td>Theatre Internship</td>
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</tr>
<tr>
<td>TPA 3930</td>
<td>Special Topics in Technical Production and/or Research</td>
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<tr>
<td>THE 4916</td>
<td>Total Credits for the Major</td>
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</tr>
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</table>

Bachelor of Arts in Dance

Degree Program Hours: 120

The philosophy of the dance program is to provide the highest standards of academic and technical training while fostering individual creativity, intellectual growth and humanistic ideals to meet the challenges of the 21st Century in a multicultural society. The program offers a four year curriculum of comprehensive dance technique and theory classes, complemented by a secondary emphasis in a dance related field such as dance education, dance history, dance ethnology or preparation for advanced degree work in a selected area of dance such as dance therapy. The secondary emphasis is determined through faculty advisement. Upper division transfer students must have their lower division preparation evaluated by the department.

Students interested in majoring in dance and who meet the admission requirements of the University are automatically accepted as potential dance majors. While no auditions are required prior to admittance to the University, certain standards of performance are required by the dance faculty before the student is allowed to declare a major in dance. Students are evaluated during the first week of classes each term to determine appropriate technique level. In addition, all students applying for acceptance into the major must have met all lower division requirements including CLAST.

INDAM - Intercultural Dance and Music Institute and the FIU Dance Ensemble-The student Performance Group are based at the University Park Campus.

Required Courses: (55)

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>Ballet Techniques I</td>
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<td>DAA 1201</td>
<td>Ballet Techniques I-2</td>
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</tr>
<tr>
<td>DAA 2202</td>
<td>Ballet Techniques II-2</td>
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</tr>
<tr>
<td>DAA 2203</td>
<td>Ballet Techniques II-3</td>
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<tr>
<td>DAA 1100</td>
<td>Modern Dance Techniques I</td>
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<td>Modern Dance Techniques I-2</td>
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<td>DAA 2102</td>
<td>Modern Dance Techniques II</td>
<td>2-3</td>
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<td>DAA 2103</td>
<td>Modern Dance Techniques II-2</td>
<td>2-3</td>
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<tr>
<td>DAA 3204</td>
<td>Ballet Techniques III</td>
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<tr>
<td>DAA 3104</td>
<td>Modern Dance Techniques III</td>
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</table>
Undergraduate 100
(2-3).

DAA 3343 Cultural Dance Forms 1
DAA 3205 Ballet Techniques III-2
or
DAA 3105 Modern Dance Techniques III-2 3
or
DAA 3343 Cultural Dance Forms 1
DAA 4206 Ballet Techniques IV or
DAA 4106 Modern Dance Techniques IV 3
or
DAA 3343 Cultural Dance Forms 1
DAA 4207 Ballet Techniques IV-2 or
DAA 4107 Modern Dance Techniques IV-2 3
or
DAA 3343 Cultural Dance Forms 1
DAN 1603 Music for Dance 2
DAA 2700 Dance Composition I 2
DAN 3420 Laban Movement Analysis 2
DAA 3702 Dance Composition III 2
DAA 4111 Dance History I 3
DAA 4112 Dance History II 3
DAA 3420 Dance Repertory 2
DAA 4512 Dance Production 2
DAA 4970 Senior Thesis 2
DAA 4932 Dance Ethnology or
DAN Latin American and Caribbean Dance 3
or
DAN 4171 Dance Philosophy and Criticism 1

Notes: Cultural Dance Forms may be substituted two times or more, subject to advisement.
DAA 3703 Dance Composition IV now becomes an elective.

Specialization Electives: (min 12)
With Dance faculty advisor’s approval the student will select electives which will prepare him/her for a career in a dance related field. The electives would constitute a specialization in the selected area. The exact number of credits needed to complete the specialization depends on the specialization, but the minimum allowed by the dance program is 12.

More credits may be necessary, depending on the nature of the specialization. Each student will receive individual advisement on specialization requirements.

A grade of ‘C’ or higher is necessary in all required courses for graduation.

Total credits for the major: 67

Minor in Dance
The Minor in Dance is designed to meet the needs of the Liberal Arts student who wants to pursue dance in order to increase his/her creative development and artistic awareness, and for those students who feel that dance is closely related to or on important extension of facet of their major discipline.

Requirements for Minor
Twenty credits minimum
Fourteen credits in Dance Technique
Six credits in other Dance courses
Ten credits must be taken of FIU
Ten credits must be upper division

Minor in Theatre
Required Courses (24)
THE 2000 Theatre Appreciation 3
TPP 2100 Introduction to Acting 3
THE 4370 Modern Dramatic Literature 3
TPA 2210 Stagecraft 3
TPA 2290L Theatre Electives (upper division) 11

Theatre minors will not be allowed to take TPP 2110 Acting I.

Course Descriptions

Definition of Prefixes
DAA-Dance Activities; DAA-Dance; ORI-Oral Interpretation; SPC-Speech Communication; TEE- Theatre; TPA- Theatre Production and Administration; TPP-Theatre Performance and Performance Training.

COM 3 Intercultural/Interracial Communication (3). How people communicate cross-culturally, interculturally and intraculturally.

DAA 1100 Modern Dance Techniques I (2). Development of Techniques and understanding of the art form of contemporary dance. May be repeated.

DAA 1101 Modern Dance Techniques I-2 (2). A continuation of Modern Dance Techniques I with emphasis on vocabulary, movement, rhythm and alignment. May be repeated. Prerequisite: DAA 1100 or permission of instructor.

DAA 1200 Ballet Techniques I (2). Development of Techniques and understanding of ballet. May be repeated.

DAA 1201 Ballet Techniques I-2 (2). A continuation of Ballet Techniques I with an emphasis on vocabulary, movement skill and alignment. May be repeated. Prerequisite: DAA 1200 or permission of instructor.

DAA 1500 Jazz Dance Techniques (2). Development of the dance and understanding of jazz dance. May be repeated.

DAA 2102 Modern Dance Techniques II (2-3). A continuation of basic Techniques and understanding of the art form of contemporary dance. Prerequisite: DAA 1100 or permission of instructor. May be repeated.

DAA 2103 Modern Dance Techniques II-2 (2-3). A continuation of Modern Dance Techniques II with further emphasis on style and phrasing. Prerequisite: DAA 2102 or permission of instructor.

DAA 2202 Ballet Techniques II (2-3). A continuation of Ballet Techniques II with increasing complexity of combinations. Emphasis on correct execution of basics and musicality. May be repeated. Prerequisite: DAA 2202 or permission of instructor.

DAA 2203 Ballet Techniques II-2 (2-3). A continuation of the basic Techniques and understanding of ballet. Prerequisite: DAA 2202 or permission of instructor. May be repeated.

DAA 2501 Jazz Dance Techniques II (2). A continuation of Jazz I with emphasis on quickness and musicality when executing complex combinations of movements.

DAA 2600 Tap (2). Designed for students interested in learning the skills and Techniques of tap dancing.

DAA 2700 Dance Composition I (2). A study of the principles of composition-emphasis on improvisation to explore structure and form in dance. Prerequisite: Permission of instructor.

DAA 2701 Dance Composition II (2). A continuation of Composition I with an emphasis on exploring movement potential and structuring of dance forms. Prerequisite: DAA 2700 or permission of instructor.
DAA 3104 Modern Dance Techniques III (3). A continuation of Modern Dance I and II with an emphasis on skills in movement style and phrasing necessary to perform modern dance repertory. Prerequisite: DAA 2102 or permission of instructor.

DAA 3105 Modern Dance Techniques III-2 (3). A continuation of Modern Dance Techniques III with an emphasis on skills in movement style and phrasing necessary to perform modern dance repertory. Prerequisite: DAA 3104 or permission of instructor.

DAA 3204 Ballet III (3). A continuation of Ballet I & II with an emphasis on developing strength & coordination in more complex movement. Additional work on phrasing, quality of movement, musicality and performance style. Prerequisite: DAA 2202 or permission of instructor.

DAA 3205 Ballet Techniques III-2 (3). A continuation of Ballet Techniques III with an emphasis on strength and form. Introduction of pointe work. Center practice in balance, jumps, beats and turns. Prerequisite: DAA 3204 or permission of instructor.

DAA 3220 Pointe Techniques (1). Introduction of fundamentals for development of pointe techniques. May be repeated. Prerequisite: Permission of instructor.

DAA 3343 Cultural Dance Forms (3). An in-depth focus on specific cultural dance styles (Haitian, Afro-Cuban, etc.) to vary each semester. Studio course. May be repeated.

DAA 3420 Dance Repertory (2). The study and practice of works in repertory. May be repeated. Prerequisite: Permission of instructor.

DAA 3702 Dance Composition & Improvisation III (2). A further exploration of choreography for the group form. Students will be required to take a concept and complete a work for showing and critique. Prerequisite: DAA 3701 or permission of instructor.

DAA 3703 Dance Composition & Improvisation IV (2). Students work on extended choreographic projects with the eye toward developing material for their senior project. Prerequisite: DAA 3702 or permission of instructor.

DAA 3950 Dance Ensemble (1). An auditioned performing and production laboratory. Permission of instructor.

DAA 4106 Modern Dance Techniques IV (3). Advanced modern dance techniques with the major focus on dance as an art form using the body as a medium of expression. Prerequisite: DAA 3104 or permission of instructor.

DAA 4107 Modern Dance Techniques IV-2 (3). A continuation of Modern Dance Techniques IV with the major emphasis on performance skills. Prerequisite: DAA 4106 or permission of instructor.

DAA 4206 Ballet Techniques IV (3). Further development of strength and form with emphasis placed on perfecting the execution of the classical ballet techniques. Prerequisite: DAA 3204 or permission of instructor.

DAA 4207 Ballet Techniques IV-2 (3). A continuation of Ballet Techniques IV with an emphasis on developing individual performance styles. Prerequisite: DAA 4206 or permission of instructor.

DAA 4362 Spanish Dance (2). This course explores the basics of the three theatre styles of Spanish dance.

DAA 4363 Spanish Dance II (3). A continuation of Spanish Dance I stressing the development of musicality while working with a variety of basic rhythms. Arm and upper body strength and style will be emphasized as well as footwork techniques. Prerequisites: DAA 4362 or permission of instructor.

DAA 4364 Spanish Dance III (3). A continuation of Spanish Dance II, stressing the development of musicality while working with both basic and more complex flamenco rhythms. Elements of flamenco choreography are also explored. Prerequisite: DAA 4363.

DAA 4502 Jazz Dance Techniques III (2-3). A continuation of jazz dance techniques and skills with increased emphasis on developing complex dance combinations and full routines.

DAN 1603 Music for Dance (2). The connection of musical structure and body movement will be explored in improvisational dance composition exercises. The basic elements of rhythm, time, and meter will be studied.

DAN 2100 Introduction to Dance (3). An overview of dance from a variety of cultural and traditional perspectives. Through film, lecture, and movement, this course explores the diverse ways in which we organize and interpret our life experience as human beings through dance.

DAN 3420 Laban Movement Analysis (2). An introduction to movement analysis. Prerequisites: DAA 111-2, and Labanotation.

DAN 3820 Introduction to Dance/Movement Therapy (1). An introduction to the history, theory, and practice of Dance/Movement Therapy. Students learn how this medium can further the emotional, cognitive, and physical integration of the individual.

DAN 3910 Latin American Caribbean Dance and Culture (3). Research, fieldwork, and studio practice related to the investigation of the dance and culture of Latin America and the Caribbean.

DAN 4111 Dance History I (3). An introduction to the history of non-western, cultural dance forms from tribal to modern.

DAN 4112 Dance History II (3). A survey of the development of dance in the West from ancient Greece to the present day. Prerequisite: DAN 4111 or permission of instructor.

DAN 4171 Philosophy and Criticism of Dance (3). An exploration of the major philosophical and critical theories of the art of the dance within a broad socio-historical context.

DAN 4512 Dance Production (2). This course prepares dancers for all aspects of dance concert production including lighting, costume, props, set designs, budget management, and publicity.

DAN 4910 Research (1-5). Supervised individual investigation of special research projects. Credit will vary with the nature and scope of the project. May be repeated.

DAN 4932 Dance Ethnology (3). A special topics course which will study a specific dance culture from an historical, sociological and anthropological viewpoint. Topic will vary from semester to semester.

DAN 4970 Senior Thesis (2). Preparation of a comprehensive final work in the student's area of emphasis under the direction of a faculty advisor. Prerequisite: Permission of instructor, dance majors only.
ORI 3000 Basic Oral Interpretation (3). Development of the voice as an instrument for expressive interpretation of literature.

ORI 3003 Intermediate Oral Interpretation (3). A continuation of the basic techniques of oral interpretation with emphasis on program development. Programs will include poetry, prose, and drama. Prerequisite: ORI 3000.

PGY 3020 Introduction to Film-Making (3). For the beginning student of film making. Survey of the origins and development of cinematography as an art form. Presentation and technical analysis of selected films.

SPC 2  Voice and Diction (3). Effective voice production, articulation, acceptable pronunciation, accent reduction, intonation, rhythm and phrasing.

SPC 2062 Communication for Business (3). A communication course that emphasizes oral communication skills necessary for the business and professional communities. Concentration on interviewing, public speaking, problem-solving, and leadership skills.

SPC 2600 Public Speaking (3). Study of the principles of ethical and effective public speaking, with practice in the construction and delivery of original speeches before an audience.

SPC 3210 Communication Theory (3). Comprehensive introduction to the study of human communication processes including verbal and nonverbal modalities. Key historical and contemporary definitions and concepts in communication theory are reviewed.

SPC 3301 Interpersonal Communication (3). Fundamental principles and terms of human communication study in the interpersonal context. Practical application of definitions, models, and communication rules and competence discussed with emphases on a variety of relational stages and types.

SPC 3513 Argumentation and Debate (3). Lectures and activities concerned with audience-centered reasoning. Topics include: Nature of argument, analysis, reasoning, evidence, values, and building and refuting arguments. Prerequisite: SPC 2600 or permission of instructor.

SPC 3514 Argumentation and Debate II (3). Study of all styles of formal and informal debate. Emphasis on construction and use of the brief, debate strategy and delivery. Prerequisites: SPC 2600, SPC 3513 and permission of instructor.

SPC 4 Corporate Communication Theory and Leadership Dynamics (3). Emphasis on oral communication and leadership skills that are essential for the business community.

THE 1020 Freshman Theatre Seminar (3). An orientation to the study, theory, and practice of theatre for freshman theatre majors. It provides the foundation for theatre study at more advanced levels. Prerequisite: Permission of instructor.

THE 2000 Theatre Appreciation (3). A study of theatre: process and product, introducing the past of theatre, its literature and traditions; and the means by which theatre is produced: acting, directing and visual design. (F,S)


THE 2820 Creative Dramatics (3). The study of informal drama activity with children. Techniques of improvisation, sense recall, music, and movement are employed.

THE 4110 Theatre History I (3). The development of the theatre from its origins to the early 19th century. (F)

THE 4111 Theatre History II (3). The development of the theatre from the early 19th century to the present. (S)

THE 4370 Modern Dramatic Literature (3). Intensive play reading and discussion from early modern through contemporary. (S)

THE 4916 Research (1-5). Supervised individual investigation of special research projects. Credit will vary with the nature and scope of the project. May be repeated.

THE 4930 Senior Seminar (2). Theories of theatre presentation. Reading, seminar presentations and discussions cover the theories of playwriting, dramatic forms, acting, directing, design and theatrical criticism. Prerequisite: Theatre major. (S)

THE 4950 Theatre Internship (1-15). Supervised internship in a professional company in acting, directing, stage management, design, technical theatre, or theatre management.

THE 4970 Senior Project I (1). Preparation of a final creative project in the student's area of emphasis under the direction of a department chairperson. Theatre majors only. Prerequisite: Permission of Instructor.

THE 4971 Senior Project II (1). Final preparation and performance of presentation of a creative project in the student's area of emphasis under the direction of a faculty advisor. Theatre majors only. Prerequisite: THE 4970.

TPA 2101 Introduction to Scenic and Lighting Design (3). An introduction to the creative process of bringing scenery and lighting to the stage. Includes script analysis and rendering techniques. Prerequisite: TPA 2210. (F)

TPA 2210 Stagecraft I (3). An introduction to construction techniques used in stage. Direct experience with wood and metal working tools, blueprint reading, and various materials including wood, metal, plastics and fabrics. Lecture and laboratory. Prerequisite: Prior arrangement with advisor. (F,S)

TPA 2211 Stagecraft II (3). Advanced problems in the construction and movement of scenery, properties, and special effects. Prerequisite: TPA 3200.

TPA 2290L Technical Theatre Lab I (1). Supervised crew work in construction, painting, lighting, costuming, and running major productions. Required of Theatre majors. (F,S)

TPA 2291L Technical Theatre Lab II (1). Supervised crew work. Required of Theatre majors. (F,S)

TPA 2292L Technical Theatre Lab III (1). Supervised crew work. Required of Theatre majors. (F,S)

TPA 3060 Scenic Design I (3). Fundamentals of designing effective settings for the play. Discussion and practice in analysis, research, the creation of appropriate and exciting environments for the actor, and basic skills in rendering and model making. Prerequisite (for Theatre majors): TPA 2210.

TPA 3061 Approaches to Design for the Stage (3). Nontraditional approaches to the development of design elements for the stage. Prerequisites: TPA 3230, and TPA 2010.
TTP 3071 Stage Rendering (3). An introduction to the techniques used in rendering scenery and costume design concepts. Recommended as preparation for TTP 3060 and TTP 4230.

TTP 3220 Stage Lighting (3). Familiarization with stage lighting equipment, purposes, and aesthetics of stage lighting; development of an approach to designing lighting; practical experience in the use of equipment. Lecture and laboratory.

TTP 3230 Stage Costuming I (3). Fundamentals of costume design. Study of period, character, and concept. Familiarization with fabrics and techniques of construction and trim. (F)

TTP 3250 Stage Make-up (3). Fundamentals of straight and character makeup. Use of greasepaint and three dimensional techniques. (S)

TTP 3293L Technical Theatre Lab IV (1). Supervised crew work. Required of Theatre majors. Prerequisite: TTP 2292L (F,S)

TTP 3601 Stage Management (3). A practical course in the methods and procedures used by the stage manager. It includes the study of the working organizational function of the stage manager in theatre, dance, and other performance situations.

TTP 3930 Special Topics in Technical Production (1-3). Lecture-lab studies in particular areas of theatre production, one area per semester, including stage management, prop making, sound design, special effects.

TTP 4061 Scenic Design II (3). Advanced skills in setting the mood of, and creating movement through a theatrical space. Emphasis will be placed upon rendering techniques and model making. Prerequisite: TTP 3060.

TTP 4221 Stage Lighting II (3). Advanced work in lighting of the stage. Emphasis is on practical training and experience through drafting of light plots accompanied by discussion and evaluation. Prerequisite: TTP 3220.

TTP 4231 Stage Costuming II (3). Advanced skills in designing, rendering, and construction of costumes. Includes pattern making and charting the show. Prerequisite: TTP 3230.

TTP 4400 Theatre Management (3). Survey of all aspects of theatre administration: budget planning and maintenance; public relations; box office and house management; unions and contracts.

TTP 1120 Introduction to Performance Process (2). An introduction to the acting process using an improvisational approach. (S)

TTP 2100 Introduction to Acting (3). An introduction to the acting process. Self awareness, physical and vocal control, basic stage techniques and beginning scene work will be studied. Intended for the student with little or no acting experience. (F,S)

TTP 2110 Acting I (3). Development and training of basic skills: use of self, stage terminology, stage voice and movement. Intended for the serious theatre student. Prerequisite: Permission of instructor. Majors only. (F)

TTP 2111 Acting II (3). A continuation of the development and training of basic skills: improvisation, scripted dialogues, voice and movement. Use of self in scene work. Prerequisite: TTP 2110 and TTP 3283 and permission of instructor. (S)

TTP 2510 Theatre Movement I (2). A study of movement for the actor through improving the mind-body connection, alignment, relaxation, imagination, centering, flexibility and use of space. Corequisite: TTP 2110. (F)

TTP 2710 Theatre Voice I (2). A study of voice production for the actor, the vocal apparatus, breathing, placement, range, resonance and connection to emotion. Corequisite: TTP 2110. (F)

TTP 3112 Acting III (3). Continuation of the development and training of acting skills with an emphasis on characterization. Prerequisites: TTP 2111 and permission of instructor. (F)

TTP 3164 Theatre Voice and Movement III (2-3). Intensive training in effort-shape techniques leading to a more elaborate physical building of the character. Prerequisite: TTP 2713. Corequisite: TTP 3112. (F)

TTP 3165 Theatre Speech and Movement IV (2-3). A continuation of the vocal and physical training required in TTP 3284 with an emphasis on the handling of Shakespearean verse and gaining professional skills in stage combat and period dance. Prerequisite: TTP 3284. Corequisite: TTP 3113.

TTP 3250 Musical Theatre Workshop I (3). An introduction to Musical Comedy performance; integration of the dramatic, musical and movement components will be studied through work on selected scenes.

TTP 3310 Directing (1). Basic principles of play direction; including problems of selecting, analyzing, casting, and rehearsing plays. Prerequisite: TTP 2111 and TTP 3650. (S)

TTP 3511 Theatre Movement II (2). A continuation of the work from Theatre Movement I with an emphasis on the physical approaches to creating a character. Prerequisite: TTP 2510. Corequisite: TTP 2111. (S)

TTP 3650 Playscript Analysis (3). Detailed playscript examination for directors, actors and designers, focusing on identification of those elements upon which successful theatre production depends. (F)

TTP 3711 Theatre Voice II (2). A continuation of the vocal production work from Theatre Voice I with an emphasis on standard speech and removing regionalisms. Prerequisite: TTP 2710. Corequisite: TTP 2111. (S)

TTP 3730 Dialects (3). A study of dialects common to western theatre.

TTP 4114 Acting IV (3). Continuation of the development and training of acting skills with emphasis on a variety of styles. Prerequisites: TTP 3112 and permission of instructor. (S)

TTP 4311 Directing II (3). A continued study of directing techniques culminating in the preparation of a play for public performance. Prerequisite: TTP 3310.

TTP 4531 Stage Combat (3). A study of combat techniques for the stage, including fencing, boxing, wrestling, and tumbling.

TTP 4600 Playwriting I (3). Study of the theory and principles of writing plays for the stage. Practice in writing either the short or long play. May be repeated.

TTP 4601 Playwriting II (3). A continuation of the study of the theory and principle of writing plays for the stage. Actual practice in writing plays. Prerequisite: TTP 4600.

TTP 4920 Actor's Workshop I (3). This course will concentrate on the acting demands of a specific period: style, genre, or playwright. Prerequisite: TTP 4114 or permission of instructor.
Visual Arts
Clive King, Professor and Chairperson
William Maguire, Professor
Ralph F. Buckley, Associate Professor
William Burke, Professor
James M. Cooper III, Professor
Carol Damian, Associate Professor
Eduardo Del Valle, Associate Professor
Richard Duncan, Associate Professor
Mirta Gomez, Associate Professor
Nora Heimann, Assistant Professor
Ellen Jacobs, Professor
Kate Kretz, Assistant Professor
Juan Martinez, Associate Professor
Dahlia Morgan, Lecturer/Art Museum Director
Chrisline Tamblyn, Assistant Professor
Manuel Torres, Associate Professor
Barbara Watts, Associate Professor
Sandra Winters, Associate Professor

Bachelor of Fine Arts
Degree Program Hours: 120

Lower Division Preparation
Required Courses
Art Survey I & II 6
2-D and 3-D Design 6
Basic Drawing and Figure Drawing 6
Beginning Studio Courses 6

Recommended Studio Courses
Painting, Sculpture, Printmaking, Ceramics, Photography, Jewelry, Glass, Drawing.

Remarks: The student who does not have an A.A. degree or who lacks proficiency in required courses, or both, will be expected to take more than 60 semester hours to complete the bachelor's degree, or to make up courses at the lower division level.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Visual Arts Scholarships
All Visual Arts scholarships are awarded as a result of the faculty's Spring Review, usually in April. Students should contact the department at 348-2897 for information on procedures for participation in the Spring Review.

Upper Division Program (60)
Required Courses: (48)
ARH 4450 Modern Art 3
ARH 4470 Contemporary Art 3
ARH Elective (upper division) 6
Studio Major 15-18
ART Thesis I & II 6
ART & ARH Electives outside Studio Concentration 15-18
Electives outside of Visual Arts Department 9-12

Minor in Visual Arts
(18 semester hours)
ARH 4450 Modern Art 3
ART 3310C Drawing 3
or ART 3311C Figure Drawing
ART Studio Electives (upper division) 12

Minor in Art History
(18 semester hours)
ARH 4450 Modern Art 3
ARH 4470 Contemporary Art 3
ART Studio Elective (upper division) 3
ARH Electives (upper division) 9

Course Descriptions
Definition of Prefixes
ARH-Art History; ART-Art; PGY-Photography.

ARH 2050 Art History Survey I (3). A broad survey of the visual arts and architecture from the Paleolithic Period through the Middle Ages.

ARH 2051 Art History Survey II (3). A broad survey of the visual arts and architecture from the Renaissance through the Modern Age.

ARH 3210 Early Chalitian and Byzantine Art (3). The art of Byzantine Empire from the early Christian period and the foundation of Constantinople to the Ottoman conquest and afterward (300-1500 A.D.). Prerequisite: ARH 2050 or permission of instructor.

ARH 3350 Baroque Art (3). European art of the 17th and early 18th centuries. Artists to be studied include Bernini, Caravaggio, Velasquez, Vermeer, Rembrandt, Rubens, Poussin, La Tour, and Watteau. Prerequisite: ARH 2051.

ARH 4014 History of Decorative Arts (3). A survey of the more important and influential periods in history in the production of ceramics, fabrics, glass, jewelry and silversmithing. Slides, lectures, student research.

ARH 4131 Greek Art (3). Lectures, slides, research. The Art of Greece from the Bronze Age through the Classical Period.

ARH 4151 Roman Art (3). Lectures, slides, research. The Art of Ancient Rome from the Early Iron Age through the Late Roman Empire.

ARH 4310 Early Italian Renaissance (3). Lectures, slides, research. From the origins of Italian Renaissance in the Late Gothic Period to the Early 15th Century.


ARH 4312 Later Italian Renaissance (3). Lectures, slides, research. The Art of Italy in the later 15th and 16th Century.

ARH 4400 Primalve Art (3). An introduction to the art of widely dissimilar groups from areas on the margin or beyond the cultural influences of Europe, the Near East, India, China, and Japan. Emphasis will be placed on African, Oceanic, and North American Indian Art.

ARH 4430 Art and Politics (3). An investigation into the interrelationship between art and political issues, with emphasis on the 19th and 20th centuries.

ARH 4431 19th Century Painting (3). A study of Neoclassicism, Romanticism, Realism, and Impressionism. Artists to be considered include David, Ingres, Gericault, Delacroix, Goya, Courbet, Manet, Degas, Monet, and Renoir.


ARH 4454 Post 1965 Art (3). Examines the changing roles of the arts within the current socio-political context of plurality, corporate sponsorship and mass communications.

ARH 4470 Contemporary Art (3). Lectures, slides, visits and student research. A survey of art from 1945 to the present.
ARH 4552 Art of China and Japan (3). An introduction to the art of China to the Ming Dynasty and of Japan through the 18th century. The emphasis will be on painting and sculpture, with some ceramics and architecture.

ARH 4610 American Art (3). A survey of American painting from the Colonial period to the eve of World War I. Artists to be studied include Copley, West, Cole, Whistler, Sargent, Homer, Henri, and Bellows.

ARH 4611 North American Indian Art (3). A survey of native North American art history with emphasis on the post-contact period. The arts of the far north, Northwest coast, south-west, plains and the eastern woodlands.

ARH 4650 Pre-Columbian Art (3). Slides, lectures, research. A survey of Pre-Columbian art from approximately 2000 B.C. to 1500 A.D. of Mesoamerica. (Intermediate area from Honduras to Columbia and the Andes).

ARH 4652 Pre-Columbian Art of the Andes (3). A survey of Andean Pre-Columbian art and architecture. Basic characteristics of technique, style and iconography in relation to Andean socio-economic and cultural patterns.

ARH 4655 Mesoamerican Art History (3). A survey of Mesoamerican pre-Columbian art and architecture from the Mexican and Mayan territories, 1500 BC to the Conquest.

ARH 4670 20th Century Latin American Art (3). Lectures, films, slides. The Art of Central, South America and the Caribbean of the Twentieth Century.

ARH 4672 A History of Cuban Art (3). A survey of the visual arts in Cuba (sculpture, painting, and prints) with emphasis in the 20th century.

ARH 4710 History of Photography (3). A chronological examination of the work of the world's most significant photographers, from photography's invention in the 1830's to the present.

ARH 4905 Directed Studies (1-6). A group of students, with the approval of the art faculty, may select a master teacher of theory, research or criticism in selected areas as film, painting, sculpture, architecture, crafts, art history, multi-media art, etc. Arrangements must be made at least a semester before course is offered. May be repeated.

ARH 4910 Research (1-6). Art history, criticism, and theory in areas not covered by the present program and which the student wishes to study. Prerequisite: Permission of instructor. May be repeated.

ARH 3930 Special Topics in Art History (3). Rotating special topics in Art History. May be repeated with change of content. Prerequisites: ARH 2050 and ARH 2051 or permission of instructor.

ARH 4931 Women and Art (3). Women in the history of art; past, present and future. Slides, lectures, films, panels and discussions.

ARH 5907 Directed Studies (1-6). A group of students, with the approval of the art faculty, may select a master teacher of theory, research or criticism in selected areas as film, painting, sculpture, architecture, crafts, art history, multi-media art, etc. Arrangements must be made at least a semester before course is offered. May be repeated.

ARH 5913 Research (1-6). Art history, criticism, and theory in areas not covered by the present program and which the student wishes to study. Prerequisite: Permission of instructor. May be repeated.

ARH 1202C 2D Design (3). Studio course introducing the basic art elements such as line, value, and color to develop the student's vocabulary and awareness of two-dimensional potential in various media.

ART 2103C 3D Design (3). Studio course introducing the basic elements inherent in three-dimensional works of art. Shape, mass, balance, proportion, and scale are elements which will be explored.

ART 2112C Intermediate Ceramics (3). An in-depth study of ceramic forms concentrating on wheel techniques focusing on functional design, glazing and applicable firing processes. Prerequisite: ART 3110C.

ART 2215C Jewelry and Metals (3). A study of basic metal techniques and strengthening of three-dimensional design concepts for the beginner. The advanced student will explore the more difficult technical aspects of areas such as hollow ware, enameling, casting, and stone setting. May be repeated.

ART 2401C Printmaking (3). With a knowledge of basic intaglio and relief printing, the student will explore specific media such as etching, lithography, silk-screen and other experimental techniques. May be repeated.

ART 2510C Painting (3). Stresses development of idea and technique in creating paintings. Demonstration, lecture, field trips and critiques included. Strong emphasis on individual development. Prerequisites: ART 1202C and ART 3310C. May be repeated.

ART 2702C Sculpture (3). With a background in beginning sculpture, the student will develop standards of excellence, both in concept and technique, with stress on individual expression. An equipped shop will be available to the student. May be repeated.

ART 3110C Ceramics (3). A beginning course for art and non-art majors. Fundamentals of throwing, hand-building, and glaze application. May be repeated.

ART 3115C Low Temperature Ceramics (3). An in-depth study of low-temperature clays and glazes, and exploration of a variety of glazing and firing techniques, including lustres, residual salt, raku, white and red earthenware, etc. Prerequisite: ART 3110C.

ART 3183C Glassblowing (3). A basic course in off-hand glass blowing, concerned with preparing, forming, and finishing glass; understanding of glass as an art form; operation and maintenance of a glass studio. May be repeated.

ART 3310C Drawing (3). Drawing will be considered as an essential part of every art student's curriculum. Depending on his lower level work, a student will be encouraged to take at least one drawing course at the University. Off-campus studio work may be arranged. May be repeated.

ART 3331C Figure Drawing (3). Drawing from the model during assigned studio time. Open to all students. May be repeated. Prerequisite: ART 3310C.

ART 3711C Figure Sculpture (3). A basic sculpture class emphasizing anatomical study with 2 & 3 dimensional rendering in clay, training the student to observe and accurately model the human figure.
ART 3809 Performance Art (3). A workshop on the history and practice of performance art for the fine arts student. Focus on intersections with other visual arts media and social contexts. Not a course in dance, music, or theater.

ART 3820 Visual Thinking I (3). A beginning studio-based course with a strong theoretical component where concepts are examined through a variety of approaches and media.

ART 3821 Visual Thinking II (3). An advanced studio-based course with a strong theoretical component where concepts are examined through a variety of approaches and media. Prerequisite: ART 3820.

ART 3830C Color Theory (3). This course is designed to familiarize the student with the theory and principles of color as it relates to the arts. Lecture, demonstration, and application through assigned projects will be included.

ART 3831C Materials and Techniques (3). Instruction in the craft of painting. Demonstration and exercise in the following will be included: color, pigments, ground, all major media, studio and equipment.

ART 3849C Cooperative Education in Visual Arts (3). A student majoring in Visual Arts may spend several semesters fully employed in industry in a capacity relating to the major. Prerequisite: Permission of chairperson.

ART 4114C Ceramics (3). The advanced student will explore all aspects of expression in clay and glaze. Students will be expected to be mostly self-directed. Prerequisite: ART 3110C, or permission of the instructor. May be repeated.

ART 4116C Glaze and Clay Calculation (3). The study of the nature, formulation and altering of ceramic glazes and clays.

ART 4151C Jewelry and Metals (3). See ART 2150C.

ART 4184C Glassblowing (3). See ART 3183C.

ART 4320C Drawing (3). See ART 3310C.

ART 4332C Figure Drawing (3). See ART 3331C.

ART 4402C Printmaking (3). See ART 2401C.

ART 4532C Painting (3). An advanced course concentrating on conceptual clarity and the realization of stylistic development. Group, individual criticism will be emphasized. May be repeated. Prerequisites: ART 2510C or equivalent. Suggested prerequisites: ART 3831C and ART 3803C.

ART 4703C Sculpture (3). See ART 2702C.

ART 4710C Figure Sculpture (3). To develop skills in representational structure and anatomy from the model and learn mold-making techniques. May be repeated.

ART 4681 Time Arts (3). An introduction to electronic media for the first arts student. Computer and video as tools for the artmaking process. Not a course in programming or commercial computer graphics.

ART 4832L Art Gallery and Display (1-3). The study and participation of all aspects of Gallery operations, from daily operation to special exhibitions and events. Permission of Gallery Director.

ART 4906C Directed Study (VAR). A group of students, with the approval of the Visual Arts Department faculty, may select a master artist and pursue a course of art study in selected areas such as graphic design, film, multi-media, environmental design, sound, etc. Arrangements must be made at least one semester before course is offered. May be repeated.

ART 4910C Research (1-6). Students may study or research an individual art project with an art faculty member. Complexity and amount of work will determine the number of credit hours granted. May be repeated.

ART 4949C Cooperative Education in Visual Arts (3). See ART 3849C.

ART 4952C Thesis I. The course will expose students to fundamental issues and ideas current in the field of art. An inquiry into the structure of art and its relationship to society, knowledge, and the self. Prerequisite: 15-18 hours of Studio Major and permission of instructor (portfolio review).

ART 4953C Thesis II (3). Studio work in student's major area with major professor, resulting in a student exhibit. Arrangements with major professor one semester before graduation. Written thesis required. Prerequisite: 15 semester hours of studio major and permission of instructor (portfolio review). (Fall and Spring only). ART 4970C.

ART 5125C Ceramics (3). The advanced student will explore all aspects of expression in clay and glaze. Students will be expected to be mostly self-directed. Prerequisites: ART 3110C, or permission of the instructor. May be repeated.

ART 5159C Jewelry and Metals (3). A study of basic metal techniques and strengthening of three-dimensional design concepts for the beginner. The advanced student will explore the more difficult technical aspects of areas such as hollow ware, enameling, casting, and stone setting. May be repeated.

ART 5185C Glassblowing (3). A basic course in off-hand glass blowing, concerned with preparing, forming, and finishing glass; understanding of glass as an art form; operation and maintenance of a glass studio. May be repeated.

ART 5340C Drawing (3). Drawing will be considered as an essential part of every art student's curriculum. Depending on his lower level work, a student will be encouraged to take at least one drawing course at the University. Off-campus studio work may be arranged. May be repeated.

ART 5341C Figure Drawing (3). Drawing from the model during assigned studio time. Open to all students. May be repeated. Prerequisite: ART 3310C.

ART 5406C Printmaking (3). With a knowledge of basic intaglio and relief printing, the student will explore specific media such as etching, lithography, silk-screen and other experimental techniques. May be repeated.

ART 5580C Painting (3). An advanced course concentrating on conceptual clarity and the realization of stylistic development. Group, individual criticism will be emphasized. May be repeated. Prerequisites: ART 2510C or equivalent. Suggested prerequisites: ART 3831C and ART 3803C. May be repeated.

ART 5710C Figure Sculpture (3). To develop skills in representational structure and anatomy from the model and learn mold-making techniques. May be repeated.
Certificate Programs

Certificate in Actuarial Studies

Coordinating Committee
Hassan Zahedi, Director, (Statistics)
Jie Mi, (Statistics)
James F. Silker, (Mathematics)

The Certificate in Actuarial Studies is designed to provide a focus for those students who are interested in pursuing a career in the actuarial sciences. The primary emphasis of the Certificate program is on the mathematical and statistical background that forms the foundation of the work in this area.

The program is most obviously suitable for those students who are majoring in Mathematics or Statistics. It would also be valuable for those who wish eventually to enter the actuarial field, but choose to major in an allied discipline, such as Business or Computer Science. In addition, it allows access to persons in the community who are currently working in this area and wish to develop or upgrade their skills.

Prerequisites:
Before entering the Certificate program, the student must have completed the following courses (or equivalent):

**MAC 2311-12 Calculus I-II**
**MAC 2313 Multivariable Calculus**
**COP 2210 Introduction to Programming**
**CGS 2420 Programming for Engineers**

Recommended Courses:
It is recommended that a student intending to pursue an actuarial career take courses in Technical Writing (ENC 2210), Economics (ECO 3011 Macro-Economics and/or ECO 3021 Micro-Economics) and have exposure to at least two programming languages.

Required Courses:
Upon completion of the following requirements, a student may apply for the Certificate in Actuarial Studies. The Certificate will be awarded at the time of awarding a Bachelor's degree, or upon completion of this work if the student already has a Bachelor's degree.

Statistics requirements: (7)
- STA 3321 Mathematical Statistics I 3
- STA 3322 Mathematical Statistics II 3
- STA 3930 Special Topics - Statistics 1

Mathematics requirements: (7)
- MAS 3105 Linear Algebra 3
- MAD 3401 Numerical Analysis 3
  or
- MAD 5405 Numerical Methods 3
- MAT 3930 Special Topics - Mathematics 1

Two options from the following list: (6)
- a) STA 4603 Mathematical Techniques of Operations Research 3
  or
- MAP 5236 Operations Research 3
- b) STA 4234 Introduction to Regression Analysis 3
  or
- STA 5236 Regression Analysis 3
- c) One course selected from
- ACG 2021 Accounting for Decisions 3
- FIN 3403 Financial Management 3

An overall average of B (3.0 GPA) or better in the 20 semester-hours of coursework listed above, with a grade of C or better in each course. A minimum of 12 of these semester-hours must be earned in courses taken at the University.
African-New World Studies Certificate Program

Morvin Dunn, Acting Director (Psychology)

Coordinating Committee
Leke Adeofe, (Philosophy)
G. Janice Allen, (Sociology/Anthropology)
Jean-Robert Cady, Modern Languages
Anna Marie Evans, (Education Social Studies)
Chris Gray, (History)
Ivelow Griffith, (Political Science)
Tomato Hopkins, (English)
Abe Lavender, (Sociology/Anthropology)
Linda Leek, (English)
Alex Lichtenstein, (History)
Ken Lipner, (Economics)
Leslie Neal, (Theatre/Dance)
Adelle Newson, (English)
Joyce Shaw Peterson, (History)
William Reno, (Political Science)
Alex Stepick, III, (Sociology/Anthropology)
S. Lee Woods, (Education)

African Studies Programs respond to canonical deficiencies and student inquiries by developing new theories, discourse, and approaches to academics and the world. Housed within the College of Arts and Sciences, the African-New World Studies Certificate Program provides students with an interdisciplinary approach to the study of the global, economic, cultural, and historical experiences of people of African descent. The Certificate complements students’ work in their major fields of study on both the undergraduate and graduate levels while fostering greater understanding of traditionally marginalized topics.

General Requirements (18)

Students complete 18 credit hours of study from disciplines as diverse as geography, international relations, civil engineering, music, and political science, history, literature, and journalism.

Core Courses (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHI 3073</td>
<td>African Philosophy</td>
<td>3</td>
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<tr>
<td>AMH 4570</td>
<td>African-American History</td>
<td>3</td>
</tr>
<tr>
<td>AML 2271</td>
<td>African-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ANT 4451</td>
<td>Racial and Cultural Minorities</td>
<td>3</td>
</tr>
<tr>
<td>CPO 4034</td>
<td>The Politics of Development and Underdevelopment</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives (12)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INR 4024</td>
<td>Ethnicity and Nationality: World Patterns and Problems</td>
<td>3</td>
</tr>
<tr>
<td>CPO 3320</td>
<td>African Politics</td>
<td>3</td>
</tr>
<tr>
<td>LIN 2612</td>
<td>Black English</td>
<td>3</td>
</tr>
</tbody>
</table>

Students select four approved electives that the advisor deems appropriate to an African-New World Studies curriculum. These courses may come from the above list of core courses or they may be chosen from among other appropriate courses including those in the sample list below. Students should consult the advisor since new courses are frequently added and special topics courses often concern African-New World Studies topics.

For example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIN 2612</td>
<td>Black English</td>
<td>3</td>
</tr>
<tr>
<td>SYD 4700</td>
<td>Minorities</td>
<td>3</td>
</tr>
<tr>
<td>AML 4274</td>
<td>African-American Women Writers</td>
<td>3</td>
</tr>
<tr>
<td>AML 4024</td>
<td>Studies in Twentieth Century African-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>AML 4014</td>
<td>Studies in Nineteenth Century</td>
<td>3</td>
</tr>
<tr>
<td>AML 2272</td>
<td>Major African-American Writers</td>
<td>3</td>
</tr>
<tr>
<td>INR 3253</td>
<td>International Relations of Sub-Saharan Africa</td>
<td>3</td>
</tr>
<tr>
<td>ECS 4433</td>
<td>Economics of the Caribbean</td>
<td>3</td>
</tr>
<tr>
<td>ANT 4315</td>
<td>Afro-American Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

The required courses are designed to provide the foundation of the Program, offering participants a general understanding of the broad and diverse spectrum of African and diaspora history, politics, and culture.

American Studies Certificate Program

Darden A. Pyron, Director (History)

Coordinating Committee
Tucker Arnold, (English)
Lynn Berk, (English)
Eric Leed, (History)
Howard Rock, (History)
Donald Watson, (English)

The American Studies Certificate Program provides the opportunity for students to examine the nature of American civilization through an interdisciplinary study of American history, literature, culture, and thought. The program provides a grounding in American literature and American history, a sampling of how each discipline approaches the study of American civilization, and an opportunity to follow the approaches of political science, anthropology, philosophy, and religion. Through a seminar in American studies, students will apply the insights of the various disciplines to problems of their own choosing.

The Certificate in American Studies is awarded with a bachelor's degree, or upon completion of Certificate requirements, to a student who already possesses that degree.

General Requirements

A total of seven courses chosen among the prescribed certification courses with a grade of "C" or higher.

Specific Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AML 2011</td>
<td>Survey of American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>AML 2020</td>
<td>Survey of American Literature II</td>
<td>3</td>
</tr>
</tbody>
</table>

Two consecutive semesters chosen from the following:

- AMH 3012 American History 1600-1763
- AMH 2010 American History, 1607-1850
- AMH 2020 American History, 1850 to the Present

Two electives chosen from the following:

- ANT 3409 Anthropology of Contemporary Society
- PHH 3700 American Philosophy
- POT 3204 American Political Thought
- REL 3100 Religion and Culture
An appropriate American Literature course.
An appropriate American History course.

Consumer Affairs Certificate Program
Juan Sanchez, Director (Psychology)
Advisory Committee
Yao Aposu (Marketing and Business Environment)
Scott L. Fraser (Psychology)
Shearon Lowery (Sociology/Anthropology)
Samuel Shopiro (Statistics)
The Certificate Program in Consumer Affairs provides a sound educational base for those dealing with consumer satisfaction and customer service issues.

The Certificate Program is intended to provide business, government, education, industry, and labor with a resource for selecting and training personnel in customer service and customer satisfaction.

For more information on the program, please contact the Director in DM 4078 348-3387. Required Courses.

The Certificate will be awarded upon satisfactory completion of six courses from among those listed below. Students are admitted to the program provided proper application has been made to the Director.

Group I: (Choose three courses)
COA 2410 Consumer Decisions 3
ECO 3021 Economics and Society-Micro 3
EVR 3011 Environmental Resources and Pollution 3
MAR 4503 Consumer Behavior 3
SOP 4445 Consumer Psychology 3
SVP 4421 Man, Society, and Technology 3

Group II: (Choose three courses)
COA 4460 Consumer and Technology 3
COA 5450 Consumer Legislation 3
EVR 3010 Energy Flow in Natural and Man-Made Systems 3
FOS 3504 Food and the Consumer 3
MAN 3503 Managerial Decision Making 3
MAN 4151 Behavioral Science in Management 3
SOP 4649 Experimental Consumer Psychology 2
SOP 4649L Experimental Consumer Psychology Lab 3
SVP 4321 Mass Culture 3

Note: Students may substitute an independent research project working with any professor provided the professor approves the request and final approval is obtained in writing from the Program Director.

Environmental Studies Certificate Program
J. Parker, Coordinator (Chemistry)
Coordinating Committee
J. Gottlieb, (Political Science)
J. Hutchingson, (Philosophy and Religious Studies)
S. Kopler, (Biology)
The Certificate Program in Environmental Studies is designed to provide students in various majors with the unique perspective of interdisciplinary ecological education to both enrich and expand the breadth of their primary training. The Certificate seeks to provide participants with an analytic basis for understanding the milieu of local and global environmental problems and processes.

The program requires no prerequisite and is complementary to majors in all disciplines and schools at the University. This certificate is appropriate also for persons who already have a degree but would like to increase their knowledge of contemporary environmental issues.

General Requirements: Six courses as follows:
1. EVR 3010 Energy Flow in Natural and Man-Made Systems 3
2. EVR 3011 Environmental Resources and Pollution 3
3. EVR 3013 plus Lab Ecology of South Florida 4
or
1. EVP 4211 Water Resources 3
2. EVP 4312 Energy Resources 3
3. EVP 4231 Air Resources 3
4. PUP 4203 Environmental Politics and Policies 3
Two courses from the following, at least one of which must be from the Social Sciences or Humanities: 6
AMH 4930 Environmental History
ANT 3403 Cultural Ecology
ANT 4552 Primate Behavior and Ecology
BOT 2010C Plant Biology
BOT 2153C Local Flora
BSC 5825 Wildlife Biology
ECP 3302 Introduction to Environmental Economics
ECP 4314 Land and Resource Economics
ENT 3004 General Entomology
EVR 3013 Ecology of South Florida plus Lab
EVR 3931 Population and Environment
EVR 4211 Water Resources
EVR 4231 Air Resources
EVR 4312 Energy Resources
EVR 4905 Independent Study
EVR 4920 Environmental Seminar
EVR 4026 Ecology of Biotic Resources
EVR 5907 Research and Independent Study
EVR 5935 Special Topics
EVR 5936 Topics in Environmental Studies
EVR 5065 Rainforest Ecology
GEO 3510 Earth Resources
GEO 3421 Cultural Geography
GLY 3030 Environmental Geology
INR 3043 Population and Society
INR 4054 World Resources, World Order
INR 4350 International Environmental Politics
LIT 4930 Literature and the Environment
MCB 4603 Microbial Ecology
PCC 3043 Ecology
REL 3492 Nature and Human Values
SOP 4712 Environmental Psychology
URP 4149 Planning and Human Ecology
ZOO 3892C Biology of Captive Wildlife
ZOO 4423C Herpetology
U.S. Environmental Policy Sustainable Resource Development Restoration Ecology
U.S. Energy Policy
International Energy Policy
Total Credit Hours: 18-19

Ethnic Studies Certificate Program
John F. Slack, Jr., Director (Political Science)

Coordinating Committee
Ralph S. Clem, (International Relations)
Anthony P. Maingot, (Sociology/Anthropology)
Mark D. Szuchman, (History)

The College of Arts and Sciences offers the student a program in ethnic studies, in recognition of the place ethnic studies enjoys in the social sciences and humanities, and the importance of ethnic studies in today’s world. The Program seeks to establish a proper balance between its academic goals and objectives and the on-going concerns of the University’s local and international constituencies. The Program contains four specialized areas: Black Studies, Jewish Studies, Cuban Studies, and Comparative Studies.

The Certificate in Ethnic Studies is awarded with a bachelor’s degree or upon completion of Certificate requirements, to a student who already possesses that degree. The Certificate will specify the area of concentration chosen by the student.

A student may acquire the Certificate in Ethnic Studies by fulfilling the following requirements:

General Requirements: A minimum of six courses with a grade “C” or higher.

Courses in both the ‘Core’ and ‘Specialized’ areas (indicated below) must be taken from at least two different departments.

A maximum of one course in a relevant language will be accepted.

A maximum of two courses of independent study will be accepted.

The Program Director must approve the student’s overall plan and all special topics courses must be approved by Certificate advisors in each area.

The Program is especially eager to encourage programs of study abroad and field work in general. Credit for such programs will be awarded on an individual basis after evaluation by the Director and the Coordinating Committee, but in no case will it consist of more than three courses towards the Certificate.

Specific Requirements
A core of a minimum of two to three courses in a theoretical and conceptual nature in the area of ethnic studies

A minimum of three to four specialized courses in one of the four distinct areas: Black Studies, Jewish Studies, Cuban Studies, Comparative Studies.

Core Courses
SYD 4700 or ANT 4451: Minorities; POS 4314: Ethnic Politics; INR 4074: Ethnicity in World Politics; INR 4074: Ethnicity and Nationality; ECP 3144: Economics of Race and Sex Discrimination; SOP 4444: Attitudes and Ethnicity.

Specialized Courses
(Note: This is not an exhaustive list; students should consult with the Director of the program on current offerings.)

Specialized Courses in Cuban Studies
ECS 4430 The Economic Development of Cuba
FOW 4390 Genre Studies (with reference to Cuban Literature)
INR 3246 International Relations of the Caribbean
SYD 4630 Latin American and Caribbean Social Structures
SYA 4124 Social Theory and Third World Innovations

Specialized Courses in Black Studies
AML 5305 Major American Literary Figures
ANT 4315 Afro-American Anthropology
ANT 4352 African Peoples Culture
LIT 4188 Regional Literature in English
LIT 4930 Special Topics
MUH 2116 Evolution of Jazz

Specialized Courses in Jewish Studies
GEA 3630 Population and Geography of the Middle East
INR 3274 International Relations of the Middle East

Gerontological Studies Certificate Program
Joan Erber, Director (Psychology)

Coordinating Committee
Myra Crabtree, (Education)
Leon A. Cuervo, (Biological Sciences)
Katharine Curry, (Dietetics and Nutrition)
Rosebud Foster, (Health Services Administration)
Shearon A. Lowery, (Sociology and Anthropology)
Martha Pelaez, (Southeast Florida Center on Aging)
Thomas Skalika, (Education)

The Certificate Program in Gerontological Studies is an undergraduate, academic certificate program designed to complement the student’s major area of study.

The goals of the program are: (1) to stimulate interest in the study of aging; (2) to provide an introduction to the field of gerontology from a multidisciplinary perspective; (3) to provide foundation courses for advanced study in gerontology; and (4) to provide students seeking employment upon graduation with a sound background which will make them attractive to employers.

The State of Florida has the largest percentage of persons over 65. Demographic projections indicate that not only will Florida continue to increase its percentage of older persons, but so will the nation as a whole. Thus, it has become imperative that gerontological knowledge be increased and shared. This is critical, both for individuals to function as informed citizens and for enhanced gerontological teaching, research, and service.

The present certificate program seeks to meet these needs by providing a multidisciplinary approach to the study of aging. The Certificate in Gerontological Studies is awarded with a bachelor’s degree, or on completion of Certificate requirements to a student who already possesses that degree.
Interested students should meet with the director early to plan an individualized program to meet the student’s educational or occupational goals.

Certificate Requirements: (17-18)
1. A minimum of six courses must be completed with a grade of ‘C’ or higher in each course.
2. Courses must be taken from at least three different disciplines.
3. Electives must be taken from two different categories listed below.
4. Up to two gerontologically relevant courses taken elsewhere may be accepted by the director.
5. Students should contact the director during registration for a list of certificate courses offered each semester.

Required Courses: (9)
- DEP 4464 Psychology of Aging 3
- SYP 4730 Sociology of Aging 3
- PCB 3241 Physiology of Aging 3

Elective Courses (8-9)
- Aging in the Context of the Life-Span
  - DEP 2000 Human Growth and Development 3
  - FAD 2230 Family Life Cycle 3
  - FAD 5450 Human Sexuality 3

Death and Dying
- SYP 4745 Sociology of Death 3
- PHM 4050 Philosophy of Death 3

Health and Rehabilitation
- OTH 3160 Adaptive Living Skills 2
- OTH 3161 Adaptive Living Skills Lab 1
- PHT 3400 Emotional Aspects of Physical Disability 2
- SOP 6034 Psychology of Health and Illness 3
- HME 5255 Independent Living for the Handicapped 3

Nutrition
- HPA 2201 Principles of Nutrition 3
- HPA 4403 Life Cycle Nutrition 3

Public Affairs and Services
- HLA 4113 Issues and Trends in Health Care Delivery 3
- HCA 3103 Health & Social Service Delivery Systems 3

Supervised Research / Practicum / Special Topics: (3)
Students wishing to take an independent research project or an independent practicum in gerontology should: First obtain the collaboration of a faculty sponsor; and second, obtain the approval of the Certificate Director prior to beginning the project by submitting a one-page proposal. Credit will be obtained under the appropriate independent studies course in the faculty advisor’s department. Also, special topics and other courses that have gerontological relevance may be acceptable for credit with permission of the Director.

International Studies Certificate Program
Dominic Fernandez, Director
(International Relations)

Advisory Council
Robert Farrell, (Education)
Clair McElfresh, (Music)
Laurence Miller, (Library)
Luis Salas, (Criminal Justice)
Mark Rosenberg, (Political Science)
Wunnava S. Subbarao, (Electrical Engineering)

A minimum grade of ‘C’ in each course taken in the program. Courses must be taken in at least three different departments.

Prerequisites that may be required for courses in the program will not be included as courses within the 12-semester hour coursework requirement.

Judaic Studies Certificate Program
Stephen M. Fain, (Educational Leadership), Director, Institute of Judaic Studies

Theodore Weinberger, (Religious Studies), Chairperson, Judaic Studies Certificate Program

Coordinating Committee

Mitchell Hart, (History)
Nathan Katz, (Religious Studies)
Erik Larson, (Religious Studies)
Abe Lavender, (Sociology)
Asher Milbauer, (English)
Miri-Jane Rochelson, (English)
Howard Rock, (History)
Mark Szuchman, (History)

The Certificate in Judaic Studies will require 18 hours of coursework. Candidates for the Certificate in Judaic Studies will select an advisor from among the Coordinating Committee members, who will approve or disapprove specific courses to meet the following requirements.

Students must demonstrate mastery of the Hebrew language at
least at the HBR 2200 level. Up to five credit hours of Hebrew language courses may be credited toward the Certificate.

The Certificate requires students to take Judaism (REL 3600) for three credits, plus approved courses with distribution requirements as follows:

**Literature, and the Arts**
A minimum of three credits will be selected from such courses as: The Jewish Cinema, Jewish-American Women Writers, and Holocaust Literature.

**Religious Studies**
At least three credits will be selected from such courses as: Hebrew Scriptures, The Ethics of Judaism, The Modernization of Judaism, and The Holocaust.

**Social-Scientific Approaches**
At least three credits will be selected from such courses as: Population and Geography of the Middle East, International Relations of the Middle East, History of the Holocaust, Jewish History to 1750, Modern Jewish History, and Black-Jewish Relations.

**Labor Studies Certificate Program**
The Certificate in Labor Studies is an 18 credit course of study designed to offer degree-seeking students from a wide range of backgrounds an understanding of the major issues in the field. Courses must be taken from at least two disciplines other than Labor Studies. The Certificate is also appropriate for students who already have a degree and would like to acquire additional knowledge about various facets of the field of Labor Studies. Labor Studies as a discipline acknowledges insights which have emerged from decades of university-union cooperation in labor education and fulfills an academic need to study labor affairs apart from the traditional framework of industrial relations. According to this concept, Labor Studies is the academic examination of issues which confront people in the pursuit of their need for rewarding employment. The focus of inquiry is on workers as individuals, as members and/or leaders in their unions or associations, and as citizens of their communities.

Courses must be taken from at least two disciplines in addition to Labor Studies. Minimum of 18 credit hours for certificate. Courses are to be selected in consultation with advisor. A grade of 'C' or better is required for all courses. (C- is not acceptable).

**Required Courses:** (12)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBS 3001</td>
<td>Introduction to Labor Studies</td>
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<tr>
<td>LBS 4101</td>
<td>Theories of the Labor Movement</td>
<td></td>
</tr>
<tr>
<td>LBS 4210</td>
<td>Women and the Labor Movement</td>
<td></td>
</tr>
<tr>
<td>LBS 4501</td>
<td>Labor and Industrial Relations Law</td>
<td></td>
</tr>
<tr>
<td>LBS 4900</td>
<td>Directed Study in Labor Studies</td>
<td></td>
</tr>
<tr>
<td>SYO 4360</td>
<td>Industrial Sociology</td>
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<tr>
<td>AMH 3270</td>
<td>Contemporary U.S. History</td>
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<tr>
<td>AMH 4500</td>
<td>United States Labor History</td>
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<tr>
<td>ECO 3011</td>
<td>Economics, Man &amp; Society, Macro</td>
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<tr>
<td>ECO 3021</td>
<td>Economics, Man &amp; Society, Micro</td>
<td></td>
</tr>
<tr>
<td>ECO 3101</td>
<td>Theory of Price</td>
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</tr>
<tr>
<td>ECO 4222</td>
<td>Economic Development of U.S.</td>
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<tr>
<td>ECO 4701</td>
<td>World Economy</td>
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<tr>
<td>ECP 3123</td>
<td>Economics of Poverty</td>
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<tr>
<td>ECP 4203</td>
<td>Introduction to Labor Economics</td>
<td></td>
</tr>
<tr>
<td>ECP 4204</td>
<td>Theory of Labor Economics</td>
<td></td>
</tr>
<tr>
<td>INP 2002</td>
<td>Introductory Industrial/Organizational Psychology</td>
<td></td>
</tr>
<tr>
<td>INR 3004</td>
<td>Patterns of International Relations</td>
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<tr>
<td>LBS 4401</td>
<td>Collective Bargaining in Industrial Systems</td>
<td></td>
</tr>
<tr>
<td>LBS 4150</td>
<td>Contemporary Labor Issues</td>
<td></td>
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<tr>
<td>LBS 4250</td>
<td>Administration of Labor Organizations</td>
<td></td>
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<tr>
<td>LBS 4611</td>
<td>Labor Dispute Resolution</td>
<td></td>
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<tr>
<td>LBS 4654</td>
<td>Comparative and International Labor Studies</td>
<td></td>
</tr>
<tr>
<td>LBS 4905</td>
<td>Topics in Labor Studies</td>
<td></td>
</tr>
<tr>
<td>POS 3044</td>
<td>Government and Politics of the U.S.</td>
<td></td>
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<tr>
<td>POT 3204</td>
<td>American Political Thought</td>
<td></td>
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<tr>
<td>PUP 4004</td>
<td>Public Policy: U.S.</td>
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</tr>
</tbody>
</table>

**Labor Studies and Labor Relations Professional Certificate Program**
The Professional Certificate in Labor Studies and Labor Relations is an eighteen credit course of study designed to offer both pre- and post-baccalaureate as well as degree-seeking students the opportunity to obtain specialized knowledge in the areas of labor studies, collective bargaining and labor-management relations. This certificate is designed to provide students with broad-based knowledge about the field of labor studies with its focus upon the examination of the issues which confront people in the pursuit of their need for rewarding employment as well as insights from the field of labor relations with its emphasis upon the formal interactions between labor and management. Students who are interested in the practical as well as the more theoretical issues of labor studies and labor relations will be especially interested in this certificate.

Courses should be taken from at least one discipline in addition to Labor Studies. Minimum of eighteen credit hours for certificate. Courses are to be selected in consultation with and agreement of advisor. A grade of 'C' or better is required for all courses. (C- is not acceptable).

**Required Courses:** (9)

*All students are required to take LBS 3001, Introduction to Labor Studies, and a minimum of two courses to be selected from among the following: (additional courses may be used to fulfill electives).*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBS 4401</td>
<td>Collective Bargaining in Industrial Systems</td>
<td></td>
</tr>
<tr>
<td>MAN 4401</td>
<td>Collective Bargaining</td>
<td></td>
</tr>
<tr>
<td>LBS 4461</td>
<td>Labor Dispute Resolution</td>
<td></td>
</tr>
<tr>
<td>MAN 4410</td>
<td>Union-Management Relations</td>
<td></td>
</tr>
<tr>
<td>LBS 4150</td>
<td>Contemporary Labor Issues</td>
<td></td>
</tr>
<tr>
<td>LBS 4250</td>
<td>Administration of Labor Organizations</td>
<td></td>
</tr>
<tr>
<td>LBS 4654</td>
<td>Comparative and International Labor Studies</td>
<td></td>
</tr>
<tr>
<td>LBS 4905</td>
<td>Topics in Labor Studies</td>
<td></td>
</tr>
</tbody>
</table>
Latin American and Caribbean Studies Certificate Program

Mark B. Rosenberg, Director and Professor (Political Science)
Grisell V. Sotolongo, Student Advisor

The program in Latin American and Caribbean studies at Florida International University represents one way in which the university fulfills its commitment to furthering international understanding. The program encourages students to take an interdisciplinary approach to this important area by awarding a certificate to both degree and non-degree seeking students who successfully complete the requirements. For students pursuing a degree, the certificate program should be understood as a complement to the student’s major area or discipline of study. For non-degree seeking students, the certificate represents a way to gain a fuller, more complete understanding of Latin America and the Caribbean without pursuing a lengthy course of study at the university.

Students registered in the certificate program receive regular mailings announcing course offerings, seminars, foreign study opportunities, and other special events. They also receive LACC News, a newsletter reporting on people and activities concerning Latin American and Caribbean affairs at the university.

LACC has sponsored summer study abroad opportunities since 1981 in Mexico, Costa Rica, Puerto Rico, Barbados, Haiti, Belize, and the Dominican Republic. In addition, LACC has placed certificate students in summer programs sponsored by the Organization of American States in Argentina and Costa Rica.

An important component of the certificate program is the library’s Latin American and Caribbean holdings, which now exceed 30,000 volumes. Regionally, the collection is strongest in works on Cuba and Central America, with substantial strength in Caribbean countries as well. The library’s Latin American and Caribbean Collection receives about 45 publications and eight daily or weekly newspapers (this is in addition to 120 Latin American and Caribbean-related publications that can be found in the library's general periodical section). LACC also currently receives about 150 publications, primarily newsletters and research report series. In addition, the audio-visual section of the library contains about 220 films and video recordings on Latin America and the Caribbean and an extensive slide collection of Latin American art works.

Certificate Requirements:

1. At least 15 semester hours of courses with a grade of ‘C’ or better from the certificate program course listing, or approved by the certificate program faculty advisor. Courses must be taken in at least three different disciplines, and from at least two disciplines outside of the student’s departmental major.

2. The two-course, introductory language sequence at FIU in Spanish, Portuguese, or French. Exemption from this requirement may be obtained through a proficiency examination administered by the FIU Department of Modern Languages. Language courses may not be counted toward the fulfillment of requirement (1) above.

3. A minimum of three semester hours of independent study under the supervision of a certificate program faculty member, or other instructor approved by the certificate program faculty advisor. During this work, the student will prepare a research paper on a theme directly concerned with some aspect of Latin American and Caribbean affairs.

Students interested in the certificate program should consult directly with either the Associate Director or Student Advisor of the Latin American and Caribbean Center. Call (305) 348-2894 for an appointment.

The following courses fulfill certificate requirements. These courses should be understood as a partial list; students should consult with advisors of the certificate program about current course offerings.

Anthropology

ANT 314 4 Prehistory of the Americas 3
ANT 325 4 Peasant Society 3
ANT 340 3 Cultural Ecology 3
ANT 421 4 Afro-Cuban Religion 3
ANT 422 4 Tribal Art 3
ANT 430 4 The Third World 3
ANT 432 4 Mexico 3
ANT 432 8 Maya Civilization 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 4330</td>
<td>Contemporary Maya Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ANT 4332</td>
<td>Latin America</td>
<td>3</td>
</tr>
<tr>
<td>ANT 4334</td>
<td>Latin American Women</td>
<td>3</td>
</tr>
<tr>
<td>ANT 4340</td>
<td>Cultures of the Caribbean</td>
<td>3</td>
</tr>
<tr>
<td>ANT 4343</td>
<td>Cuban Culture &amp; Revolution</td>
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<tr>
<td>ECO 4701</td>
<td>The World Economy</td>
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<td>ECO 4703</td>
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<td>ECO 4733</td>
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<td>ECO 5709</td>
<td>The World Economy</td>
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<td>ECS 3402</td>
<td>The Political Economy of South America</td>
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<td>ECS 4013</td>
<td>Economic Development</td>
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<td>ECS 4403</td>
<td>The Latin American Economies</td>
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<td>ECS 4404</td>
<td>Economic Integration-Latin America</td>
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<td>ECS 4430</td>
<td>The Economic Development of Cuba - Past and Present</td>
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<td>Economic Integration-Caribbean</td>
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<td>SSE 4380</td>
<td>Developing a Global Perspective</td>
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<td>GLY 3157</td>
<td>Elements of Caribbean Geology</td>
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<td>GLY 5620</td>
<td>Caribbean Stratigraphic Micropaleontology</td>
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<td>GLY 5793</td>
<td>Caribbean Shallow-Marine Environments</td>
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<td>Latin American Civilization</td>
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<td>LAH 2092</td>
<td>The Latin Americans</td>
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<td>LAH 3132</td>
<td>The Formation of Latin America</td>
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<tr>
<td>LAH 3200</td>
<td>Latin America: The National Period</td>
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<td>LAH 3450</td>
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<td>LAH 4482</td>
<td>Cuba: 18th - 20th Centuries</td>
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<td>LAH 4511</td>
<td>Argentina: 1776-Present</td>
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<td>History of Brazil</td>
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<td>Family/Land in Latin American History</td>
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<td>LAH 4750</td>
<td>Law/Society in Latin American History</td>
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<td>INR 4247</td>
<td>Caribbean Regional Relations</td>
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<td>INR 4283</td>
<td>International Relations, Development, and the Third World</td>
<td>3</td>
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<tr>
<td>MAR 4156</td>
<td>International Marketing</td>
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<tr>
<td>MAR 4803</td>
<td>Cases in Marketing Management</td>
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<tr>
<td>MAR 4144</td>
<td>Export Marketing</td>
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<tr>
<td>FOL 3930</td>
<td>Haitian Creole</td>
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<td>FLE 3500</td>
<td>History of French Civilization (Latin American course)</td>
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<td>FRE 4501</td>
<td>Contemporary French Society (Latin American course)</td>
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<td>POR 3500</td>
<td>Luso-Brazilian Culture</td>
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<td>POW 4930</td>
<td>The Literature of Brazil</td>
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<tr>
<td>SPN 3520</td>
<td>Spanish American Culture</td>
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<td>SPN 4500</td>
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<td>SPW 3371</td>
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<td>SPW 3520</td>
<td>Prose and Society (Latin American course)</td>
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<td>SPW 4304</td>
<td>Latin American Theatre</td>
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<tr>
<td>SPW 4351</td>
<td>Spanish American Poetry I</td>
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<td>SPW 4352</td>
<td>Spanish American Poetry II</td>
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<td>SPW 4364</td>
<td>The Spanish American Essay</td>
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<td>SPW 5237</td>
<td>The Traditional Spanish American Novel</td>
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<td>SPW 5286</td>
<td>Contemporary Spanish American Novel</td>
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<td>SPW 5358</td>
<td>Prose and Poetry of Jorge Luis Borges</td>
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<td>SPW 5359</td>
<td>Poetry of Pablo Neruda</td>
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<td>SPW 5575</td>
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<td>PHH 3042</td>
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<td>REL 4481</td>
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<td>CPO 3055</td>
<td>Authoritarian Politics</td>
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<td>CPO 3304</td>
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<td>CPO 4034</td>
<td>Politics of Development &amp; Underdevelopment</td>
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<tr>
<td>CPO 4053</td>
<td>Political Repression and Human Rights</td>
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<tr>
<td>CPO 4303</td>
<td>Politics of South America</td>
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<td>Politics of the Caribbean</td>
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<td>CPO 4333</td>
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<td>CPO 4360</td>
<td>Cuban Politics</td>
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<td>CPO 5036</td>
<td>Politics of Development</td>
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<tr>
<td>INR 4244</td>
<td>Latin America in International Politics</td>
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<td>SOP 4050</td>
<td>Social Psychology in Latin America</td>
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<td>SYA 4124</td>
<td>Social Theory and Third World Innovations</td>
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<td>SYD 4530</td>
<td>Latin American and Caribbean Social Structures</td>
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<tr>
<td>SYD 4610</td>
<td>Area Studies (Latin American and/or Caribbean)</td>
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<td>SYD 4700</td>
<td>Minorities</td>
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<td>SYP 4600</td>
<td>Art and Literature of the Caribbean</td>
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<td>DAN 4932</td>
<td>Dance Ethnology</td>
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<tr>
<td>ARH 4650</td>
<td>Pre-Columbian Art</td>
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<td>ARH 4652</td>
<td>Andean Pre-Columbian Art</td>
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<tr>
<td>ARH 4670</td>
<td>20th Century Latin American Art</td>
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<tr>
<td>PHM 3400</td>
<td>Philosophy of Law</td>
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<tr>
<td>POS 3604</td>
<td>Constitutional Law: Limit</td>
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<tr>
<td>POS 3603</td>
<td>Constitutional Law: Powers</td>
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<tr>
<td>POS 3283</td>
<td>The Judicial Process</td>
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<td>POS 4944</td>
<td>Judicial Internship</td>
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<td>SOP 4842</td>
<td>Legal Psychology</td>
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<td>PSY 4930</td>
<td>Women, Law and Social Psychology</td>
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<tr>
<td>INR 3403</td>
<td>International Law</td>
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<td>CCJ 4252</td>
<td>Criminal Justice and the Constitution</td>
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<td>CCJ 4280</td>
<td>Law and Criminal Justice</td>
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<tr>
<td>POT 3054</td>
<td>Modern Political Theory</td>
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<tr>
<td>PHI 2600</td>
<td>Ethics</td>
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<tr>
<td>PHI 2630</td>
<td>Contemporary Ethical Issues</td>
<td>3</td>
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<td>POT 3621</td>
<td>Theories of Justice</td>
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<td>PHM 3200</td>
<td>Social and Political Philosophy</td>
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<tr>
<td>PHI 4633</td>
<td>Biomedical Ethics</td>
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<tr>
<td>PHM 4050</td>
<td>Philosophy of Death</td>
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<td>HSA 5455</td>
<td>Ethical Decisions in Health Services</td>
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<td>ISS 3330</td>
<td>Ethical Issues in Social Science Research</td>
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<tr>
<td>POT 3302</td>
<td>Political Ideologies</td>
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<td>SYG 3320</td>
<td>Social Deviancy</td>
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<td>SYG 2010</td>
<td>Social Problems</td>
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<tr>
<td>ANT 3302</td>
<td>Male and Female: Sex Roles and Sexuality</td>
<td>3</td>
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<tr>
<td>CPO 4057</td>
<td>Political Violence and Revolution</td>
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<tr>
<td>PAD 4040</td>
<td>Public Values, Ethics and Morality in a Changing Environment</td>
<td>3</td>
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<tr>
<td>PAD 5041</td>
<td>Values and Technology in Modern Society</td>
<td>3</td>
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</tbody>
</table>

**Legal Translation and Court Interpreting Certificate Program**

This professional certificate program provides a theoretical basis and practical experience to prepare the student for employment at entry level in the legal translation and interpretation fields (E-S and S-E). This curriculum does not train specifically for work as court interpreter, but provides a good background and the experience needed for further study in both legal translation and court interpreting. Through its academic track, it offers complementary studies for the practitioner who wants to strengthen his or her competence in the field. The program consists of 30 semester credit hours.

**Prerequisites**

ENC 1200 Business Letters and Reports 3

No credits allowed. These prerequisites may be fulfilled by passing a qualifying examination.

**Core Courses: (12)**

- SPT 3800 Introduction to Translation 3
- SPT 3812 Introduction to Interpreting 3
- SPT 4801 Translation Practice 3
- SPT 4802 Oral Translation Practice 3

**Required Program Courses: (12)**

- SPT 4803 Practice in Legal Translation 3
- SPT 4804 Practice in Legal Interpretation 3
- SPT 4940 Judicial Translation/Interpretation Internship 3
- SPT 4813 The Interpreter and Language 3
- SPT 4806 Oral Skills for Interpreters 3

**Electives: (6)**

- BUL 5105 Legal Environment of Business 3
- BUL 4111 Business Law I 3
- CCJ 3011 The Nature and Causes of Crime 3
- CCJ 3020 An Overview of Criminal Justice 3
- CCJ 3101 Law Enforcement System 3
- CCJ 3290 Judicial Policy Making 3
- CCJ 4280 Law and Criminal Justice 3
- CCJ 4331 Probation, Parole and Community Program 3
- CCJ 4662 Criminal Justice and the Minority Community 3
- INR 3403 International Law 3
- ORI 3000 Basic Oral Interpretation 3
- POS 3283 The Judicial Process 3

**Law, Ethics and Society Certificate Program**

Kenneth Rogerson, Director

Bruce Detwiler, (Political Science)
Kenmnn Henley, (Philosophy and Religion)

Stephen Fieldman, (Sociology/Anthropology)

This program offers a course of studies in the broad field of normative or value issues. The program seeks to develop a curriculum which will study these issues from a variety of perspectives. From philosophy we offer courses in ethical theory, social and political theory and various applied ethical courses-courses in medical ethics, business ethics, environmental ethics and so on. From political science the student sees how normative issues are considered in law and politics. In this context it is appropriate to have courses dealing with constitutional interpretation, in legal affairs, environmental regulation and the like. From sociology and anthropology the student takes courses dealing with how values are incorporated in our society and how such values compare to other societies around the world.

**Required Courses:**

1. The certificate requires six (3 credit) courses from the following list:
   1. Two core (starred) courses are required.
   2. Of the six courses, including core courses, at least one course must be taken from each of the following categories—Ethics, Law, and Society.
Linguistics Studies Certificate Program

Lynn Bark, Director (English)

Coordinating Committee
Isabel Castellanos, (Modern Language)
Tomeiro Hopkins, (English)
John Jensen, (Modern Languages)
Ana Roca (Modern Languages)
Peter Machonis, (Modern Languages)
Kemp Williams, (English)
Mehmet Yavas, (English)

In addition to an M.A. in Linguistics, the University offers a Certificate acknowledging that a student has demonstrated competence in course work pertaining to the study of linguistics. This Certificate is designed to meet the needs of those who have a general interest in linguistics studies, as well as those for whom work in linguistics would assist in career planning or advancement. Both undergraduate and graduate students are eligible to earn the certificate.

A student can acquire a Certificate in Linguistics Studies by fulfilling the following requirements:

1. The successful completion of at least six courses in linguistics or linguistics-related courses. These courses are listed below.
2. Courses must be selected from at least two different departments.
3. Students should consult a Certificate advisor in selecting courses.
4. With the advice of the Coordinating Committee, the student is encouraged to attain some degree of proficiency in a language other than his or her native language.

In addition to the requirements noted above, all of the requirements for obtaining a bachelor's degree from the University must be met, or the student must possess a bachelor's degree from another institution.

A Coordinating Committee representing various fields, will advise students and grant the Certificate.

A student wishing to earn a Linguistics Studies Certificate will choose courses from the following list of offerings:

Required Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIN 3010</td>
<td>Introduction to General Linguistics</td>
</tr>
<tr>
<td>LIN 5018</td>
<td>Introduction to Linguistics</td>
</tr>
<tr>
<td>LIN 4680</td>
<td>Modern English Grammar</td>
</tr>
<tr>
<td>FRA 4800</td>
<td>Contrasting Morphology</td>
</tr>
<tr>
<td>SPN 4802</td>
<td>Contrasting Syntax</td>
</tr>
<tr>
<td>LIN 5501</td>
<td>English Syntax</td>
</tr>
</tbody>
</table>

Four additional courses: (12)

Any course with an LIN prefix fulfills this requirement with the exception of LIN 3670 - Grammatical Usage. Linguistics courses with FOL, FRA, FRA, or SPN prefixes also fulfill this requirement. You must receive permission from a Coordinating Committee member or take courses with these prefixes. PHI 4221 (Philosophy of Language), PHI 4222 (Philosophy of Dialogue) and MHF 4302 (Mathematical Logic) also fulfill this requirement.

Public Policy Studies Certificate Program

John F. Stack, Director (Institute for Public Policy and Citizenship Studies)

Coordinating Committee:
Harvey A. Averch, (Public Administration)
J. Scott Birr, (Social Work)
Lisandro O. Perez, (Sociology/Anthropology)
Raul Moncarz, (Economics)
Rebeca A. Saloara, (Political Science)

The academic Certificate Program in Public Policy Studies is an interdisciplinary certificate program. It provides degree-seeking students with a critical understanding of how public policy is created, how it is implemented, and how it transforms daily life.

Besides providing the students with a wide range of interdisciplinary perspectives on public policy, the certificate program also provides students with practical experience by placing them in internships with public and political organizations in South Florida, Tallahassee, and Washington, D.C. For those students looking for careers in public policy, this experience could well be crucial.

Certificate Requirements

The certificate program requires completion of 21 semester hours of college credit. POS 2042 American Government is recommended as a prerequisite course. All students must then complete a common core of coursework by selecting one course from each of the following three core course categories for a total of nine hours. Then, the student must fulfill the requirements of one of the three internship tracks: Federal Policy, (12 hours), State Policy (12 hours), or Local Policy (12 hours).

Core Courses: (9)

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ECO 3021</td>
<td>Economics and Society - Micro or</td>
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<tr>
<td>ECO 2023</td>
<td>Micro Principles</td>
</tr>
<tr>
<td>ECO 3011</td>
<td>Economics and Society - Macro or</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Macro Principles</td>
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</table>

One of the following three-hour courses:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>POS 3424</td>
<td>The Legislative Process</td>
</tr>
<tr>
<td>PAD 3033</td>
<td>Administrators and the Legislative Process</td>
</tr>
<tr>
<td>PAD 4223</td>
<td>Public Sector Budgeting</td>
</tr>
</tbody>
</table>

3. One of the three-hour courses listed below under Certificate Courses. Students are encouraged to take a public policy issues course in their major, if it is offered, to satisfy this requirement.

Certificate Courses

The following courses fulfill certificate requirements for core courses and those exercising the Local Policy track. This is a partial list. The student should consult with the IPPCS about current course offerings. Other courses may be substituted upon approval of the IPPCS. Transfer students may only transfer up to two courses from institutions previously attended. The program is intended to expand student options, and complement other certificate programs.

Biology

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BSC 5825</td>
<td>Wildlife Biology</td>
</tr>
<tr>
<td>OCB 5635</td>
<td>Coral Reef Ecology, with lab</td>
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Other Disciplines

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<th>Course Code</th>
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<tbody>
<tr>
<td>PCB 3241</td>
<td>Physiology of Aging</td>
</tr>
<tr>
<td>PCB 5358</td>
<td>Everglades Research and Resource Management</td>
</tr>
<tr>
<td>PCB 5686</td>
<td>Population Biology</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>ZOO 3892C</td>
<td>Biology of Captive Wildlife</td>
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<tr>
<td>MAN 3503</td>
<td>Managerial Decision Making</td>
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<td>MAN 4711</td>
<td>Corporate Social Monitoring</td>
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<td>TAX 4001</td>
<td>Income Tax Accounting</td>
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<td>TRA 4320</td>
<td>Transportation Regulations</td>
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<td>TRA 4380</td>
<td>Transportation Policy</td>
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<td>TRA 4411</td>
<td>Airport Management</td>
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<td>ENV 5062</td>
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<td>ENV 5659</td>
<td>Regional Planning Engineering</td>
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<td>ENV 5666</td>
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<td>TTE 5506</td>
<td>Urban Mass Transit and Transportation Planning</td>
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<td>BCN 3640</td>
<td>Economic Planning for Construction</td>
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<td>BCN 5755</td>
<td>Construction Accounting and Finance</td>
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<td>CCJ 3290</td>
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<tr>
<td>CCJ 3300</td>
<td>Correctional Philosophy, Theory, and Practice</td>
</tr>
<tr>
<td>CCJ 3470</td>
<td>Criminal Justice Planning</td>
</tr>
<tr>
<td>CCJ 3501</td>
<td>Juvenile Delinquency, Prevention and Control</td>
</tr>
<tr>
<td>CCJ 4453</td>
<td>Methods of Institutional Change</td>
</tr>
<tr>
<td>CCJ 5285</td>
<td>Judicial Process and Policy</td>
</tr>
<tr>
<td>CCJ 5347</td>
<td>Correctional Intervention Strategies</td>
</tr>
<tr>
<td>CCJ 5525</td>
<td>Seminar in Judicial Delinquency</td>
</tr>
<tr>
<td>ECO 4622</td>
<td>Economic Development of the United States</td>
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<tr>
<td>ECO 4701</td>
<td>World Economy</td>
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<td>ECO 4703</td>
<td>International Economics</td>
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<tr>
<td>ECO 4713</td>
<td>International Monetary Relations</td>
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<td>ECO 4733</td>
<td>Multinational Corporations</td>
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<td>ECP 3123</td>
<td>Economics of Poverty</td>
</tr>
<tr>
<td>ECP 3302</td>
<td>Introduction to Environmental Economics</td>
</tr>
<tr>
<td>ECP 3533</td>
<td>Health Systems Economics</td>
</tr>
<tr>
<td>ECP 3613</td>
<td>Introduction to Urban Economics</td>
</tr>
<tr>
<td>ECP 4203</td>
<td>Introduction to Labor Economics</td>
</tr>
<tr>
<td>ECP 4204</td>
<td>Theory of Labor Economics</td>
</tr>
<tr>
<td>ECP 4314</td>
<td>Land and Resource Economics</td>
</tr>
<tr>
<td>ECP 4403</td>
<td>Economic Policy for Industry</td>
</tr>
<tr>
<td>ECP 4622</td>
<td>Regional Economic Growth Management</td>
</tr>
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<td>EDF 3723</td>
<td>Schooling in America</td>
</tr>
<tr>
<td>EDF 4780</td>
<td>The Teacher and the Law</td>
</tr>
<tr>
<td>EDF 5852</td>
<td>Educational Developmental Issues in Context: A Multidisciplinary Perspective</td>
</tr>
<tr>
<td>EEC 4301</td>
<td>Trends in Early Childhood Education</td>
</tr>
<tr>
<td>EEX 5771/HME 5255</td>
<td>Independent Living for the Handicapped</td>
</tr>
<tr>
<td>LEI 3437</td>
<td>Program Development in Parks and Recreation</td>
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<tr>
<td>LEI 5510</td>
<td>Program Administration in Parks and Recreation</td>
</tr>
<tr>
<td>EVR 3011</td>
<td>Environmental Resources and Pollution</td>
</tr>
<tr>
<td>EVR 3013</td>
<td>Ecology of South Florida</td>
</tr>
<tr>
<td>EVR 4021</td>
<td>Survey of Environmental Problems I</td>
</tr>
<tr>
<td>EVR 4022</td>
<td>Survey of Environmental Problems II</td>
</tr>
<tr>
<td>EVR 4211</td>
<td>Water Resources</td>
</tr>
<tr>
<td>EVR 4231</td>
<td>Air Resources</td>
</tr>
<tr>
<td>EVR 4312</td>
<td>Energy Resources</td>
</tr>
<tr>
<td>EVR 5236</td>
<td>Air Pollution Dynamics</td>
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<tr>
<td>HSA 3103</td>
<td>Health and Social Service Delivery Systems</td>
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<tr>
<td>HSA 4110</td>
<td>Health Care Organization and Administration</td>
</tr>
<tr>
<td>HSA 4113</td>
<td>Issues and Trends in Health Care Delivery</td>
</tr>
<tr>
<td>HSA 4140</td>
<td>Program Planning and Evaluation</td>
</tr>
<tr>
<td>HSA 4150</td>
<td>People, Power and Politics in Health Affairs</td>
</tr>
<tr>
<td>HSA 4420</td>
<td>Legal Aspects and Legislation in Health Care</td>
</tr>
<tr>
<td>HSC 4202</td>
<td>Principles and Programs in Public Health</td>
</tr>
<tr>
<td>AMH 4130</td>
<td>The American Revolution</td>
</tr>
<tr>
<td>AMH 4140</td>
<td>The Age of Jefferson</td>
</tr>
<tr>
<td>AMH 4160</td>
<td>The Age of Jackson</td>
</tr>
<tr>
<td>AMH 4251</td>
<td>The Great Depression</td>
</tr>
<tr>
<td>AMH 4560</td>
<td>History of Women in the United States</td>
</tr>
<tr>
<td>GEO 3602</td>
<td>Urban Geography</td>
</tr>
<tr>
<td>GEO 5415</td>
<td>Topics in Social Geography</td>
</tr>
<tr>
<td>HFT 3700</td>
<td>Fundamentals of Tourism</td>
</tr>
<tr>
<td>INR 3043</td>
<td>Population and Society</td>
</tr>
<tr>
<td>ADV 4300</td>
<td>Media Planning</td>
</tr>
<tr>
<td>JOU 4108</td>
<td>Public Affairs Reporting</td>
</tr>
<tr>
<td>MMC 4609</td>
<td>Public Opinion and the Mass Media</td>
</tr>
<tr>
<td>PUR 4100</td>
<td>Writing for Public Relations</td>
</tr>
<tr>
<td>PUR 4101</td>
<td>Publications Editing and Design</td>
</tr>
<tr>
<td>PUR 4106</td>
<td>Advanced PR Writing</td>
</tr>
<tr>
<td>PUR 4934</td>
<td>Public Relations Seminar</td>
</tr>
<tr>
<td>PUR 5607</td>
<td>Advertising and Public Relations Management</td>
</tr>
<tr>
<td>PUR 5806</td>
<td>Integrated Advertising and Public Relations Planning and Evaluation</td>
</tr>
</tbody>
</table>
Leaving for the internship. While in Washington, all FIU interns are required to attend a course designed to inform them of the workings of public policy on the national and international levels; students receive three hours of credit for a seminar in Washington. Students are responsible for their own room and board, although the Institute assists as much as possible in arranging housing and financial aid. The Washington, D.C., internship option is worth a total of 12 semester hours.

PUP 4004 Public Policy: U.S. 3
(Crosslisted with PAD 3034 Public Policy and Its Administration (Pre-Internship Seminar))

PAD 4024 Concepts and Issues in Public Administration 3
(Crosslisted with PUP 4931 Topics in Public Policy: Federal Policy making, to be offered in Washington, D.C.)

Supervised Summer Internship in Washington, D.C. 6

Students are to register for the internship, field study or independent study course in their department (e.g., PAD 4940, POS 4944, PUP 4941)

State Policy (Intern Semester - 12 hours)

Students with senior status are placed in nonpaying internships in State of Florida government agencies. Advisors from the IPPCS work with students to determine which agency is most suitable, depending upon the student's interests. This internship is held during the Spring Term in order to coincide with the State's legislative session. Students attend an intensive two week introductory course at FIU before leaving for Tallahassee. While in Tallahassee, in addition to their internship responsibilities, which are worth six semester hours, students attend a once a week seminar with other interns. This class will be coordinated by the IPPCS and features guest lecturers from governmental and political organizations. Although the students are responsible for their own room and board, the Institute helps to arrange housing and assists in the application for financial aid. The Tallahassee internship option is worth a total of 12 semester hours.

PUP 4004 Public Policy: U.S. 3
(Crosslisted with PUP 4934 Public Policy and Its Administration (Pre-Internship Seminar))
Translation Studies Certificate Program

This professional certificate is designed to train students in the techniques and skills needed for the translation (E-S and S-E) of routine documents and general correspondence. It also provides the general background and introductory professional courses needed for future study or work in the field of translation. The program consists of 30 semester hours.

Through its academic track, the certificate program offers complementary studies for the practitioner who wants to strengthen his or her competence in this field.

Prerequisites

ENC 1200 Business Letters and Reports 3

No credits allowed. These prerequisites may be fulfilled by passing a qualifying examination.

Core Courses: (12)

SPT 3800 Introduction to Translation 3
SPT 3812 Introduction to Interpreting 3
SPT 4801 Translation Practice 3
SPT 4802 Oral Translation 3

Required Courses: (9)

FOT 3810 Creative Writing 3
SPT 4803 Practica in Legal Translation 3
SPT 4809 Practica in Medical Translation 3
SPT 4807 Practica in Business Translation 3
SPT 4808 Practica in Technological Translation 3
SPT 4805 Translation in Communication Media 3
SPT 4820 Computer Aided Translation 3
SPT 4941 Professional Internship 3

Restrictive Electives

One course from the following
ENC 2210 Technical Writing 3
SPN 3413 Communication Arts 3
SPN 3520 Spanish American Culture 3

Free Electives

Two courses from the following
ACG 2021 Accounting for Decisions 3

COP 2172 Programming in BASIC 3
ECO 3021 Economics and Society, Micro 3
ECO 3011 Economics and Society, Macro 3
HUN 2201 Principles of Nutrition 3
INR 3403 International Law 3
JOU 3100 News Reporting 3
MAN 3602 International Business 3
MAN 3701 Business and Society 3
MRE 3001 Medical Terminology 3
MRE 3431 Fundamentals of Medical Science 3
RTV 4302 Broadcasting for Reporting (Prerequisite JOU 3100) 3
SYG 3002 The Basic Ideas of Society 3

In addition to these subjects, the free electives may be chosen from the offerings in the departments of Sociology/Anthropology, Communication, Computer Science, Economics, International Relations, Modern Languages, and Political Science by securing the approval of the Director of the Program.

Tropical Commercial Botany Professional Certificate Program

David Lee, Director (Biological Sciences)

Coordinating Committee

Bradley Bennett, (Biological Sciences)
Richard Campbell, (Fairchild Tropical Garden)
George Dalrymple, (Biological Sciences)
Kelsey Downum, (Biological Sciences)
Jack B. Fisher, (Fairchild Tropical Garden)
Christopher Kernen, (Biological Sciences)
Suzanne Koptur, (Biological Sciences)
Steven Oberbauer, (Biological Sciences)
Jennifer Richards, (Biological Sciences)

This Certificate Program provides background in the plant sciences, principally for those with practical experience in horticulture. The curriculum is designed to give solid information on the plants being grown: their anatomy and morphology, reproduction, taxonomy, develop-
ment and physiology. This background should prepare students for work in the more technical aspects of horticulture in South Florida. Those fulfilling its requirements, along with a B.S. degree in Biological Sciences or Environmental Studies, would have excellent preparation for postgraduate work in Botany or Horticulture.

Certificate Requirements

Lower or Upper Division Preparation;

Two semesters of college-level chemistry;
Mathematics through College Algebra (such as MAC 2132);
Practical Horticultural Experience.

Required Courses: (16)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 3010C</td>
<td>Plant Biology</td>
<td>4</td>
</tr>
<tr>
<td>BOT 3353</td>
<td>Morphology of Vascular Plants</td>
<td>4</td>
</tr>
<tr>
<td>BOT 4504</td>
<td>Plant Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BOT 4504L</td>
<td>Plant Physiology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BOT 3723C</td>
<td>Toxicology of Tropical Plants</td>
<td>4</td>
</tr>
</tbody>
</table>

Electives

Two courses from the following (6-8)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 3810</td>
<td>Ecotoxic Botany</td>
<td>3</td>
</tr>
<tr>
<td>BOT 4314C</td>
<td>Plant Development</td>
<td>4</td>
</tr>
<tr>
<td>PCB 3043</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>PCB 3043L</td>
<td>Ecology Lab</td>
<td>1</td>
</tr>
<tr>
<td>EVR 3010</td>
<td>Energy Flow in Natural and Man-Made Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENY 1004</td>
<td>General Entomology</td>
<td>3</td>
</tr>
<tr>
<td>ENY 1004L</td>
<td>General Entomology Lab</td>
<td>1</td>
</tr>
<tr>
<td>ACG 2021</td>
<td>Accounting for Decisions</td>
<td>3</td>
</tr>
<tr>
<td>ARC 3133</td>
<td>Graphic Communication</td>
<td>3</td>
</tr>
<tr>
<td>LAA 3350C</td>
<td>Landscape Design I</td>
<td>3</td>
</tr>
</tbody>
</table>

All courses require a grade of 'C' or higher.

Western Social and Political Thought Certificate Program

Brian Nelson, Director (Political Science)

Coordinating Committee

Charles Elkins, (English)
Steven Fjellman, (Sociology/Anthropology)
Bruce Hauptli, (Philosophy and Religious Studies)
Antonio Jorge, (International Relations)
Eric Leeds, (History)
Barry Levine, (Sociology/Anthropology)

The Certificate Program provides interested students with a broad background in the history of western social and political thought. As such, the Certificate student will be expected to take courses from a variety of disciplines and at least three tutorials. Each tutorial will concentrate on one prescribed book which will be the same for all students. At the beginning and end of each semester the students will meet as a group with the instructors in the Program to discuss the different perspectives which they have developed on the common subject matter.

Course Requirements

A total of five courses in prescribed Certificate courses and three tutorials with a grade of 'C' or higher.

Four courses in three historical eras (Ancient-Medieval, Modern, and Contemporary) from at least three different departments (Economics, English, History, Philosophy/Religion, Political Science, Sociology/Anthropology).

IDS 4920, Liberal Studies Colloquium on 'Visions of Order and Revolt'. (Under exceptional circumstances another course may be substituted with the advisors approval).

Three independent study tutorials taken in three semester blocks.

Admission to the Program

Admission to the program will be by invitation from a member of the Certificate faculty, or by request from the student. In either case, final approval for admission rests with the Coordinating Committee of the Certificate Program. GPA, intellectual interests, and academic potential will be the criteria considered for admission to the Program.

Advising

The student's advisor will be the designated Certificate representative in his or her major. It is the function of the Certificate advisor to aid students in the selection of relevant courses, to ensure that all Certificate requirements have been completed before graduation, and to assign the tutorial grades. Students who are majoring in a discipline other than those listed will be advised by the Director of the Certificate Program or, by mutual agreement, by another advisor of the students choice. Students are responsible for contacting their advisor on the progress of their coursework and other matters related to completion of Certificate requirements.

Course Listing

The following list may be modified from time to time. The student should consult with his or her advisor about current course offerings.

Ancient-Medieval

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 3001</td>
<td>Introduction to History</td>
<td>3</td>
</tr>
<tr>
<td>HUM 3214</td>
<td>Ancient Classical Culture and Civilization</td>
<td>3</td>
</tr>
<tr>
<td>LIT 4403</td>
<td>Literature Among the Arts and Science</td>
<td>3</td>
</tr>
<tr>
<td>PHH 3100</td>
<td>Ancient Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHH 3200</td>
<td>Medieval Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHM 3200</td>
<td>Social and Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHM 3400</td>
<td>Philosophy of Law</td>
<td>3</td>
</tr>
<tr>
<td>POT 3013</td>
<td>Ancient and Medieval Political Theory</td>
<td>3</td>
</tr>
<tr>
<td>POT 4930</td>
<td>Topics in Political Theory 1</td>
<td>3</td>
</tr>
<tr>
<td>POT 5934</td>
<td>Topics in Political Theory 2</td>
<td>3</td>
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Modern

<table>
<thead>
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<th>Course Name</th>
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<tbody>
<tr>
<td>ENL 4320</td>
<td>Shakespeare's Histories</td>
<td>3</td>
</tr>
<tr>
<td>ENL 4321</td>
<td>Shakespeare's Comedies</td>
<td>3</td>
</tr>
<tr>
<td>ENL 4322</td>
<td>Shakespeare's Tragedies</td>
<td>3</td>
</tr>
<tr>
<td>EUH 3142</td>
<td>Renaissance and Reformation</td>
<td>3</td>
</tr>
<tr>
<td>EUH 4453</td>
<td>French Revolution and Enlightenment</td>
<td>3</td>
</tr>
<tr>
<td>EUH 4286</td>
<td>Topics in European Intellectual History</td>
<td>3</td>
</tr>
<tr>
<td>LIT 3200</td>
<td>Themes in Literature</td>
<td>3</td>
</tr>
<tr>
<td>LIT 4403</td>
<td>Literature Among the Arts and Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PHM 3200</td>
<td>Social and Political Philosophy 1</td>
<td>3</td>
</tr>
</tbody>
</table>
### Women's Studies Certificate Program

**Marilyn Hoder-Salmon, Director, Women's Studies Center**

**Steering Committee:**
- Joyce Shaw Peterson, Coordinator, (History)
- Rusty Belese, (Undergraduate Studies)
- Carmen Mendez, (Education)
- Minnie Dunbar, (Library)
- Ana Roca, (Modern Languages)
- Susan Walliz, (International Relations)
- Lois West, (Women's Studies & Sociology/Anthropology)
- Margaret Wilson, (Center for Labor Research and Studies)

**Advisory Committee**
- Irma de Alonso, (Economics)
- Michelle Baker, Philosophy & Religion
- Lynn Berk, (English)
- Judy Blucker, (Health)
- Toni Margulies-Eisner, (Equal Opportunity Program)
- Mary Jane Elkins, (English)
- Steve Fijellman, (Sociology/Anthropology)
- Rosa Jones, (Academic Affairs)
- Mary Levitt, (Psychology)
- Kathleen McCormack, (English)
- Lynda Raheem, (Business)
- Jennifer Richards, (Biology)
- Mari-Jane Racleson, (English)
- Rebecca Salakar, (Political Science)
- Regina Shean, (Criminal Justice)
- Betsy Smith, (Social Work)
- Karen Sowers-Hoog, (Social Work)
- Judith Stiehm, (Political Science)
- Ophelia Weeks, (Biology)

The Women's Studies Certificate Program provides an opportunity for students to integrate scholarship about gender from a variety of disciplines into a coherent program of study. The Certificate Program includes a core of required courses central to an understanding of women in a social and historical context. The courses provide a basic grounding in Women's Studies that should be useful in many other courses. The core courses are supplemented by a variety of electives to be chosen according to the particular student's specific interests. The Certificate Program seeks to provide a balance to the traditional academic curriculum and also offers pragmatic vocational learning. Students may enroll in the Certificate Program or take courses as electives either in their major or in any discipline that offers women's studies courses for credit.

A student may acquire the Certificate in Women's Studies by fulfilling the following requirements: Three required Core Courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>AMH 4560/HUM 3225</td>
<td>History of Women in the United States</td>
</tr>
<tr>
<td>SOP 3742</td>
<td>Psychology of Women</td>
</tr>
<tr>
<td>SYD 4810</td>
<td>Sociology of Gender</td>
</tr>
<tr>
<td>LIT 3383</td>
<td>Women in Literature</td>
</tr>
<tr>
<td>IDS 3930</td>
<td>Foundations of Liberal Studies selected sections</td>
</tr>
<tr>
<td>HUM 3930</td>
<td>Female/Male: Women's Studies Seminar</td>
</tr>
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</table>

#### Three electives from the following:

<table>
<thead>
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<th>Course Code</th>
<th>Details</th>
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<tbody>
<tr>
<td>AML 4624</td>
<td>African American Women Writers</td>
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<tr>
<td>LIT 4931</td>
<td>Special Topics in Women's Literature</td>
</tr>
<tr>
<td>ANT 3302</td>
<td>Male and Female: Sex Roles and Sexuality</td>
</tr>
<tr>
<td>ANT 3304</td>
<td>Voices of Third World Women</td>
</tr>
<tr>
<td>ANT 4334</td>
<td>Contemporary Latin American Women</td>
</tr>
<tr>
<td>ARH 4931</td>
<td>Women and Art</td>
</tr>
<tr>
<td>CCJ 4663</td>
<td>Women, Crime and the Criminal Justice System</td>
</tr>
<tr>
<td>ENG 4134</td>
<td>Women and Film</td>
</tr>
<tr>
<td>LIN 4651/LIN 6937</td>
<td>Gender and Language</td>
</tr>
<tr>
<td>MAN 4102</td>
<td>Women and Men in Management</td>
</tr>
<tr>
<td>PAD 5435</td>
<td>Administration and the Role of Women</td>
</tr>
<tr>
<td>PHM 4123</td>
<td>Philosophy and Feminism</td>
</tr>
<tr>
<td>POS 4605</td>
<td>Gender Justice</td>
</tr>
<tr>
<td>POT 4993</td>
<td>Sex, Power and Politics</td>
</tr>
<tr>
<td>REL 3145</td>
<td>Women and Religion</td>
</tr>
<tr>
<td>SOW 5109</td>
<td>Crises in the Lives of Women</td>
</tr>
</tbody>
</table>

Every semester additional courses are introduced and periodically special topics courses on gender are offered.

The Center is located in DM 212/214, University Park, 348-2408. Students may contact the Women's Studies Center, or the Certificate Committee coordinator, North Campus, 940-5859 for further information.
College of Arts and Sciences

Dean
Arthur W. Herriott

Associate Deans
Curriculum and Advisement
Fred Bouma

College Relations
Gisela Casines

Graduate Studies and Research
Brian Cutler

North Miami
Joyce Peterson

Director
School of Computer Science
Michael Evangelist

Chairpersons and Program Directors:

Biological Sciences
L. Scott Quackenbush

Chemistry
Ramon Lopez de la Vega

Economics
Panagis Liosisatos

English
Donald Watson

Environmental Studies
David Lee

Geology
Gautam Sen

History
N. David Cook

Humanities
Kenneth Rogerson

International Relations
Damian Fernandez

International Studies
Nicholas Onuf

Liberal Studies
Janet Parker

Mathematics
Enrique Villamor

Modern Languages
Maida Watson-Espener

Music
Frederick Kaulman

Philosophy
Bruce Haupli

Physics
Stephan Mintz

Political Science
John Stack, Jr.

Psychology
Scott Fraser

Religious Studies
Nathan Katz

Sociology and Anthropology
Stephen Fjellman

Statistics
Jie Mi

Theatre and Dance
Therald Todd

Visual Arts
Clive King

Akache, Wald, M.S. (University of Miami), Instructor, School of Computer Science

Aladro, Gerardo, Ph.D. (Pennsylvania State University), Associate Professor, Mathematics

Allen, G. Janice, Ph.D. (University of Florida), Assistant Professor, Sociology/Anthropology

Anbarci, Nejal, Ph.D. (The University of Iowa), Associate Professor, Economics

Antrim, Harry, Ph.D. (University of Florida), Professor, English

Apanius, Victor, Ph.D. (University of Pennsylvania), Assistant Professor, Biological Sciences

Arnold, St. George Tucker, Jr., Ph.D. (Stanford University), Associate Professor, English

Arvin-Rad, Hassan, Ph.D. (University of Pennsylvania), Assistant Professor, Economics

Atti, Paul C., Ph.D. (University of Texas-Austin), Assistant Professor, School of Computer Science

Augenblick, John, D.M.A. (University of Miami), Associate Professor, Music

Bahrick, Lorraine, Ph.D. (Cornell University), Associate Professor, Psychology

Baker, Joan L., Ph.D. (University of Washington), Assistant Professor, English

Baldor, Aurelio, M.A. (Florida International University), Instructor, Modern Languages

Barrett, Lynn, M.F.A. (University of North Carolina-Greensboro), Associate Professor, English

Barton, David, Ph.D. (University of Cambridge), Professor, School of Computer Science

 Bazzi, Rida, Ph.D. (Georgia Institute of Technology), Assistant Professor, School of Computer Science

Becel, Pascale, Ph.D. (University of California-Davis), Assistant Professor, Modern Languages

Becker, David, Ph.D. (Massachusetts Institute of Technology), Assistant Professor, Chemistry

Becker, Michelle, Ph.D. (University of Pittsburgh), Associate Professor, Philosophy

Bekiranov, Daniella, Ph.D. (University of California-Santa Barbara), Assistant Professor, Mathematics

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Timick, Lesley-Ann, M.F.A. (University of California-Davis). Assistant Professor, Theatre and Dance

Todd, Therald, Ph.D. (University of Oregon). Associate Professor and Chairperson, Theatre and Dance

Torres, Manuel, Ph.D. (University of New Mexico). Associate Professor, Visual Arts

Tracey, Martin, Ph.D. (Brown University). Professor, Biological Sciences

Treadgold, Warren, Ph.D. (Harvard University). Professor, History

Trexler, Joel C., Ph.D. (Florida State University). Assistant Professor, Biological Sciences

Tubman, Jonathan, Ph.D. (Pennsylvania State University). Assistant Professor, Psychology

Uribe, Victor, Ph.D. (University of Pittsburgh). Assistant Professor, History

Vagramian-Nishanian, Violet, Ph.D. (University of Miami). Professor, Music

Van Hamme, Walter, Ph.D. (University of Ghent, Belgium). Associate Professor, Physics

Vickers, William, Ph.D. (University of Florida). Professor, Sociology/Anthropology

Villamor, Enrique, Ph.D. (Washington University). Associate Professor and Chairperson, Mathematics

Visvesvaran, Chockalingam, Ph.D. (University of Iowa). Assistant Professor, Psychology

Volcansek, Mary, Ph.D. (Texas Tech University). Professor, Political Science

Wallace, Dorothy Patricia, Ph.D. (Cornell University). Assistant Professor, English

Waltz, Susan, Ph.D. (University of Denver). Associate Professor, International Relations

Wong, Xuewen, Ph.D. (Iowa State University). Associate Professor, Physics

Warren, Christopher, D.A. (Lehigh University). Associate Professor, Political Science

Warren, Paul, Ph.D. (University of Wisconsin-Madison). Associate Professor, Philosophy

Watson, Donald, Ph.D. (University of Virginia). Professor and Chairperson. Modern Languages

Watson-Espener, Maida, Ph.D. (University of Florida). Professor and Chairperson. Modern Languages

Watts, Barbara, Ph.D. (University of Virginia). Associate Professor, Visual Arts

Wauth, Butler, Ph.D. (Indiana University). Professor, English

Webb, James, Ph.D. (University of Florida). Associate Professor, Physics

Weeks, Ophelia, Ph.D. (Howard University). Associate Professor, Biological Sciences

Weinberger, Robert, M.A. (Columbia University). Instructor, English

Weinberger, Theodore, Ph.D. (Emory University). Assistant Professor, Religious Studies

Weiss, Mark, Ph.D. (Princeton University). Associate Professor, School of Computer Science

Weltz, Barbara, M.S. (Florida International University). Instructor, English

Welch, Marcelle, Ph.D. (University of Michigan). Professor, Modern Languages

West, Lois, Ph.D. (University of California-Berkeley). Assistant Professor, Sociology/Anthropology and Women's Studies

Whitman, Dean, Ph.D. (Cornell University). Assistant Professor, Geology

Wilkins, Mira, Ph.D. (University of Cambridge). Associate Professor, Economics

Williams, C. Kemp, Ph.D. (Indiana University). Associate Professor, English

Willumsen, Maria, Ph.D. (Cornell University). Associate Professor, Economics

Winkle, Stephen, Ph.D. (University of California at Berkeley). Associate Professor, Chemistry

Winters, Sandra, M.F.A. (Cornell University). Associate Professor, Visual Arts

Witte, Ann D., Ph.D. (North Carolina State University). Professor, Economics

Wolle, Gregory Baker, Ph.D. (The Fletcher School of Law and Diplomacy). Professor, International Relations

Xie, Hong, Ph.D. (University of California-Davis). Instructor, Chemistry

Yavas, Mehmet, Ph.D. (University of Kansas). Associate Professor, English and Director, Linguistics

Young, Theodore, Ph.D. (Harvard University). Assistant Professor, Modern Languages

Yudin, Florence, Ph.D. (University of Illinois). Professor, Modern Languages

Zahedi-Jasbi, Hassan, Ph.D. (University of California-Riverside). Associate Professor, Statistics

Zalkikar, Jyoti N., Ph.D. (University of California-Santa Barbara). Associate Professor, Statistics

Zhu, Yifu, Ph.D. (University of Virginia). Assistant Professor, Physics

Zweibel, John, Ph.D. (Columbia University). Associate Professor, Mathematics
College of Business Administration
College of Business Administration

The College of Business Administration (CBA) offers academic programs leading to the undergraduate degrees of Bachelor of Business Administration and Bachelor of Accounting and to the graduate degrees of Master of Accounting (M.Acc.), Master of Business Administration (M.B.A.), Master of International Business (M.I.B.), Master of Science in Finance (M.S.F.), Master of Science in Taxation (M.S.T.), and Doctor of Philosophy in Business Administration (Ph.D.).

The College is organized into the School of Accounting and Departments of Decision Sciences and Information Systems, Finance, Management and International Business, and Marketing and Business Environment.

Weekend Bachelor of Business Administration
This is a special program charging tuition plus additional fees limited to a select number of students. The objective of this program is to provide an educational alternative tailored to the needs of the working professional who wishes to complete the final two years of the Bachelor of Business Administration Degree in a concentrated time span. For information on the program call 348-4052.

Undergraduate Majors
Major programs leading to the Bachelor's degree are offered in Accounting, Entrepreneurship, Finance, International Business, Management, Personnel Management, Management Information Systems, and Marketing.

Undergraduate Minors
The College offers both a minor in Business and a minor in Entrepreneurship for non-business students.

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

Academic Standards
1. CBA undergraduates must earn a grade of "C" or higher in all major courses.
2. CBA undergraduates will be required to pass a Readiness Examination prior to registration in ACG 3301 and ACG 4101.
3. Undergraduate and graduate students may not enroll more than twice in any CBA course without the written permission of the Dean. This permission will be granted only in those exceptional cases where failure to complete a course successfully is demonstrated to be unrelated to classroom performance.
4. All CBA students must satisfy the requirements of their respective programs of study and, additionally, must satisfy all University requirements for graduation.
5. See University General Information regarding Academic Warning, Probation, and Dismissal.

Undergraduate Programs
All students must have a program of study completed by the end of their first semester. Entering Accounting majors should call the School of Accounting, 348-2571, to make a program counseling appointment. All other majors should call 348-2781 at University Park, or 965-5221 at the North Campus. At the time of the appointment the appropriate counselor will assist the student in completing a formal program of study. Questions of interpretation regarding course or degree requirements will be resolved at the time the program of study is developed. If, for some reason, a program of study is not completed at least two semesters before a student is expected to graduate, the student may not be permitted to register for future classes.

Undergraduate students majoring in non-business areas will not be permitted to apply more than 30 semester hours of business courses toward their degree.

Additionally, students who register for any graduate business course must be formally admitted to a graduate certificate or graduate degree program at the University. Applicants to the College must submit an Application for Admission to the University and must follow the regular University admission procedures. Applicants must be eligible for admission to the University before admission to the College.

An undergraduate student is required to have completed the Associate in Arts degree or its equivalent, and is encouraged to have some knowledge of accounting, mathematics, computer programming, speech and economics (accounting majors should also have coursework in the areas of calculus and logic). The broad liberal arts exposure inherent in the Associate in Arts degree usually enables a student to complete the Bachelor of Business Administration requirements in the equivalent of two years, and to take most of the professional work within the College. This professional work includes:
1. Pre-core courses where necessary;
2. Certain required courses designed to provide the student with a common body of knowledge, including:
   a. A background of concepts and processes in the marketing, production, and financing of goods and services in the business enterprise and related organizations, both domestically and internationally;
   b. A background of the economic and legal environment as it pertains to profit and non-profit organizations along with ethical, social, and political influences;
   c. A basic understanding of concepts and applications in accounting, quantitative methods, computers, and management information systems;
   d. A study of organization theory, behavior, and interpersonal communications;
   e. A study of administrative processes and decision-making under conditions of uncertainty, including policy analysis at the overall management level;
3. Courses required for the student's major;
4. Approved elective courses.
The student entering an undergraduate program of the College is required to meet the following standards:

1. 60 semester hours completed.
2. Grade point average of 2.5 or higher. Business courses taken at the University are not included in this computation.
3. Satisfaction of general University requirements for admission, including, in this case, the general education requirements. The general education requirements are: English composition, humanities, social science, natural science, and mathematics.

If a student has a GPA higher than 2.5 and is deficient in no more than six semester hours of general education requirements, the student may still be accepted into the undergraduate program. However, all lower-division deficiencies must be completed during the student’s first two semesters at the University.

Upper-Division Transfer

Previous credit may be considered acceptable for transfer toward upper-level academic study in the College if the credit was designated as junior-senior level credit at an accredited four-year upper-level institution, a grade of ‘C’ or higher was earned, or can be validated by some acceptable measure to verify its equivalency. Students wishing to transfer to the College must be in good standing at their previous school or college.

Change of Major

Any student changing to a new major within the College of Business Administration from another college or school in the University must meet certain degree requirements in effect at the time of the change of major.

Residency Requirements

A student must complete the last 30 semester hours of course work at the University to qualify for the undergraduate degree.

Readmission

An admitted degree-seeking student who has not enrolled in any course at the University for three consecutive semesters must complete a readmission application. Those eligible for readmission are subject to the University and program regulations in effect at the time of readmission.

Degree Requirements

See University General Information.

Undergraduate Business Program Requirements

Lower-division Preparation

The following courses, in addition to the other requirements for the Associate in Arts degree, should be a part of the 60 semester hours of lower-division coursework completed in order to enter any CBA upper-division major: six semester hours of accounting; six semester hours of economics; three semester hours of college algebra; three semester hours of business statistics; and three semester hours of computer applications.

FIU undergraduates must have met all the lower-division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into CBA programs.

Computer Programming Proficiency Requirement

The rapidly increasing need of the professional administrator for exposure to computer technology and terminology requires that fundamental expertise in this area be achieved.

Therefore, prior to enrollment in CGS 3300 (or ACG 4401), each student must demonstrate computer programming proficiency. This requirement may be completed in any of the following ways:

1. Successful completion of a computer programming course at the lower-division.
2. Successful completion of CGS 2060 Introduction to Microcomputers.
3. Work experience with verification by employer. Further details may be obtained from the undergraduate counseling office.

Upper-Division Program

Pre-Core Courses Required for Business Administration Students: (21 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Accounting for Decisions</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2071</td>
<td>Accounting for Planning and Control</td>
<td>3</td>
</tr>
<tr>
<td>CGS 2060</td>
<td>Introduction to Microcomputers</td>
<td>3</td>
</tr>
<tr>
<td>ECO 3021</td>
<td>Economics and Society-Macro</td>
<td>3</td>
</tr>
<tr>
<td>ECO 3011</td>
<td>Economics and Society-Macro</td>
<td>3</td>
</tr>
<tr>
<td>STA 3132</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Calculus for Business and Economics

The above courses will be waived if the student received a grade of ‘C’ or higher in the appropriate lower-division courses. A student should see a counselor to determine whether these courses should or should not be added to the program of study. Upper-division credit will not be given for STA 3132, ECO 3021, ECO 3011, ACG 2021, ACG 2071, CGS 2060, MAC 2233, FIN 3005 and PHI 2100, or comparable courses taken at the lower level.

Core Courses Required for Business Administration Students: (36-39)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 3300</td>
<td>Introduction to Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ACG 3311</td>
<td>Applied Accounting Concepts</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2130</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3403</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 4303</td>
<td>Financial Markets and Institutions</td>
<td>3</td>
</tr>
<tr>
<td>GEB 3113</td>
<td>Entrepreneurship &amp; Organization</td>
<td>3</td>
</tr>
<tr>
<td>MAN 3025</td>
<td>Organization and Management</td>
<td>3</td>
</tr>
<tr>
<td>MAN 3602</td>
<td>International Business</td>
<td>3</td>
</tr>
<tr>
<td>MAN 3701</td>
<td>Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>MAN 4504</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MAN 4722</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MAR 3023</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>QMB 3200</td>
<td>Applications of Quantitative Methods in Business</td>
<td>3</td>
</tr>
</tbody>
</table>

1This course should not be taken by students majoring in accounting. (See model schedule for accounting majors).

Major Required Credits 12-21

Approved Elective Credits 3-12

Note: All electives must be approved in advance by the Counseling Office. At least three courses (9 credits) which are electives should be taken outside the College of Business as below:

Required Elective:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 3431</td>
<td>Applied Macro Economics</td>
<td>3</td>
</tr>
</tbody>
</table>
Other Electives: Two non-business electives.

**Business Core Courses**
The core courses and prerequisites in the College are as follows:

FIN 3403 Financial Management, STA 3132 and ACG 2021 or its equivalent.

MAR 3023 Marketing Management

QMB 3200 Application of Quantitative Methods in Business - STA 3132, or its equivalent, and college algebra.

CGS 3300 Introduction to Information Systems - computer programming proficiency requirement or CGS 2060.

ACG 2071 Accounting for Planning and Control - at least three semester hours of introductory financial and managerial accounting with a grade of 'C' or higher; or ACG 2021 with a grade of 'C' or higher; and successful completion of a readiness examination.

ACG 3311 Applied Accounting Concepts - ACG 2021 and ACG 2071 or equivalent

ECO 3431 Applied Macroeconomics - ECO 3021 and ECO 3011 or equivalent

GEB 3113 Entrepreneurship and Organization

MAN 3025 Organization and Management

MAN 3602 International Business - ECO 3431

MAN 3701 Business and Society - ECO 3021 and ECO 3011 or equivalent

MAN 4504 Operations Management - QMB 3200

MAN 4722 Strategic Management - Completion of all core course requirements. Course should be taken in the student's last academic semester before graduation.

**Entrepreneurship**

**Requirements**
The following courses will be required as a major in Entrepreneurship:

FIN 4345 Credit Analysis and Loan Evaluation

MAN 4802 Small Business Management

MAN 4853 Marketing Strategy

MAN 4930 Special Topics in Management - Entrepreneurship

In addition the students will be required to do a 30 hour internship with a small, entrepreneurial business and write a complete analysis of the business with recommendations in terms of its future direction. Students will register for Management 4905.

**Minor in Business**
To meet the increasing demand for business courses by students from other colleges and schools, the College offers a minor for non-business students. Students opting for a minor in Business must complete the following five courses:

ACG 3024 Accounting for Managers

FIN 3005 Introduction to Business Finance

MAR 3023 Marketing Management

MAN 3025 Organization and Management

ISM 3012 Introduction to Decision and Information Systems
### School of Accounting

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>James H. Schelner</td>
<td>Professor and Director</td>
</tr>
<tr>
<td>Rall Auster</td>
<td>Professor</td>
</tr>
<tr>
<td>Delano H. Berry, Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Lucia S. Chang</td>
<td>Professor</td>
</tr>
<tr>
<td>Jack L. Carter, Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Yong S. Chee, Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Lewis F. Davidson</td>
<td>Professor</td>
</tr>
<tr>
<td>Manuel Dieguez, Instructor</td>
<td></td>
</tr>
<tr>
<td>Mortimer Dittenhofer, Professor</td>
<td></td>
</tr>
<tr>
<td>Donald W. Fair, Instructor and Associate Dean</td>
<td></td>
</tr>
<tr>
<td>Georgina Garcia</td>
<td>Instructor</td>
</tr>
<tr>
<td>Mii H. Guo</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Rosalie C. Hallbauer, Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Harvey S. Hendrickson, Professor</td>
<td></td>
</tr>
<tr>
<td>Kevin Kemerer, Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>David Lavin, Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Myron S. Lubell, Associate Professor</td>
<td></td>
</tr>
<tr>
<td>David Manry, Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Kenneth S. Most, Professor Emeritus</td>
<td></td>
</tr>
<tr>
<td>Leandro S. Nunez, Instructor</td>
<td></td>
</tr>
<tr>
<td>Robert B. Oliva, Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Felix Pomeranz, Professor, Associate</td>
<td></td>
</tr>
<tr>
<td>Director and Director, Center for</td>
<td></td>
</tr>
<tr>
<td>Accounting, Auditing, and Tax Studies</td>
<td></td>
</tr>
<tr>
<td>Leonardo Rodriguez</td>
<td>Professor</td>
</tr>
<tr>
<td>Ena Rosé-Green, Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Bernadette Rul, Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Samuel Tiras, Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Jerry Turner, Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Barbara T. Uliss, Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Clark Wheatley, Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Richard H. Wiskeman, Jr., Instructor</td>
<td></td>
</tr>
<tr>
<td>John Wieden, Instructor</td>
<td></td>
</tr>
<tr>
<td>Harold E. Wyman, Professor and Dean</td>
<td></td>
</tr>
<tr>
<td>Dario Yeoman, Associate Professor</td>
<td></td>
</tr>
</tbody>
</table>

### Bachelor of Accounting (B.Acc.)

**Degree Program Hours:** 120

The B.Acc. program prepares students for positions in public, corporate, private-sector, and governmental accounting. For positions in public accounting, students must take the CPA examination, which in Florida requires an additional 30 semester hours beyond the B.Acc. degree. The B.Acc. program also provides students seeking advanced accounting, business, or law degrees with an appropriate foundation for those studies. The accounting program consists of four parts requiring 120 hours of course work:

<table>
<thead>
<tr>
<th>Part</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower-Division/Business Pre-Core</td>
<td>60</td>
</tr>
<tr>
<td>Upper-Division/Business Core</td>
<td>33</td>
</tr>
<tr>
<td>Accounting Core</td>
<td>21</td>
</tr>
<tr>
<td>Approved Accounting Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

The lower division/business pre-core requirements are described in the University General Information and CBA Undergraduate Business Requirements. Students must complete all lower division/business pre-core requirements no later than the first semester of the third year of undergraduate study.

The upper division business core requirements are described in the College of Business Administration Upper-Division Program.

### Accounting Core Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 4111</td>
<td>Financial Accounting I</td>
</tr>
<tr>
<td>ACG 4112</td>
<td>Financial Accounting II</td>
</tr>
<tr>
<td>ACG 4341</td>
<td>Management Accounting</td>
</tr>
<tr>
<td>ACG 4401</td>
<td>Accounting Information Systems</td>
</tr>
<tr>
<td>ACG 4651</td>
<td>Auditing</td>
</tr>
<tr>
<td>BUL 4320</td>
<td>Business Law I</td>
</tr>
<tr>
<td>TAX 4001</td>
<td>Income Tax Accounting</td>
</tr>
</tbody>
</table>

All courses in the accounting area must be taken at this University, i.e., courses in accounting are not transferable unless approved in advance by the Director of the School of Accounting.

The elective requirements are two courses one of which is ECO 3431 (Applied Macroeconomics) and one that must be approved by the Director of the School of Accounting.

### Model Schedule B.Acc. Major

Below is a model schedule for a typical full-time B.Acc. major who has completed all of the 60 hours of lower division requirements. Deviations from this schedule must be approved by the Director of the School of Accounting. (The student possessing a non-business baccalaureate degree should consult the School of Accounting for alternative programs that meet the Florida State Board of Accountancy requirements).

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 3311</td>
<td>MAR 3023</td>
</tr>
<tr>
<td>FIN 3403</td>
<td>GEB 3112</td>
</tr>
<tr>
<td>QMB 3150</td>
<td>MAN 3025</td>
</tr>
<tr>
<td>ECO 3431</td>
<td>ACG 4401</td>
</tr>
</tbody>
</table>

### Policy for Continuation as a B.Acc Major

1. Students must earn a minimum grade of 'C' in ACG 3311.

2. Students must earn a minimum grade of 'C' in all 4000 level accounting, business law, and tax courses.

3. Students not achieving a grade of 'C' or better in two enrollments in any course will be dropped from the Accounting program. In extenuating circumstances, continuation in the program may be possible after a written appeal to the Continuation and Retention Committee. Appeals should be directed to the Director of the School of Accounting. A student may have no more than three re-enrollments.

4. Undergraduate students who wish to take more than two accounting and tax courses in one semester must submit a written appeal to the Continuation and Retention Committee.

5. Prerequisites for all accounting and tax courses are strictly enforced.

6. Students taking accounting and tax courses are expected to seek counsel from Accounting advisors prior to registration.

7. Students working more than 20 hours per week are strongly urged to discuss with an Accounting advisor the composition of their schedule and number of courses they should take.
Decision Sciences and Information Systems
Enzo Valenzi, Professor and Acting Chairperson
Dinesh Baita, Associate Professor
Joyce J. Etam, Professor and James L. Knight Eminent Scholar
Sushil K. Gupta, Professor and Vice Provost
Christos P. Koulamas, Professor
Jerry Kyparisis, Professor
Tomislav Mandakovic, Professor
Krishnamurty Muralidhar, Associate Professor
Kenneth E. Murphy, Assistant Professor
Rajiv Sabherwal, Assistant Professor
Radhika Santhanam, Associate Professor
Larry A. Smith, Associate Professor
Steve H. Zanakis, Professor
Peter J. Zegon, Instructor

The Department of Decision Sciences and Information Systems offers coursework in the areas of Management Information Systems, Management Science, Production/Operations Management, and Business Statistics at both the graduate and undergraduate levels. Students may pursue at the undergraduate level a major in Management Information Systems; and at the graduate level a concentration in the Master of Business Administration. The Department also offers a doctoral concentration in Information Systems.

Management Information Systems

Degree Program Hours: 120
The undergraduate program in Management Information Systems (MIS) emphasizes the design, development, implementation, and use of information technology to solve organizational problems effectively. The program is designed to prepare graduates for entry-level positions in the profession of MIS, whether in user or in system departments. This program is a natural continuation for students who have completed a business data processing program at the lower division.

The MIS program is composed of the following three parts:
Business Core: 12 courses (36)
Finance: Five courses (15)
ISM 4113 Systems Analysis and Design 3
ISM 4210 Data Base Applications 3
ISM 4151 Systems Management 3
ISM 4400 Management Support Systems 3
ISM 4220 Business Data Communications 3

Electives: Three courses (9)
Electives should be taken from approved courses in Computer Science, Business, or other Departments. CGS 3403 COBOL for Non-Computer Science Majors or COP 2120 Data Processing and COBOL, or equivalent, must be taken before ISM 4210.

CGS 3403 or COP 2120 may be counted as an elective.

Finance
Arun Prakash, Professor and Chairperson
Gary Anderson, Associate Professor
Joel Barber, Associate Professor
Robert Bear, Professor
Gerald O. Bierwag, Professor, Ryder System
Chun-Hao Chang, Associate Professor
Robert T. Daigler, Associate Professor
Krishnan Dandapani, Associate Professor
Maria E. de Boyrie, Assistant Professor
Shahid Hamid, Associate Professor
James Keys, Instructor
Simon Pak, Associate Professor
Ali M. Parhizgari, Professor and Director, MBA Program
Emmanuel Roussakis, Professor and Director, Certificate Programs
Lee Sevald, Instructor and MSF Program Coordinator
Michael Sullivan, Assistant Professor
William Welch, Associate Professor
John S. Zdanowicz, Professor and Director, Center for Banking and Financial Institutions

The Department of Finance offers an undergraduate major in Finance, and a Master of Science in Finance (M.S.F.).

Undergraduate Finance Major
Degree Program Hours: 120
The Finance program leading to the BBA degree is designed to give the undergraduate student managerial finance skills in the areas of banking, corporate finance, investments, and financial markets. Tracks are available for those students who desire a concentration in a particular area of finance. The program consists of:
1. 36 semester hours of general business core courses.
2. 12 semester hours of finance major courses:
   FIN 3414 Intermediate Finance
   FIN 4324 Commercial Bank Management
   FIN 4486 Financial Risk Management-Engineering
   FIN 4502 Securities Analysis
3. A three semester hour finance major elective.
Management and International Business
Gary Dessler, Professor and Chairperson
Constance S. Bales, Associate Professor
Larry W. Cox, Assistant Professor
Herman Darsett, Associate Professor
Dana L. Farrow, Professor and Associate Dean
Earnest Friday, Assistant Professor
Ronald Gilbert, Associate Professor
Joyce Harrigan, Instructor
Richard M. Hodgetts, Professor
William T. Jerome, Distinguished University Professor
K. Galen Kroeck, Associate Professor
Jan B. Luytjes, Professor
Karl O. Magnusen, Associate Professor
Moadeo A. Maidique, Professor and University President
Sherry Mass, Assistant Professor
Stephen L. Mueller, Assistant Professor
Eleanor Polster, Instructor and Graduate Coordinator
Antonio F. Pradas, Instructor
Kannan Ramaswamy, Associate Professor
Leonardo Rodriguez, Professor
Donald Roome, Instructor and Coordinator, Weekend BBA
John D. Sargent, Assistant Professor
Rennie Silverblatt, Associate Professor
George Sutija, Associate Professor
William M. Taggart, Professor
Anisya S. Thomas, Associate Professor
Enzo Valenzi, Professor
Mary Ann Von Glinow, Professor

The Department of Management and International Business offers programs of study at the Bachelor's level in General Management, Personnel Management, and International Business.

General Management and Personnel Management Majors

Degree Program Hours: 120
The student is given latitude either to specialize in one particular area, or to select from courses on a more general level of professional education. The curriculum is designed to allow students to prepare for employment in business or other profit organizations. The emphasis is on developing immediately applicable skills in management within a broader frame.

work of general concepts and theory. Flexibility is allowed and students are permitted to take up to 12 hours of electives in other fields, particularly in economics, mathematics, and psychology in 3000- and 4000-level courses not a part of the College's pre-core. Electives in fields other than these must have the prior approval of the Department Chairperson. The Management major requires 12 semester hours of courses listed with the Department at the 4000 level.

Note: Not all courses with an MAN prefix are Management courses.

Major courses for Management students in specific subject areas

Personnel Management Major:
(Select 4 of 6)
MAN 4401 Collective Bargaining
MAN 4410 Union-Management Relations
MAN 4301 Personnel Management
MAN 4320 Personnel Recruitment and Selection
MAN 4322 Personnel Information Systems
MAN 4320 Wage and Salary Administration.

General Management Major
Any four other eligible Management or Personnel Management courses listed with the Management and International Business Department. (Students are urged to confer with their academic counselors regarding eligible courses.

Note: Not all courses with an MAN prefix are Management courses.

Note: Elective courses outside the CBA must be taken in the Departments of Economics, Mathematical Sciences, Computer Science, or Psychology. Exceptions may be permitted only with the approval of the Department Chairperson. Elective courses taken in other departments must be taken for letter grade only.

International Business Major

Degree Program Hours: 120
The Department of Management and International Business offers an undergraduate major in International Business to students in the College of Business Administration.

The objective of the undergraduate International Business major is to provide eligible students with an intensive, in-depth study of the international dimension of business operations. Students are required to take the following courses.

MAN 4600 International Management

Three of the following courses:
FIN 4604 International Financial Management (required for Finance IB majors)
MAN 4671 Special Topics in International Business
MAN 4690 Independent Study in International Business
MAR 4156 International Marketing (required for Marketing IB majors)
MAR 4144 Export Marketing
ECO 4701 World Economy
ECO 4733 Multinational Corporations

(Listings of additional International Business courses are available in the CBA Counseling office.)

Entrepreneurship Track

A track in Entrepreneurship is offered to address the needs of students in taking initiatives and acquiring a greater degree of self-reliance.

Required courses
FIN 4345 Credit Analysis and Loan Evaluation
MAN 4802 Small Business Management
MAR 4853 Marketing Strategy
MAN 4930 Special Topics in Management

In addition, the students will be required to do a 30-hour internship with a small, entrepreneurship business and write a complete analysis of the business with recommendations in terms of future direction. Students will register for MAN 4905.

Minor in Entrepreneurship (for non-business students)

Students opting for a minor in Entrepreneurship must complete the following courses:
GEB 3113 Entrepreneurship
ACG 3024 Accounting for Managers and Investors
FIN 3106 Personal Financial Management
MAR 3023 Marketing Management
MAN 4802 Small Business Management
Marketing and Business Environment

Barnell A. Greenberg, Professor and Chairperson
Michael Barone, Assistant Professor
Mary Jane Burns, Assistant Professor
Deborah Cohen, Assistant Professor
Dennis J. Gayle, Associate Professor
Jonathan N. Goodrich, Professor
Robert Hogner, Associate Professor
Carl Kranendonk, Instructor
Tiger Li, Assistant Professor
Philip H. Mann, Instructor and Director, Entrepreneurial Studies
Paul Miniard, BMI Professor of Marketing
J.A.F. Nicholls, Professor
Marla Ortiz, Associate Professor
Karen Paul, Professor
Lynda Rhesm, Instructor and Assistant Dean
Scott Robin, Instructor
Sydney Rosow, Professor Emeritus
Bruce Seaton, Associate Professor
Philip Shepherd, Associate Professor
Kimberly Taylor, Assistant Professor
John Tsaklis, Associate Professor
Arturo Vasquez, Assistant Professor

Undergraduate Marketing Major

Degree Program Hours: 120

The Marketing Major requires 15 semester hours of senior (4000) level marketing course work, of which the following nine hours are required:

MAR 4503 Consumer Behavior
MAR 4613 Marketing Research
MAR 4803 Cases in Marketing Management

The remaining six hours are selected by the student with his or her advisor from other Marketing course offerings. Although not required students may choose to concentrate in a specific area and take, for example:

1. Advertising Concentration
   MAR 4323 Advertising Management
   MAR 4334 Advertising Campaign Management

2. Sales Concentration
   MAR 4403 Sales Management
   MAR 4400 Personal Selling

3. Retailing Concentration
   MAR 4231 Retailing Management
   MAR 4232 Cases in Retailing Management

4. International Concentration
   MAR 4156 International Marketing
   MAR 4144 Export Marketing

5. Distribution Concentration
   MAR 4203 Marketing Channels
   MAR 4213 Transportation Logistics

   Marketing majors, however, may choose courses from any other approved undergraduate marketing offerings.

Approved Electives

Marketing majors may select any 4000-level business course as an elective. With the prior approval of the Counseling Office, certain non-business courses also may be used as electives (depending upon their relevance to the student’s academic program and career objectives).

Minor in Marketing

Students admitted into a degree program at FIU and having a 2.25 cumulative GPA, must apply to the CBA for a Minor in Marketing.

Required
   MAR 3023 Marketing Management
   MAR 4503 Consumer Behavior

Any three of the following:
   MAR 4025 Marketing of Small Business Enterprises
   MAR 4156 International Marketing
   MAR 4203 Marketing Channels
   MAR 4231 Retailing Management
   MAR 4323 Advertising Management
   MAR 4333 Promotional Strategy
   MAR 4334 Advertising Campaign Management
   MAR 4403 Sales Management
   MAR 4613 Marketing Research
   MAR 4400 Personnel Selling
   MAR 4144 Export Marketing

   MAN 4065 or MAN 4731 may be substituted for one of the three marketing electives; however, both courses cannot be taken for credit toward the Marketing Minor.
Certificate Programs

General Information
The overall purpose of the Certificate Programs is to provide practicing managers with advanced training in the techniques and methods pertinent to their areas. The programs are for both degree and non-degree seeking students, and are available in the areas of Banking and International Bank Management. A Certificate is awarded upon successful completion of each program.

Students wishing to enter the Banking, or International Bank Management Certificate Programs must meet all prerequisites for courses in those programs. Please contact the Business Counseling Office at 348-2781 for application details. In all cases, students must apply to, and be accepted into the Certificate Programs. Upon successful completion of the appropriate course work, and upon application by the student to the appropriate department, a Certificate of Completion will be awarded.

Banking Certificate
The CIB, (Certificate in Banking) is designed for practicing bank managers and bank employees. The core program consists of four undergraduate or graduate Finance courses. Upon successful completion of the four course sequence, a Certificate signed by the Dean of the College of Business Administration will be awarded.

Participants in the CIB Program must meet certain admission requirements. In general, those intending to take undergraduate level courses must have an Associate in Arts Degree or its equivalent, and must meet the other lower division preparation requirements of the College.

Program Requirements
FIN 4404 Policies for Financial Management
or
FIN 4486 Financial Risk Management - Financial Engineering
FIN 4303 Financial Markets and Institutions
FIN 4324 Commercial Bank Management
FIN 4345 Credit Analysis and Loan Evaluation

International Bank Management Certificate
The Certificate in International Bank Management (CIBM) is designed to train existing and future bankers in the areas of international banking policy, practice, and technique. Its interest is to provide an interface between the domestic and international side of banking for bank managers. This certificate is not open to finance majors.

Participants in the CIBM must meet the admission requirements listed for the Certificate in Banking Program.

Required Courses
FIN 4404 Policies for Financial Management
or
FIN 4486 Financial Risk Management - Financial Engineering
FIN 4324 Commercial Bank Management
or
FIN 4345 Credit Analysis and Loan Evaluation
FIN 4604 International Financial Management
FIN 4615 International Banking

Professional Development Certificate Programs

Certificate In Managing Quality Health Care Systems
Combining study of the functional areas of management with development of human relations skills, this program prepares managers for success in today's health care environment. This Certificate was created for the health care manager whose clinical education did not prepare him/her for managing a rapidly changing health care industry. In addition, it prepares participants to address tomorrow's challenges. Quality standards mandated by the Joint Commission on Accreditation of Health Care Organizations is an overarching theme. A community advisory council of health care executives provides continuous input to assure the blending of theory and practice in the educational experience. This two semester program qualifies for several professional continuing education units, an earned Certificate, and limited consideration for credit in certain Colleges and Schools within FIU.

Training and Human Resource Development Certificate
Based in academic theory and models, this program uses hands-on techniques and applications that build the competencies to operationalize its conceptual framework. This two semester program is the most comprehensive non-credit program for adult educators in the United States. In addition to an earned Certificate and c.e.u.'s, the program qualifies for credit consideration in several University schools. Recognized by the American Society for Training and Development, the program was showcased in it's April, 1989 issue of the Training and Development Journal. The certificate sets a standard for professionalism for South Florida trainers.

Human Resource Certificate
Created for the practitioner with up to five years experience in a personnel or human resource department, this Certificate program meets once a week for 11 weeks. It covers the functions of personnel administration with emphasis on the ever-changing legal issues affecting its practice. The program surveys the field and concentrates on skill building in the areas of interviewing, using and developing appropriate forms, and building a professional network. A Certificate as well as c.e.u.'s may be earned.
Course Descriptions

Definition of Prefixes:
ACG-Accounting; BAN-Banking; BUL-Business Law; CIS-Computer and Information Systems; CES-General Business; FIN-Finance; MAN-Management; MAR-Marketing; QMB-Quantitative Methods in Business; REE-Real Estate; RMI-Risk Management and Insurance; TAX-Taxation.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

Departmental or School/College Designation:
AC - Course taught by School of Accounting
BA - Interdepartmental course taught by College of Business Administration
DS - Course taught by Department of Decision Sciences and Information Systems
EC - Course taught by Department of Economics, College of Arts and Sciences
FI - Course taught by Department of Finance
MA - Course taught by Department of Management and International Business
ME - Course taught by Department of Marketing and Business Environment
MS - Course taught by Department of Mathematical Sciences, College of Arts and Sciences

ACG 2021 Accounting for Decisions (AC) (3). Accounting concepts and analyses essential to determining the income and financial position of a business enterprise. Prerequisites: ECO 3021, ECO 3011, STA 3132, or equivalent and sophomore standing. (F.S.SS)

ACG 2071 Accounting for Planning and Control (AC) (3). Use of accounting concepts, analyses, and financial data to aid in the evaluation of the business enterprise; and to aid management in its planning, organizing, and controlling functions. Prerequisites: ACG 2021 or equivalent with a grade of 'C' or higher, and successful completion of a readiness examination. (F.S.SS)

ACG 3024 Accounting for Managers and Investors (AC) (3). Introduction to the principles used in measuring organization activities. For non-business majors only. (F,S)

ACG 311C Applied Accounting Concepts (3). A continuation of ACG 2021 and ACG 3301. A case study course exploring uses of accounting information, financial statement analysis and ethical issues in accounting. Prerequisites: ACG 2021 and ACG 3301 (or equivalent within one year with grades of 'C' or higher of upper division work. Must be taken in first 30 hours of upper division work. (F.S.SS)

ACG 4101 Financial Accounting I (AC) (3). Underlying concepts and ethical, regulatory and business environment of financial reporting with emphasis on measurement, analysis and interpretation of income, cash flows and financial position. Prerequisites: Calculus I with a grade of 'C' or higher, ACG 3311 with grade of 'C' or higher within one year, successful completion of a readiness examination, and junior standing. (F,S,SS)

ACG 4111 Financial Accounting II (AC) (3). Underlying concepts and ethical, regulatory, and business environment of financial reporting with emphasis on measurement, analysis and interpretation of financial position. Prerequisite: ACG 4101 with grade of 'C' or higher. (F,S,SS)

ACG 4251 International Accounting (AC, MA) (3). Comparative analysis of accounting concepts and practices in different countries; international accounting standards; problems of accounting for multinational corporations, including transfer of funds and income measurement; and the role of accounting in national economic development. Prerequisites: CGS 2060 or equivalent. ACG 3301 with grade of 'C' or higher.

ACG 4341 Management Accounting (AC) (3). Determination and control of production costs, job order and process systems, actual and standard costs; budgetary control; performance measurement; ethics; accounting for state and local governments. Prerequisites: ACG 4101 with a grade of 'C' or higher and ability to work with spreadsheet. (F.S,SS)

ACG 4401 Accounting Information Systems (AC) (3). Use of computers in accounting systems, emphasizing hands-on use of operating system, word processing, spreadsheet, data base management, communications and other software in accounting. Prerequisites: CGS 2060 or equivalent. (F.S,SS)

ACG 4651 Auditing (AC) (3). Standards and procedures of auditing financial information, ethics and responsibilities of auditors, collection and documentation of audit evidence, reporting and international auditing standards. Prerequisite: ACG 4111 with a grade of 'C' or higher. (F.S.SS)

ACG 4692 Accounting Information Presentation (AC) (3). Seminar in the development and presentation of oral and written information as required by authoritative standards and pronouncements in accounting and auditing. Prerequisites: ACG 4651 and ACG 4341 with grades of 'C' or higher.

ACG 4821 Accounting and Social Responsibility (AC) (3). Ethical and social responsibilities of accountants with emphasis on professional ethics in corporate, government and public accounting structure and practices and their effects on employees, environment and community. Prerequisites: ACG 4341 ACG 4651 with grades of 'C' or higher.

ACG 4901 Independent Study in Accounting (AC) (1-3). Individual conferences, supervised readings, and reports on personal investigations.

ACG 4931 Special Topics in Accounting (AC) (1-3). For groups of students who wish an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Prerequisite: Permission of the Director of the School of Accounting.

BUL 2130 The Legal Environment of Business (AC) (3). The course includes issues such as: Contracts, Torts, Legal/Political/Economic aspects of Ethics and the Law, U.C.C., Antitrust Law, Employment Law, Administrative Law, Securities Law, and International Business Law topics. (F.S.SS)

BUL 4320 Business Law I (AC) (3). Substantive issues and principles of business law, including: the American legal system, torts, contracts, Uniform Commercial Code, sales, property law, credit and secured transactions, and ethical issues in business law. (F.S.SS)

BUL 4650 Special Topics in Business Law (AC) (1-6). Intensive study for groups of students of a particular topic, or a limited number of topics, not otherwise offered in the curriculum. Prerequisite: Permission of the
FIN 3106 Personal Financial Management (FI) (3). An introductory course to help individuals achieve their personal financial goals. Topics include personal budgeting, taxes, credit, major expenses, insurance, investments, and retirement planning.

FIN 3403 Financial Management (FI) (3). A study of financial decision making in the corporate form of enterprise. An analysis of the sources and uses of funds. Emphasis is placed on working capital management; capital budgeting techniques; short and long term financing; and capital structure and the value of the firm. Prerequisite: ACG 2021 and STA 3132 or equivalent. (F,S,SS)

FIN 3414 Intermediate Finance (FI) (3). Special topics and case problems in financial management. Prerequisite: FIN 3403 or equivalent. (F,S,SS)

FIN 3949 Cooperative Education in Finance (FI) (3). Semesters of full-time classroom study are alternated with semesters of full-time remunerated employment which closely relates to the student’s area of academic study. Carefully designed and monitored work assignments are intended to develop the student’s understanding of the relationship between theory and practice in an authentic work environment. Prerequisite: Approval of Chairperson. (F,S,SS)

FIN 4303 Financial Markets and Institutions (FI) (3). Financial markets and the role of financial intermediaries in these markets. Emphasis will be upon the objectives and policies of financial intermediaries within the constraints of law and regulatory authorities. Prerequisite: FIN 3403 or equivalent. (F,S,SS)

FIN 4324 Commercial Bank Management (FI) (3). The management of bank assets and liabilities; specialized banking functions; and the role of the commercial bank in financing business. Prerequisite: FIN 3403 or equivalent. (F,S,SS)

FIN 4345 Credit Analysis and Loan Evaluation (FI) (3). Topics to include: introduction to commercial lending; secured lending; accounts receivable financing and factoring; inventory financing; introduction to lending vehicles; short term lending; domestic taxation; consolidations; forecasting and intermediate term cash flow lending; term loan agreements/covenants; subordinations and guarantees; foreign exchange; international transactions and leasing. Prerequisite: FIN 3403. (F)

FIN 4404 Policies for Financial Management (FI) (3). The process of securing and allocating funds within the organization, with emphasis on the relevant financial decision-making and policy aspects. Prerequisite: FIN 3414 or equivalent. (S)

FIN 4435 Capital Budgeting Techniques and Applications (FI) (3). The application of contemporary theory and techniques to the problem of long term resource allocation. A review of capital budgeting techniques and the implications the investment and management of capital have toward the goal of maximizing the value of the firm. Prerequisite: FIN 3414 or equivalent. (F)

FIN 4461 Financial Statement Analysis (FI) (3). This course explores methods of deriving information from financial statements, including both published documents and privately prepared reports, that would be of interest to lenders and investors. Extensive use is made of computer assisted financial planning forecasting models. Prerequisite: FIN 3403. (on demand)

FIN 4486 Financial Risk Management-Financial Engineering (3). A survey of financial instruments used for financial risk management, including forwards, futures, options and swaps. Emphasis is on identification of financial risks and designing optimal risk management program. Prerequisites: FIN 4303 and FIN 3414. (S)

FIN 4502 Securities Analysis (FI) (3). The examination of the determinants of the values of common and preferred stocks, bonds, and warrants. The timing of security purchases and sales and an introduction to portfolio construction techniques. Prerequisite: FIN 3414 and QMB 3200. (F,S,SS)

FIN 4503 Futures Markets (FI) (3). This course covers the institutional, speculative, and hedging concepts associated with futures markets. Individual and institutional uses of these markets are examined, with the emphasis on the risk-return aspects of the futures and cash markets. Prerequisites: FIN 3414 or FIN 4502 or FIN 4303. (S)

FIN 4504 Portfolio Analysis and Management (FI) (3). Financial theories will be applied to the construction
of portfolios. Portfolio management techniques will be analyzed in regard to the goals of individuals, corporations, and various financial institutions. Prerequisite: FIN 4502 or equivalent. (F)

FIN 4515 Options Markets (Fl) (3). An examination of the risk-return structure of options on stocks, indexes, debt, and futures. An examination of the structure of these markets and strategies for their use in portfolios. Prerequisite: FIN 4502. (F)

FIN 4604 International Financial Management (Fl, MA) (3). Capital budgeting, operational analysis and financial decision in the multinational context. Working capital management and intrafirm fund transfers. Measurement and evaluation of the risk of internationally diversified assets. Prerequisite: FIN 3403 or equivalent. (F, S, SS)

FIN 4613 International Trade Financing Techniques (Fl, MA) (3). Alternative methods of financing exports and associated risks. Flexibility and adaptability of letters of credit to special transactions. Types of financial arrangements available to importers and banks. Considerations in the extension of credit. Role and importance of governmental and quasi-governmental organizations such as the Export-Import Bank, Foreign Credit Insurance Association (FCIA), Overseas Private Investment Corporation (OPIC), and Private Export Funding Corporation (PEFCO). Prerequisite: FIN 3403.

FIN 4614 International Capital Markets (Fl, MA) (3). The world’s major non-U.S. stock exchanges; international diversification and the international capital asset pricing model; foreign exchange markets and Eurocurrency markets. Prerequisite: One of the following courses: FIN 4303, FIN 4502, FIN 4503, or FIN 4604. (F)

FIN 4615 International Banking (Fl) (3). Introductory survey of issues that deal with international aspects of banking. The course provides an overview of the structure and operation of the international banking function, the services offered, supporting documentation, and measures to improve the efficiency and effectiveness of the international banking organization. The purpose of the course is to acquaint the student with the daily activities in international banking. Prerequisite: FIN 4324 or permission of instructor. (F)

FIN 4621 Risk Analysis in International Lending (Fl, MA) (3). Analyzing foreign loan requests and evaluating risk. Measuring and managing country exposure. Role of regulatory authorities in promoting diversification of international credits. Maximizing long-run profitability to the international loan portfolio taking funding options into consideration. Prerequisite: One of the following - FIN 4303, FIN 4502, FIN 4503, or FIN 4604. (on demand)

FIN 4904 Independent Study in Finance (Fl) (1-6). Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and Department Chairperson required. (F, S, SS)

FIN 4934 Special Topics in Finance (Fl) (1-6). For groups of students who desire an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required. (F, S, SS)

FIN 4941 Finance Internship (Fl) (1-3). Full-time supervised work in a selected bank or other organization in the area of finance. Prerequisites: At least 12 hours of finance, consent of instructor, and department chairperson. (F, S, SS)

FIN 4949 Cooperative Education in Finance (Fl) (3). Semesters of full-time classroom study are alternated with semesters of full-time remunerated employment which closely relates to the student’s area of academic study. Carefully designed and monitored work assignments are intended to develop the student’s understanding of the relationship between theory and practice in an authentic work environment. Prerequisite: Approval of Chairperson. (F, S, SS)

GEB 2011 Introduction to Business (MA) (3). Introduction to the business world, including the functions of business and management. Examination of the free enterprise system, forms of business ownership and the role of business in society. (F)

GEB 3113 Entrepreneurship and Organization (MA) (3). An introduction to the general theories, principles, concepts and practices of entrepreneurship. Heavy emphasis is placed on lecture, readings, case studies and group projects. (F, S, SS)

GEB 3935 Career Planning and Management (MA) (1). Course will respond to the need for students to make sound career decisions. Students will be able to prepare for success in a changing work environment and to use the skills introduced to cope with career decision-making.

ISM 3012 Introduction to Decision and Information Systems (3). Understanding how computer systems can be used to improve decision making. Includes applications and impacts of IS, databases, decision support systems, production planning and control systems, and resource allocation systems. Not available to business majors.

ISM 3949 Cooperative Education in Management Information Systems I (DS) (1-3). A program enabling MIS majors to work in jobs significantly related to their major area and career goals. Placement must be approved by instructor. (F, S, SS)

ISM 4113 Systems Analysis and Design (DS) (3). Topics include: information systems concepts; the structure, design, and development of the database; and techniques and procedures used in the analysis and design of systems projects. Prerequisite: ISM 4210. (F, S, SS)

ISM 4151 Systems Management (DS) (3). An in-depth, case-oriented study of the problems encountered in the management of systems projects. Analyst-user conflicts, communication problems within the systems department, computer evaluation and selection techniques, computer negotiations and contracts, and project management are covered in detail. Where appropriate, field study investigating a topical area will be carried out by each student. Prerequisite: ISM 4113. (F, S, SS)

ISM 4210 Data Base Applications (DS) (3). Application of the database technology and concepts to organization problems. Includes DBMS components; hierarchical, network and relational approaches to DBMS design. Hands on experience with a DBMS. Prerequisite: CGS 3300 and CGS 3403 or COP 2120. (F, S, SS)

ISM 4220 Business Data Communications (3). Application of telecommunication technology and concepts to organizational problems. Includes components of telecommunication network, management of a network, and issues related to installing
MAN 3701 Business and Society (ME) (3). An examination of place and role of business in contemporary society. The interaction between business and its economic, legal, political, social, and international environments is discussed and analyzed in detail. Among topics which may be covered are the development and current structure of social systems, as itemized above, which set forth the parameters in which business operates. That is, government legislation and regulation, constitutional law, political and cultural limitations, and other topics. (F,S,SS)

MAN 4142 Intuition in Management (MA) (3). Balancing Rational and Intuitive approaches for a flexible decision style. Experiential learning individually and in groups. Application of class learnings to life situations. (F,S)

MAN 4151 Behavioral Science in Management (MA) (3). An analysis of selected concepts in behavioral science, their interaction and application to management. Topics include perception, motivation, and group behavior. (F,S,SS)

MAN 4201 Organization Theory (MA) (3). A comparative analysis of various theories of organization (including the classical, biological, economic, and Cyert-March models); and of their treatment of fundamental structure; conflict, communications; group and individual behavior; and decision-making. Primary emphasis on developing an integrated philosophy of organization and management. Prerequisite: MAN 3025 or equivalent. (F,S)

MAN 4301 Personnel Management (MA) (3). Attention is focused on the theory and practice of modern personnel management as related to other management functions. Topics include: selection; training; job and performance evaluation; and incentive schemes. Special attention is given to human resource management and development at various organizational levels. (F,S,SS)

MAN 4320 Personnel Recruitment and Selection (MA) (3). In-depth study of the personnel staffing function. Includes an analysis of objectives, techniques, and procedures for forecasting manpower needs, recruiting candidates, and selecting employees. (F)

MAN 4332 Personnel Information Systems (MA) (3). A survey of personnel reporting requirements; assessment of information needs; manpower planning; and development of integrated personnel systems. Prerequisites: CGS 3300 and MAN 4301. (F)

MAN 4330 Wage and Salary Administration (MA) (3). Presents the theories and techniques used by management in the areas of work measurement, wage incentives, and job evaluation. (S)
MAN 4401 Collective Bargaining (MA) (3). Introduction to labor/management relationships in the United States. Attention to the development of unionism as an American institution, government regulations, and collective bargaining in private and public sectors. A negotiation simulation generally is integrated with classroom work. (F.S)

MAN 4410 Union-Management Relations (MA) (3). Examination of current issues and problems facing union-management problems, with emphasis on unfair labor practices, contract administration, and arbitration. Students should complete MAN 4401 before taking this course. (S)

MAN 4504 Operations Management (DS) (3). Concepts in design, analysis, and control of operating systems. Facility location and layout, work standards, maintenance, quality control, MRP, planning and scheduling, applied to production and service systems. Prerequisite: QMB 3150. (F.S.SS)

MAN 4523 Production Information Systems (DS) (3). A study of the special problems associated with the development of information systems capable of supporting the production function of an organization. Review of information systems approaches to inventory control and work processing management. Prerequisites: CGS 3300 and MAN 4504, or consent of instructor. (S)

MAN 4584 Productivity Management (DS) (3). Method and cases to measure, evaluate, plan and improve productivity in business and service organizations. Prerequisite: Senior standing in the College. (F)

MAN 4600 International Management (MA) (3). Introductory survey of management issues that confront the multinational enterprise. At least one class session is devoted to each of the following topics: review of basic trade theory; tariffs and trade barriers; organizational transfer; foreign exchange; institutions affecting the multinational manager (such as IMF, IDB, EX-in Bank, EEC, IBRD); international financial management issues in multinational accounting; personnel management, comparative business customs and behavioral issues; import-export procedures; conflicts with national interests. Prerequisite: MAN 3602. (F.S.SS)

MAN 4610 International and Comparative Industrial Relations (MA) (3). Examines selected industrial relations systems of Western Europe, Asia and the Americas, with special emphasis on differences among systems and the reasons such differences exist. The industrial relations significance of the multinational enterprise and management problems associated with operations in diverse systems are analyzed. (F)

MAN 4613 International Risk Assessment (MA) (3). Introduces the types of risk confronting businesses operating internationally. Critiques specific techniques used to assess risk and relates the results to management decisions. Prerequisite: MAN 3602. (S)

MAN 4629 International Business Internship (MA) (3). Supervised work in a selected organization in the area of international business. Prerequisite: Consent of instructor, department chairperson, MAN 3602, and MAN 4600. (F.S.SS)

MAN 4633 Strategic Management in the MNC (MA) (3). Study of the concept and process of MNC strategy. Involves considering the competitive and political structure of the global market, logic of the multinational enterprise, and nature of organizations. Prerequisite: MAN 3602. (S)

MAN 4660 Business in Latin America (3). This course examines the Latin American business climate and especially U.S.-Latin American business linkages. Topics include exporting to Latin America, regional economic integration, and examinations of individual countries. Prerequisite: MAN 3602.

MAN 4671 Special Topics in International Business (MA) (3). For groups of students who wish to study intensively a particular topic, or a limited number of topics, in international business, not offered elsewhere in the curriculum. Prerequisites: Approval of the faculty advisor, chairperson, and Dean. (F)

MAN 4690 Independent Study in International Business (MA) (3). Individual conferences; supervised readings; reports on personal investigations. Prerequisites: Assignment of faculty tutor and written permission of chairperson and Dean. (F.S.SS)

MAN 4711 Corporate Social Monitoring (ME) (3). The sources of the conception of corporate social responsibility. An examination of the classical doctrines as well as new approaches to the conception of the corporation as a citizen. A portion of the course will be devoted to a discussion of social accountability and social accounting as a specific problem in corporate input. Prerequisite: MAN 3701 or consent of instructor.

MAN 4722 Strategic Management (MA) (3). The use of cases, guest lecturers, and gaming to integrate analysis and measurement tools, functional areas, and public policy issues. The objective is to develop skill in broad areas of rational decision-making in an administrative context of uncertainty. Prerequisite: Completion of all core requirements. Must be taken in last academic semester of senior year. (F.S.SS)

MAN 4731 Modern Business History (ME) (3). An examination of the history of the corporation in the United States since the Civil War, up to, and including, the development of the multinational corporation. An examination of the social and economic forces operative in the development of the corporate form. A full exploration of the current power of the corporate form and legal and other efforts to limit this power. Prerequisite: MAN 3701 or consent of the instructor.

MAN 4741 Business Environment and Policy Formation (ME) (3). A course studying the conceptual and environmental forces which establish the framework of business strategy and tactical decision. A critical analysis of conceptual processes which can limit the executive's capacity to respond to change in the total and in the business environment. Prerequisite: MAN 3701 or consent of Instructor.

MAN 4742 Business and the Physical Environment (ME) (3). A course on the effect of industrialization and technological change on the physical environment. An examination of the current legal, economic and political consequences of pollution and environmental damage, and the abatement of these factors. Prerequisite: MAN 3701 or consent of Instructor.

MAN 4802 Small Business Management (MA) (3). The organization and operation of the small business: accounting, finance, production, and marketing subsystems. The use of analytical approach. Problems of
MAN 4930 Special Topics in Management (MA) (1-6). For students who wish an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty supervisor, Department Chairperson, and Dean required. Grading option. (F,S,SS)

MAN 4949 Cooperative Education-Management II (MA) (1-3). Continuation of MAN 3949. Prerequisite: MAN 3949 and qualification for Cooperative Education Program. (F,S,SS)

MAR 3023 Marketing Management (ME) (3). A descriptive study emphasizing the functions and institutions common to marketing systems. Prerequisite: Junior standing or permission of department. (F,S,SS)

MAR 4025 Marketing of Small Business Enterprises (ME) (3). Designed to develop an understanding of the principles and practices which contribute to the successful marketing operation of a small business enterprise. This course deals with marketing policies, techniques, and applications to aid the entrepreneur in this field. Prerequisite: MAR 3023.

MAR 4071 Current Issues in Marketing I (ME) (3). Intensive study of various topical areas in marketing. Course emphasizes student reading and research, with oral and written reports. Students electing to take this seminar may take no more than 3 credit hours of independent study in marketing. Prerequisite: MAR 3023.

MAR 4072 Current Issues in Marketing II (ME) (3). Students electing to take this seminar may not take independent study in marketing. Prerequisite: MAR 4071.

MAR 4144 Export Marketing (ME) (3). The course emphasizes practical approaches to export marketing, including marketing strategies by individual firms to serve foreign markets. Operational methods of identifying, establishing, and expanding export markets are discussed, with particular attention to the needs of the smaller business. Prerequisite: MAR 3023. (F,S,SS)

MAR 4156 International Marketing (ME, MA) (3). The course studies the information required by marketing managers to assist in satisfying the needs of consumers internationally. Special emphasis will be given to the constraints of the international environment. Prerequisite: MAR 3023. (F,S,SS)

MAR 4203 Marketing Channels (ME) (3). The course focuses upon institutions, functions, and flows within channels of distribution; and their integration into channels systems. Wholesaling and physical activity are emphasized. Prerequisite: MAR 3023.

MAR 4231 Retailing Management (ME) (3). An examination of the role of retailing in the marketing system. Attention is concentrated on fundamentals for successful retail management. The course emphasizes basic marketing principles and procedures, including merchandising, markup-markdown, pricing, stockturn; and sales and stock planning. Prerequisite: MAR 3023. (F or S)

MAR 4232 Cases in Retailing Management (ME) (3). This course treats the retail marketing concentration in terms of up-to-date merchandise management methods. Emphasis is placed on students of profit, open-to-buy planning, return on investment, and inventory control. The course delineates the decisions made by retailing managements and reviews their available strategies. Prerequisites: MAR 4153, MAR 4613 or consent of department chairperson. (F,S,SS)

MAR 4233 Advertising Management (ME) (3). The study of advertising in business and society, providing a broad understanding of advertising's social, communicative, and economic purposes. An examination of the types and functions of advertising, discussion of research, media selection, budget determination, and other elements in the total advertising process. Prerequisite: MAR 4503 or permission of instructor. (F,S)

MAR 4333 Promotional Strategy (ME) (3). The course deals with the problems of decision-making in the areas of marketing communications methods, with primary emphasis on advertising. Prerequisite: MAR 3023.

MAR 4334 Advertising Campaign Management (ME) (3). Strategic approaches to managing advertising campaigns, including selection of approaches; market research; consumer target markets; media; advertisements; development and control of budgets. Prerequisite: MAR 4323 or consent of instructor. (S)

MAR 4400 Personal Selling (ME) (3). The development of effective salesmen/customer relationships is emphasized. Selection, training, and motivation of the sales force, and the relationship between personal selling and the other elements of marketing strategy are analyzed. Prerequisite: MAR 3023. (F,S)

MAR 4403 Sales Management (ME) (3). Analysis of field sales management with emphasis on the role of personal selling in the marketing mix, building an effective organization, and controlling and evaluating the sales force. Prerequisite: MAR 3023. (S)

MAR 4503 Consumer Behavior (ME) (3). The course offers an introduction to the analysis of the consumer, as the basis for the development of the marketing mix. Prerequisite: MAR 3023. (F,S,SS)

MAR 4613 Marketing Research (ME) (3). An examination of the marketing research process and its role in aiding decision-making. Emphasis is placed on evaluation and utilization of research information in making marketing decisions. Prerequisites: MAR 3023, QMB 3150 or permission of instructor. (F,S,SS)

MAR 4803 Cases in Marketing Management (ME) (3). An analytic approach to the performance of marketing management. The elements of marketing mix as the focus of decision-making in marketing are studied, and the case method of instruction is employed. Prerequisite: MAR 4503, MAR 4613 or permission of Department Chairman. (F,S,SS)

MAR 4853 Marketing Strategy (ME) (3). Analysis of marketing planning strategy including: strategic marketing; situation analysis, target strategy, positioning strategy, and the strategic marketing plan. Course will utilize a computer simulation. Prerequisites: MAR 4503, and MAR 4613, and permission of instructor.

MAR 4907 Independent Study in Marketing (ME) (1-6). Individual conferences; supervised reading; reports on personal investigations. Consent of faculty supervisor, Department Chairperson, and Dean required. (F,S,SS)

MAR 4933 Special Topics in Marketing (ME) (1-6). For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty super-
visor and Department Chairperson required.

MAR 4941 Marketing Internship (ME) (1-6). Full-time supervised work in a selected organization. Prerequisites: At least 12 hours in marketing; consent of instructor and Department Chairperson. (F,S,SS)

MAR 4949 Cooperative Education in Marketing (ME) (3). Open to marketing majors who have been admitted to the Cooperative Education Program, with consent of Chairperson. Full-time supervised work with a participating organization in marketing. Report to the organization and a paper to the Chairperson are required. (F,S,SS)

MKA 4244 Export Marketing (3). The course emphasizes practical approaches to export marketing, including marketing strategies of individuals firms to serve foreign markets. Operational methods of identifying, establishing, and consolidating export markets are discussed, with particular attention to the needs of the smaller business. Prerequisite: MAR 3023. (F,S,SS)

QMB 3003 Quantitative Foundations of Business Administration (DS) (3). Elements and extensive applications of the following quantitative tools to Accounting, Finance, Economics, Marketing, Management and Production: Algebra review, sets, combinatorics, matrices, linear and nonlinear functions, derivatives and integrals with a view towards optimization. Case studies. Open only to Business Administration majors. Prerequisite: College Algebra. (S)

QMB 3200 Application of Quantitative Methods in Business (DS) (3). Inference and modeling for business decisions under uncertainty. Topics covered include survey sampling, confidence intervals and hypothesis testing for mean(s), variance(s), and proportion(s), chi-square test for independence and goodness of fit, correlation, linear regression, time series, and analysis of variance. Use of computer packages to solve real business problems. Prerequisites: College Algebra and STA 3132 or the equivalent. (F,S,SS)

QMB 4680 Simulation of Management Systems (DS) (3). Exploration of basic concepts in computer simulation of systems. Application of these concepts to a variety of managerial problems. Discussion of waiting line models, continuous simulation models; heuristic methods; and management games. Presentation of several computer programs and languages for simulation. Exposure to the operation and analysis of some simulation models. Prerequisites: CGS 3300. (S)

QMB 4700 Principles of Operations Research I (DS) (3). Application of deterministic operations research models (such as linear and non-linear programming, networks, dynamic programming, and branch and bound techniques) to managerial problems of allocation, planning, and scheduling. (F)

QMB 4705 Independent Study in Decision Sciences (DS) (1-6). Individual conferences; supervised readings; reports on personal investigations. Consent of instructor, Department Chairperson and Dean required. P/F only. (F,S,SS)

QMB 4930 Special Topics in Decision Sciences (DS) (1-6). For students who wish an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of instructor and Department Chairperson required. Grading option. (F,S,SS)

REE 4043 Real Estate Analysis (F) (3). Decision making processes for development, financing, marketing, and management of real estate within the framework of our governmental, economic, legal, and social systems; does not meet course content requirements of Florida Real Estate Commission for obtaining a real estate license. (F)

REE 4103 Appraisal of Real Estate (F) (3). Valuation and appraisal framework applied to residential and income producing property; role of computers; valuation theory and process as a guide to business decisions. (F)

REE 4204 Real Estate Financial Analysis (F) (3). Financial analysis and structuring of real estate projects; traditional and creative concepts and mechanisms for construction and permanent financing; portfolio problems; governmental programs; money and mortgage market analysis; computers and financial models. Prerequisites: REE 4043 and FIN 3403, or permission of Instructor. (S)

REE 4303 Real Estate Investment (F) (3). Advanced concepts of acquisition, ownership, and disposition of investment property; taxation and tax shelter; cash flow projection; analysis of specific types of investment property; utilization of computers as a decision-making tool; models of real estate investment analysis; case analysis and policy formulation. (S)

REE 4504 Real Estate Management (F) (3). Theories and techniques of professional management of real estate including such topics as creating a management plan; merchandising space; economics of alternatives; market analysis; the maintenance process; owner-tenant manager relations; operating budgets; tax consideration; and ethics. (On demand)

REE 4733 Real Estate Land Planning (F) (3). Theories of city growth and structure, operations of the real estate market in land allocation; current practices in real estate land planning. (On demand)

REE 4754 Real Estate and Regional Development Policy (F) (3). A capstone course in integrating all the aspects of real estate and regional development learned in previous courses, projects, cases, and field trips. Prerequisite: Permission of Instructor. (On demand)

REE 4814 Real Estate Marketing (F) (3). Techniques of selecting, training, and compensating sales personnel; obtaining and controlling listings; process and methods involved in the selling of real estate; promotion activities; including advertising and public relations; growth problems; professionalism; and ethics. (On demand)

REE 4905 Independent Study in Real Estate (F) (1-6). Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor, Department Chairperson, and Dean required. (F,S)

REE 4930 Special Topics in Real Estate (F) (1-6). For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty tutor and Department Chairperson required. (F,S)

STA 3132 Business Statistics (MS) (3). The use of statistical tools in management; introduction of probability, descriptive statistics, and statistical inference as included. (F,S,SS)

Pre-requisite: ACG 4111 with grade of "C" or higher. (F.S.SS)

**TAX 4901 Independent Study in Taxation (AC) (1-3).** Individual conferences, supervised readings, and reports on personal investigations. Prerequisite: Permission of the Director of the School of Accounting.

**TAX 4931 Special Topics in Taxation (AC) (1-3).** For groups of students wishing an intensive study of a particular topic(s) not otherwise offered in the curriculum. Prerequisite: Permission of the Director of the School of Accounting.

**TRA 4012 Transportation Logistics (ME) (3).** Consideration of transportation logistics and its relationship to production and distribution. Discussion of characteristics, management, legislation, and public regulation of various modes of transportation.

**TRA 4203 Physical Distribution Management (ME) (3).** Distribution in overall company operations; organization of the traffic function; determination of classification and rates; integration of transportation with production, inventory management, warehousing, marketing policies, and plant location.

**TRA 4411 Airport Management (ME) (3).** Application of management principles to airport operation, with emphasis on unique characteristics of airport finance; government relations and regulations; airline relations and interdependence.

**TRA 4936 Special Topics in Transportation (ME) (1-6).** For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

### College of Business Administration

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<thead>
<tr>
<th>College of Business Administration</th>
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<tbody>
<tr>
<td><strong>Dean</strong></td>
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<td><strong>Associate Dean</strong></td>
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<td><strong>Assistant Dean</strong></td>
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<td><strong>Director, School of Accounting</strong></td>
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</tbody>
</table>

### Chairpersons:

- **Decision Sciences and Information Systems** Enzo Valenzi
- **Finance** Arun J. Prakash
- **Management and International Business** Gary Dessler
- **Marketing and Business Environment** Barnett A. Greenberg

### Faculty

- **Abril, Juan Carlos, M.B.A.** (Florida International University), Program Director, Energy Conservation Program, Small Business Development Center
- **Anderson, Gary, Ph.D.** (University of Illinois), Associate Professor, Finance
- **Auster, Roll, Ph.D.** (Northwestern University), CPA, CMA, Professor, Accounting
- **Barber, Joel, Ph.D.** (University of Arizona), Associate Professor, Finance
- **Barone, Michael, Ph.D.** (University of South Carolina), Assistant Professor, Marketing and Business Environment
- **Bates, Constance S., D.B.A.** (Indiana University), Associate Professor, Management and International Business
- **Batra, Dinesh, Ph.D.** (Indiana University), Associate Professor, Decision Sciences and Information Systems
- **Bear, Robert M., Ph.D.** (University of Iowa), Professor, Finance
- **Berry, Delane H., Ph.D.** (University of Kentucky), CMA, Assistant Professor, Accounting
- **Bierwag, Gerald O., Ph.D.** (Northwestern University), Ryder System Professor of Business Administration, Finance
- **Browner, Ellie, M.E.D.** (Florida International University), Assistant Director, Center for Management Development
- **Burns, Mary Jane, Ph.D.** (University of Tennessee), Assistant Professor, Marketing and Business Environment
- **Carley, Jack L., Ph.D.** (University of Cincinnati), Assistant Professor, Accounting
- **Chang, Chun-Hao, Ph.D.** (Northwestern University), Associate Professor, Finance
- **Chang, Lucia S., Ph.D.** (University of Texas at Austin), Professor, Accounting
- **Chee, Yong S., Ph.D.** (University of Florida), Assistant Professor, Accounting
- **Cohen, Deborah V., Ph.D.** (Columbia University), Assistant Professor, Marketing and Business Environment
- **Cox, Larry W., Ph.D.** (University of Nebraska-Lincoln), Assistant Professor, Management and International Business
- **Daigle, Robert T., Ph.D.** (University of Oklahoma), Associate Professor, Finance
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- **Davidson, Lewis F., Ph.D.** (Pennsylvania State University), Professor, Accounting
- **de Boyrie, Maria, Ph.D.** (Florida International University), Assistant Professor, Finance
- **Dessler, Gary, Ph.D.** (City University of New York), Professor and Chairperson, Management and International Business
- **Dieguez, Manuel, M.S.M.** (Florida International University), CPA, Instructor, Accounting
- **Dittenhofer, Mortimer, Ph.D.** (American University), Professor, Accounting
- **Dorsett, Herman W., Ed.D.** (Columbia University), Associate Professor, Management and International Business
- **Elam, Joyce J., Ph.D.** (University of Texas, Austin), Professor and James L. Knight Eminent Scholar, Decision Sciences and Information Systems
- **Fair, Donald W., M.Acc.** (Bowling Green State University), CPA, Instructor, Accounting, and Associate Dean
- **Farrow, L. Dana, Ph.D.** (University of Rochester), Professor, Management and International Business and Associate Dean
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Guo, Mlien H., Ph.D. (University of Arizona), Assistant Professor, Accounting

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Zdanowicz, John S., Ph.D. (Michigan State University). Professor, Finance and Director, Center for Banking and Financial Institutions

Zegan, Peter J., M.S. (University of Florida). Instructor, Decision Sciences and Information Systems
College of Education
College of Education

The College of Education seeks through its mission to empower professionals by enabling them to acquire the knowledge, skills, and dispositions necessary to exercise control over their lives. This charge further entails the College's assisting professionals to understand that whatever their differences, people have an interconnectedness through common needs and aspirations; they can relate to each other in helpful and supportive ways; and can celebrate their diversity. The critical thrust in the College of Education's mission is to facilitate change by provoking in professionals an orientation, awareness, and commitment to improving the human condition.

The theme of the college is: The professional educator and/or related professional as facilitator of learning and change within diverse populations and environments. According to the theme, the graduates of any program in the College should be disposed to view teaching as the act of being a facilitator of student growth rather than a source of information to be learned. Teachers, educational leaders, or related professionals who facilitate learning are knowledgeable about the individual backgrounds, preferences, interests, and learning styles of their students and use this knowledge to assist students to reach their full potential.

The educational aim of the College is derived from the theme, the mission statement, and the philosophy of the College. The aim is: To facilitate education and growth through individual empowerment, interconnectedness, and change. This aim establishes a basis for subsequent decisions about what to teach (the matter of general education, professional education and content studies) and how to teach (the matter of the knowledge base).

To realize its mission and facilitate learning and change within diverse populations and environments the College offers instructional programs at the undergraduate and graduate levels, engages in research and program development activities, and provides field services to the educational community.

To support its mission, the College is organized into six departments:

- Educational Leadership, and Policy Studies
- Educational Psychology and Special Education
- Elementary Education
- Educational Foundations and Professional Studies
- Health, Physical Education and Recreation
- Subject Specializations

Bachelor of Science degree programs are offered in the following specialties:
- Art Education
- Biology Education
- Chemistry Education
- Emotional Disturbance
- Elementary Education
- English Education
- Health Education
- Exercise Physiology
- Health Occupations Education
- Home Economics Education
- Mathematics Education
- Mental Retardation
- Modern Language Education
- French
- Spanish
- Music Education
- Parks and Recreation Management
- Leisure Service Management
- Parks Management
- Organizational Training
- Recreational Therapy
- Physical Education
- Physical Education: Grades K-8
- Physical Education: Grades 6-12
- Sports Management
- Physics Education
- Specific Learning Disabilities
- Social Studies Education
- Varying Exceptionalities Track
- Vocational Industrial Education

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

General advisement is available by telephone: (305) 348-2768 for University Park, (305) 919-5820 for North Campus. Broward residents may call (954) 355-5622 for North Campus or for the Broward Program. Specific program advisement is available by prearranged personal appointment with advisors at all locations.

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

Bachelor of Science Programs

Undergraduate students will complete at least 60 semester hours of upper-division credits, including a residency requirement of 30 semester hours prior to graduation at the University. Before formal admission to the University, a student may be required to take 15 credits as a non-degree seeking student which, if applicable to the major field of study and approved by an advisor, may be applied to the degree program.

Professional Studies Core (14)

Every teacher education student must enroll in the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
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<tbody>
<tr>
<td>EDP 3004</td>
<td>Educational Psychology</td>
<td>3</td>
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<tr>
<td>EDF 3515</td>
<td>Philosophical and Historical Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDF 4634</td>
<td>Cultural and Social Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDG 3321</td>
<td>General Instructional Decision Making</td>
<td>3</td>
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<tr>
<td>EDG 3321L</td>
<td>General Instructional Decision Making Laboratory</td>
<td>2</td>
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</table>
Subsequent special teaching laboratories and courses build on these core courses to extend and refine knowledge and skill. All programs include one semester of student teaching in a public or approved non-public school. Student teaching requires the student to spend the entire school day of a complete semester on site. A student may not be employed while student teaching.

Upon the successful completion of all program requirements, the Bachelor of Science degree is awarded. The student is eligible to apply for a State of Florida Teaching Certificate in the field of specialization if the student has completed a College of Education State-approved program with a required 2.5 GPA. Other requirements for regular certification include submitting to the Florida Department of Education evidence of satisfactory CLAST scores and passing both the professional education and subject area subtests administered by the Florida Department of Education. Applicants must also complete a State-approved Professional Orientation Program approved by the Department of Education.

Undergraduate Admission Requirements

College of Education program standards are intended to ensure that students have breadth and depth of background needed for successful upper-division work in education. Students are required to have a minimum overall GPA of 2.5 for all lower division/transfer coursework to be admitted to the College. In addition, students are required to successfully complete all four subsections of the CLAST prior to transferring to the College.

Students transferring from out-of-state or private institutions, who have not met the CLAST requirement, will be allowed one semester in which to successfully pass all four subsections.

Applicants to the College must submit an Application for Admission to the University and must follow the regular University procedures. Applicants must be eligible for admission to the University before being considered for admission to the College.

Test Requirements: All teacher education candidates entering at the junior level must present a minimum score of 840 on the SAT taken prior to April 1, 1995 and 950 after April 1, 1995 or 19 on the ACT prior to October 1989 or 20 on the EACT and satisfactory CLAST scores.

Lower Division Prerequisites

All freshman and sophomore prerequisites for admission into an academic program must be satisfied with a minimum grade of 'C' and a minimum overall GPA of 2.5 before admission is completed.

Students must satisfy either the Lower Division Core requirements or the General Education requirements. In addition, students admitted to the lower division Fall 1996 or later must complete the following College of Education prerequisites:

- EDF 1006 Introduction to Education
- EDG 2701 Teaching Diverse Populations
- EME 2040 Introduction to Educational Technology

Please consult a faculty-advisor for programmatic prerequisites.

Undergraduate Grading Policies

Undergraduate students must have a minimum overall GPA of 2.5 in order to graduate. A grade of 'C-' or less is not acceptable toward graduation in any required program of study course in the College of Education, any college/program prerequisite or any Gordon writing/math requirements meeting general education or lower division core requirements. Furthermore, a student will not be approved for student teaching with a grade of 'C-' in any required program of study course or with less than a minimum GPA of 2.5 in their field of specialization. Specific undergraduate programs may have higher grading criteria than these minimums. Students applying for State of Florida Teacher Certification must present a GPA of 2.5 or higher in their teaching major.

All stated admission requirements are to be considered minimums. A student who meets these minimum requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that he/she understands and has met the requirements.

Certification Only Students

Students choosing to pursue coursework leading toward State of Florida Teacher Certification (rather than a second degree) are considered Non-Degree Seeking Students and must abide by all policies and limitations set forth for non-degree seeking students. No special classes will be offered for certification-only students. Students should seek admission to degree programs at the undergraduate or masters level to facilitate enrollment in program courses. State of Florida certification requirements are considered to be minimum requirements. It may be necessary to register for additional prerequisite courses to enroll in a desired course. Students who register for a course but have not completed the prerequisite course(s) will be administratively dropped from the class.

Alternate Track Degree Programs

Students who hold a bachelors degree in a field other than education and wish to teach may want to consider pursuing an Alternate Track Masters Program, a degree program that leads to State of Florida teacher certification plus a masters degree.

Fingerprint Requirement

State of Florida Teacher Certification, in addition to other criteria, requires all applicants to be fingerprinted and checked by the FBI. Some school districts also require a fingerprint check for student interns and/or student teachers. Students with a history of felony arrests may wish to consider this carefully, and seek advice from an advisor, before applying to programs in the College.
Educational Foundations and Professional Studies

Robert V. Farrell, Associate Professor and Chairperson, Educational Foundations, International Development Education

Carlos M. Alvarex, Associate Professor, International Development Education, Educational Psychology

John A. Carpenter, Professor, Educational Foundations and International and Intercultural Development Education

Erskine S. Dottin, Professor, Educational Foundations, Politics of Education

Miguel Angel A. Escotet, Professor, International and Intercultural Development Education and Research

Rosa Castro Feinberg, Associate Professor, Educational Foundations, Bilingual Education/TESOL

Delia Garcia, Assistant Professor, Educational Foundations and Professional Studies

I. Ira Goldenberg, Professor and Dean, Educational Foundations and Urban Education

Deborah Hasson, Instructor, Educational Foundations and Professional Studies

E. Joseph Kaplan, Associate Professor, Educational Foundations and General Methodology

Patricia A. Killian, Assistant Professor, Teaching English as a Second Language

Jodi Reiss, Instructor, Teaching English as a Second Language

Colleen A. Ryan, Associate Professor, Educational Psychology, Educational Foundations

S.L. Woods, Associate Dean and Associate Professor, Educational Foundations and General Methodology

The Department of Educational Foundations and Professional Studies has three graduate programs that are discussed in the Graduate Catalog. In terms of undergraduate education, this Department coordinates the professional education, educational foundations courses, and core courses which are part of the common preparation of undergraduate teacher education majors at FIU.

The foundations courses include:
- EDF 3515 Philosophical and Historical Foundations of Education
- EDF 4634 Cultural and Social Foundations of Education

The Core courses include one general methods course:
- EDG 3321 General Instructional Decision Making 3
- EDG 3321L General Instructional Decision Making Laboratory 2

In terms of the mission of the College, the Department is responsible for incorporation of educational foundations, multicultural, and/or general methodology studies into professional education programs. The Department is the primary source of the professional studies component.
Educational Psychology and Special Education

Wendy Cheyney, Associate Professor and Chairperson, Learning Disabilities
Tai Bailey, Assistant Professor, Counselor Education, Educational Psychology
Patricia Barbetta, Assistant Professor, Emotionally Handicapped
Michael P. Brady, Professor, Special Education
Marsal Gavilan, Associate Professor, Educational Psychology/Bilingual Education
Philip J. Lazarus, Associate Professor, School Psychology, Educational Psychology
Luretha F. Lucky, Associate Professor, Mental Retardation
Adriana McEachen, Assistant Professor, Counselor Education, Educational Psychology
Martha Pelaez, Assistant Professor, Educational Psychology, Behavior Analysis
Howard Rosenberg, Associate Professor, Mental Retardation
Stephen S. Strichart, Professor, Learning Disabilities
Jethro W. Toomer, Professor, Community Mental Health Counseling

General Information
The Department offers a variety of programs to prepare teachers of emotionally disturbed, gifted, learning disabled, and mentally retarded students. All programs require substantial supervised fieldwork. State of Florida certification requirements are met for all programs preparing school personnel.

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

The Department offers the following undergraduate and certificate programs:

Bachelor of Science
Degree Program Hours: 120

Emotional Disturbance
Mental Retardation
Specific Learning Disabilities
(And a track in Varying Exceptionalities)

Certification/Endorsements
Gifted Education
Professional Certificate Programs
Emotional Disturbance
Mentally Handicapped
Specific Learning Disability

Bachelor of Science in Special Education
The undergraduate special education program specializations utilize a field-centered training model leading to approval for State of Florida Certification in Specific Learning Disabilities, Emotional Disturbance, Mental Retardation and a track in Varying Exceptionalities.

The special education program recognizes that students with disabilities are entitled to a free and appropriate public education, that all students are to be educated in the least restrictive yet most enabling environment and be mainstreamed to the greatest extent possible. Special educators also provide services to preschool children and adults.

Given this context, undergraduate special education programs emphasize the development of the following competencies to be demonstrated in both the University and field settings:

1. Identifying and diagnosing students with learning and/or behavior problems.
2. Prescribing and implementing appropriate individual educational plans to meet these problems.
3. Effecting appropriate instruction for children with learning and/or behavior problems.
5. Planning for inclusion and collaboration with parents and other educational personnel.

Diagnostic-prescriptive and management skills are to be demonstrated with students with mild disabilities who range in age from infancy to adulthood, and who represent multicultural, multilingual backgrounds. Special education majors may have field work with moderately, severely and profoundly disabled populations.

Lower Division Preparation
An Associate in Arts Degree or equivalent preparation in basic general education.

General Education Prerequisites:
Students must receive a grade of "C" or higher in the following courses:

Mathematics (College Algebra or higher) 6
Physical Science 3
Biological Science 3
Public Speaking (Speech) 3
Computer Awareness, Computer Applications 3

Requirements as approved by the faculty of the College. See advisor for prerequisites.

To qualify for admission to the program, undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, have earned a minimum overall grade point average of 2.5 and be otherwise acceptable into the program. All teacher education candidates entering at the junior level must present a minimum score of 840 on the SAT prior to April 1, 1995 and 950 after April 1, 1995 or 19 on the ACT prior to October 1989 or 20 on the EACT and passing CLAST scores.

Emotionally Handicapped (60)

EDF 3510 Philosophical and Historical Foundations 3
EDP 3004 Educational Psychology 3
EDG 3321 General Instructional Decision Making 3
EDG 3321L General Instructional Decision Making Lab 2
EDF 4634 Cultural and Social Foundations of Education 3
EEX 2010 Educational Foundations for Students with Exceptionalities 3
EEX 3202 Personal and Social Characteristics of Students with Exceptionalities 3
EEX 3221 Assessment of Students with Exceptionalities 3
SPA 3000 Speech, Language, and Literacy Development 3
RED 4150 Teaching Primary Reading 3
LAE 4314 Teaching Elementary Language Arts 3
<table>
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<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 4310</td>
<td>Teaching Elementary Math</td>
<td>3</td>
</tr>
<tr>
<td>EEX 4940</td>
<td>Field Component for Elementary Methods (2 hours per week)</td>
<td>0</td>
</tr>
<tr>
<td>EEX 4601</td>
<td>Behavioral Approaches to Classroom Learning I</td>
<td>3</td>
</tr>
<tr>
<td>EED 4243</td>
<td>Strategies for Teaching Students with Emotional Handicaps¹²</td>
<td>3</td>
</tr>
<tr>
<td>EED 4244</td>
<td>Curriculum for Teaching Students with Emotional Handicaps¹²</td>
<td>3</td>
</tr>
<tr>
<td>EED 4212</td>
<td>Behavioral Approaches to Classroom Learning II¹²</td>
<td>3</td>
</tr>
<tr>
<td>EEX 4810</td>
<td>Supervised Practicum in Special Education¹²</td>
<td>1-3</td>
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<tr>
<td>EEX 4861</td>
<td>Student Teaching</td>
<td>9</td>
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<tr>
<td>EEX 4935</td>
<td>Seminar in Student Teaching</td>
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**Mental Retardation (60)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 3515</td>
<td>Philosophical and Historical Foundations</td>
<td>3</td>
</tr>
<tr>
<td>EDP 3004</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDG 3321</td>
<td>General Instructional Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>EDG 3321L</td>
<td>General Instructional Decision Making Lab</td>
<td>2</td>
</tr>
<tr>
<td>EDF 4634</td>
<td>Cultural and Social Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EEX 2010</td>
<td>Educational Foundations for Students with Exceptionalities</td>
<td>3</td>
</tr>
<tr>
<td>EEX 3202</td>
<td>Personal and Social Characteristics of Students with Exceptionalities</td>
<td>3</td>
</tr>
<tr>
<td>EEX 3221</td>
<td>Assessment of Students with Exceptionalities</td>
<td>3</td>
</tr>
<tr>
<td>SPA 3000</td>
<td>Speech, Language, and Literacy Development</td>
<td>3</td>
</tr>
<tr>
<td>RED 4150</td>
<td>Teaching Primary Reading</td>
<td>3</td>
</tr>
<tr>
<td>LAE 4314</td>
<td>Teaching Elementary Language Arts</td>
<td>3</td>
</tr>
<tr>
<td>MAE 4310</td>
<td>Teaching Elementary Math</td>
<td>3</td>
</tr>
<tr>
<td>EEX 4940</td>
<td>Field Component for Elementary Methods (2 hours per week)</td>
<td>0</td>
</tr>
<tr>
<td>EEX 4601</td>
<td>Behavioral Approaches to Classroom Learning I</td>
<td>3</td>
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<tr>
<td>EEX 4935</td>
<td>Seminar in Student Teaching</td>
<td>3</td>
</tr>
</tbody>
</table>

**Undergraduate Catalog**

**Learning Disabilities (60)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 4634</td>
<td>Cultural and Social Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EEX 2010</td>
<td>Educational Foundations for Students with Exceptionalities</td>
<td>3</td>
</tr>
<tr>
<td>EEX 3202</td>
<td>Personal and Social Characteristics of Students with Exceptionalities</td>
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<tr>
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<td>Assessment of Students with Exceptionalities</td>
<td>3</td>
</tr>
<tr>
<td>SPA 3000</td>
<td>Speech, Language, and Literacy Development</td>
<td>3</td>
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<td>Teaching Primary Reading</td>
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<tr>
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<td>Teaching Elementary Language Arts</td>
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<tr>
<td>MAE 4310</td>
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<td>Field Component for Elementary Methods (2 hours per week)</td>
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<td>Behavioral Approaches to Classroom Learning I</td>
<td>3</td>
</tr>
<tr>
<td>EEX 4935</td>
<td>Seminar in Student Teaching</td>
<td>3</td>
</tr>
</tbody>
</table>

**Varying Exceptionalities: Add-on**

Varying Exceptionalities is a track that can taken concurrently with one of the majors; and requires the two strategies courses not taken as part of the senior block. This track leads to add-on certification to the degree program of LD, MR, and/or EH.

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEX 4810</td>
<td>Supervised Practicum in Special Education¹²</td>
<td>1-3</td>
</tr>
<tr>
<td>EEX 4861</td>
<td>Student Teaching</td>
<td>9</td>
</tr>
<tr>
<td>EEX 4935</td>
<td>Seminar in Student Teaching</td>
<td>3</td>
</tr>
</tbody>
</table>

¹ Field Work Required.
² Senior Block.

**Note:** Courses within the undergraduate program require field placement during school hours. RED 4150, LAE 4314, MAE 4310 require registration in corequisite EEX 4940. In addition to a full-time student teaching placement during the final semester students engage in a Senior Block experience the fall semester of their senior year. This experience requires five mornings per week of placement in an educational setting and class attendance at the University. Permission to student teach is contingent upon satisfactory completion of all requirements specified in the program. Applications to student teach must be filed in the office of the Director of Internship and Student Teaching by July 1 preceding the Spring Student Teaching semester.

All stated admission requirements are to be considered minimums. A student who meets these minimum requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that he/she has met the requirements.
Elementary Education

George E. O'Brien, Associate Professor, Science Education and Chairperson, Elementary Education
Maria A. Bilbao, Associate Dean, Elementary Education
Mohammed K. Farouk, Associate Professor, Social Studies Education
Joyce C. Fine, Assistant Professor, Reading and Language Arts Education
Robert K. Gilbert, Associate Professor, Mathematics Education
Rebecca P. Harlin, Associate Professor, Early Childhood/Elementary Education
Sharon W. Kossack, Professor, Reading Education
Nancy Marshall, Associate Professor, Reading and Language Arts Education
Alicia Mendoza, Associate Professor, Early Childhood/Elementary Education
Lynne Miller, Associate Professor, Reading and Language Arts Education
Edward M. Reichbach, Associate Professor, Social Studies Education
William M. Ritzi, Instructor, Art Education
Catherine Salli, Instructor, Elementary Education
Yee P. Soon, Assistant Professor, Mathematics Education
Craig Williams, Instructor, Elementary Education
Nina Zaragoza, Assistant Professor, Language Arts Education

General Information

The department offers programs in elementary, early childhood, and reading education. The elementary education program may be taken at the bachelor's, master's, or doctoral levels. The early childhood and reading programs offer master's and doctoral degrees only.

The department is strongly committed to field experience as a part of its programs. The field component of the bachelor's degree in Elementary Education is realized through Field Experience, which is taken concurrently with methods courses, and through Student Teaching.

The department is also committed to service to the community and the extension of knowledge through research.

Bachelor of Science in Elementary Education:
Grades 1-6

Degree Program Hours: 120

Lower Division Preparation

An Associate in Arts Degree or equivalent preparation in basic general education. If a student has not completed equivalents of the courses noted below, these courses must be completed with a grade of 'C' or higher prior to enrollment in courses at the University for which there are prerequisites.

To qualify for admission to the program, undergraduates must have met all the lower division requirements including: 60 credit hours of lower-division courses, all general education requirements met, lower-division GPA of 2.5 or higher, all four parts of CLAST passed, SAT of 840 prior to April 1, 1995 or 950 after April 1, 1995 or higher or EACT of 20 or higher.

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

Lower-Division Prerequisites

Mathematics (College Algebra or higher) 6
Physical Science 3
Biological Science 3
EDF 1005 Introduction to Education 3
EDG 2701 Teaching Diverse Populations 3
EME 2040 Introduction to Educational Technology 3

plus 15 hours of Liberal Arts and Science courses to be selected from specified categories.

Upper Division Program: (60)

The Elementary Education program is undergoing significant revision. Students are advised to contact a faculty advisor to learn the latest information. Program sheets detailing program requirements are available in the Department or from faculty advisors.
Health, Physical Education and Recreation

Robert M. Wolff, Associate Professor, and Chairperson, Parks and Recreation Management and Sport Management
Laura E. Blitner, Assistant Professor, Physical Education
Judith A. Blucket, Professor, Physical Education, and Acting Dean, College of Health
Charmaine DeFrancesco, Associate Professor, Physical Education and Sport Management
Richard Lopez, Associate Professor, Exercise Physiology
Thomas K. Skalka, Professor, Recreational Therapy
Debra R. Trigoboff, Instructor, Sports Medicine
Bill Vongue, Assistant Professor, Elementary Physical Education

General Information
The Department of Health, Physical Education and Recreation offers five programs which lead to a Bachelor of Science degree. These programs include: Exercise Physiology, Parks and Recreation Management, Physical Education for Grades K-8, and 6-12, and Sports Management.

All stated admission requirements, which are subject to change, should be considered minimums. A student who meets these minimum requirements is not automatically assured admission. It is the responsibility of the student to ensure that he/she has met the requirements. Program faculty should be consulted for academic advisement.

Bachelor of Science in Health Education

Degree Program Hours: 120
Exercise Physiology Track
The undergraduate exercise physiology track is designed to prepare individuals to work in the fields of exercise testing, exercise physiology, and adult fitness. The track will prepare students for two certification examinations offered by the American College of Sports Medicine. The first certification examination is the Exercise Test Technology examination and the second is the Health/Fitness instructor certification.

Lower Division Preparation
To qualify for admission into the program, students must meet all published admission requirements which include: program prerequisites, general education/Gordon Rule, GPA, ACT/SAT, and CLAST. Students who do not meet the College admission requirements may request a formal review by: (a) writing an admission appeal letter to the Department requesting a review of the applicant's records and indicating the reason(s) special consideration should be granted to the applicant; (b) forwarding three letters of recommendation; and (c) participating in a formal interview with departmental/program faculty or representatives.

Upper Division Program: (60)
ZOO 3731 Human Anatomy 3
ZOO 3731L Human Anatomy Lab 1
PCB 3703 Human Physiology I 3
PCB 3704 Human Physiology II 3
PCB 3711 Physiological Mechanisms 3
PCB 3241 Physiology of Aging 3
CGS 2060 Introduction to Microcomputers 3 or
Demonstrate Competency in Microcomputers
HUN 2201 Principles of Nutrition 3
PEP 4111 Health/Fitness Instructor 3
PEP 4114 Exercizo Specialist 3
PET 3310 Kinesiology 3
PET 3351 Exercise Physiology 3
PET 4363 Evaluation in Exercise Physiology 3
PET 4384 Exercise Test Technology 3
PET 4622 Athletic Injuries 3
PET 4622L Athletic Injuries Lab 1
PET 4623 Advanced Athletic Injuries 3
PET 4623L Advanced Athletic Injuries Lab 1
PET 4940 Internship in Exercise Physiology 1-15
Advanced Treatment of Athletic Injuries 3
Advanced Treatment of Athletic Injuries Lab 1
Advisor approved electives 0-13

Bachelor of Science in Parks and Recreation Management

Degree Program Hours: 120
The Parks and Recreation undergraduate curriculum offers professional preparation programs designed to prepare students for employment in the leisure service delivery system and recreational therapy services. The program is oriented towards direct services, supervisory, and management employment opportunities.

A student may elect to gain competencies in Leisure Service Management, Parks Management, and Recreational Therapy.

Note: It is important to note that the Parks and Recreation Management curriculum is under review and changes to the curriculum are expected. Please see an advisor when scheduling courses.

Lower Division Preparation
To qualify for admission into the program, students must meet all published admission requirements which include: program prerequisites, general education/Gordon Rule, GPA, and CLAST. Students who do not meet the degree admission requirements may request a formal review by: (a) writing an admission appeal letter to the Department requesting a review of the applicant's records and indicating the reason(s) special consideration should be granted to the applicant; (b) forwarding three letters of recommendation; and (c) participating in a formal interview with departmental/program faculty or representatives.

Upper Division Program: (60)
Required Core Courses: (30)
LEI 3000 Leisure & Recreation in America 3
LEI 3542 Principles of Parks and Recreation Management 3
LEI 3501 Liability and Law in Leisure, Recreation & Sports 3
ACG 3024 Financial Accounting for Managers 3
LEI 4940 Internship 9
LEI 4941 Internship II 9
Leisure Service Management Track: (15)

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>LEI 3630</td>
<td>Care, Maintenance and Design</td>
<td>3</td>
</tr>
<tr>
<td>MAN 3701</td>
<td>Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>LEI 4573</td>
<td>Leisure Services Marketing</td>
<td>3</td>
</tr>
<tr>
<td>LEI 4590</td>
<td>Seminar in Parks, Recreation and Sport Management</td>
<td>3</td>
</tr>
<tr>
<td>LEI 4842</td>
<td>Private &amp; Commercial Sport and Recreation Management</td>
<td>3</td>
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</table>

Advisor approved electives 18

(Students are encouraged to use electives toward a Minor in Business, Entrepreneurship or Tourism Management).

Parks Management Track: (21)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>EVR 3010</td>
<td>Energy Flow in Natural and Man-Made Systems</td>
<td>3</td>
</tr>
<tr>
<td>EVR 3011</td>
<td>Environmental Resources and Pollution</td>
<td>3</td>
</tr>
<tr>
<td>EVR 3013</td>
<td>Ecology of South Florida</td>
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<tr>
<td>PUP 4203</td>
<td>Environmental Politics</td>
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</table>

Advisor approved electives 17

(Students are encouraged to use electives toward a Minor in Environmental Studies)

Recreational Therapy Core Courses (25)

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>CLP 4144</td>
<td>Abnormal Psychology</td>
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<tr>
<td>LEI 3723</td>
<td>Recreational Therapy Interventions for Persons with Cognitive and Psychosocial Disabilities</td>
<td>3</td>
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<td>LEI 3724</td>
<td>Recreational Therapy Interventions for Persons with Physical Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>LEI 4700</td>
<td>Programming for Recreational Therapy</td>
<td>3</td>
</tr>
<tr>
<td>LEI 4711</td>
<td>Client Assessment, Evaluation and Documentation in Recreational Therapy</td>
<td>3</td>
</tr>
<tr>
<td>LEI 4722</td>
<td>Disabling Conditions</td>
<td>3</td>
</tr>
<tr>
<td>LEI 4720</td>
<td>Problems, Issues, and Concepts in Recreational Therapy</td>
<td>3</td>
</tr>
<tr>
<td>LEI 4813</td>
<td>Leisure Education and Facilitation Techniques</td>
<td>3</td>
</tr>
<tr>
<td>LEI 4921</td>
<td>Special Topics</td>
<td>1</td>
</tr>
</tbody>
</table>

Required Co-requisites:
The student must have completed a minimum of 18 semester hours from three of the following six areas:
- adaptive physical education, biological/physical science, human services, psychology, sociology, or special education. Courses may be completed at the lower division. All internships must be done under the supervision of a full time Certified Therapeutic Recreation Specialist (CTRS).

The above proposed curricula have been designed to meet or exceed the standards established by the National Recreation and Park Association/American Association for Leisure and Recreation's Council on Accreditation and the National Council for Therapeutic Recreation Certification.

Bachelor of Science in Physical Education: Grades K-8

Degree Program Hours: 120

This program is designed for individuals who wish to become certified to teach physical education in the elementary and middle schools. Upon successful completion of the program and the requirements specified by the Florida Department of Education, degree recipients are eligible for regular teacher certification in the State of Florida.

Lower Division Preparation

Required Courses

First Aid; a minimum of two semester hours of human anatomy or combined anatomy/physiology; physical education major courses in social and folk or modern dance, aquatics, gymnastics, in addition to a minimum of two individual sports and two team sports. All required courses must be completed with a grade of 'C' or higher.

To qualify for admission to the program, undergraduates must have met all the lower division general education requirements including CLAST, ACT or SAT, completed 60 semester hours, and must be otherwise acceptable into the program.

Note: Students who have not completed the required courses may apply for admission if the deficiencies are not greater than eight semester hours. However, all program prerequisites must be completed before a student will be permitted to student teach. Students must meet all College of Education admission requirements.

Upper Division Program: (60)

Professional Education: (14)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>EDF 4634</td>
<td>Cultural and Social Foundations of Education</td>
<td>3</td>
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<tr>
<td>EDG 3321</td>
<td>General Instructional Decision Making</td>
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<td>EDG 3321L</td>
<td>General Instructional Decision Making Laboratory</td>
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<td>EDP 3004</td>
<td>Educational Psychology</td>
<td>3</td>
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<tr>
<td>EDF 3515</td>
<td>Philosophical and Historical Foundations of Education</td>
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Subject Matter Specialization: (46)

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<tr>
<td>DAE 3371</td>
<td>Dance in Elementary and Middle School</td>
<td>3</td>
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<td>PEO 4041</td>
<td>Games in Elementary and Middle School</td>
<td>3</td>
</tr>
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<td>PEP 3205</td>
<td>Gymnastics in Elementary and Middle School</td>
<td>3</td>
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<td>PET 3020</td>
<td>Foundations of Physical Education</td>
<td>3</td>
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<tr>
<td>PET 3310</td>
<td>Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PET 3351</td>
<td>Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>PET 3640</td>
<td>Adapted Physical Education</td>
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<td>PET 4510</td>
<td>Evaluation in Physical Education</td>
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<tr>
<td>PET 4622</td>
<td>Athletic Injuries</td>
<td>3</td>
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<td>PET 3730</td>
<td>Physical in the Middle School</td>
<td>3</td>
</tr>
<tr>
<td>PET 4035</td>
<td>Motor Learning and Development</td>
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<tr>
<td>PET 4401</td>
<td>Administration of Physical Education and Sport</td>
<td>3</td>
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<tr>
<td>PET 4944</td>
<td>Student Teaching: Grades K-8</td>
<td>9</td>
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</tbody>
</table>
Bachelor of Science in Physical Education: Grades 6-12

Degree Program Hours: 120

This program is designed for individuals who wish to become certified to teach physical education in the middle and secondary schools. Upon successful completion of the program and the requirements specified by the Florida Department of Education, degree recipients are eligible for regular teacher certification in the State of Florida.

Lower Division Preparation

Required Courses

First Aid or personal health or health education; a minimum of two semester hours of anatomy or combined anatomy/physiology; physical education activity courses in dance, weight training, aquatics, in addition to a minimum of two individual sport and two team sport classes. All required courses must be completed with a grade of "C" or higher.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Note: All physical education majors are expected to be proficient in a variety of games, sports and dance. At the lower division, students should enroll in those courses in which they are least proficient. Students who have not completed the required courses may apply for admission. However, all program prerequisites must be completed prior to the student teaching internship.

Upper Division Program: (60)

Professional Education: (14)

EDF 4634 Cultural and Social Foundations of Education 3
EDG 3321 General Instructional Decision Making 3
EDG 3321L General Instructional Decision Making Laboratory 2
EDP 3004 Educational Psychology 3
EDP 3515 Philosophical and Historical Foundations of Education 3

Subject Matter Specialization: (46)

PET 3020 Foundations of Physical Education 3
PET 3010 Kinesiology 3
PET 3510 Exercise Physiology 3
PET 3640 Adapted Physical Education 3
PET 4510 Evaluation in Physical Education 3
PEO 4004 Principles and Practices of Coaching 3
PET 4620 Athletic Injuries 3
PET 3730 Physical Education in the Middle School 3
PET 4035 Motor Learning and Development 4
PET 4442 Physical Education in the Secondary School 3
PEP 4102 Applied Concepts of Fitness and Health 3
PET 4401 Administration of Physical Education and Sport 3
PET 4945 Student Teaching (Grades 6-12) 9

Applications for student teaching are due in the office of the Director of Student Teaching by July 1 for Spring semester placement, and by March 1 for Fall semester placement.

Sports Management Track

The undergraduate sports management track prepares individuals for managerial positions in the sports-related fields. The core program emphasizes the physiological and psychological aspects of sport and the development of managerial and administrative skills. Program electives allow students to pursue a specialization in the area of interest.

Lower Division Preparation

Recommended courses: (12)

Select from the following recommended courses:

PET 3351 Exercise Physiology 3
PET 3541* Adaptive Physical Education 3
PET 4622 Athletic Injuries 3
PET 5416 Sports Administration and Management 3
HFT 3313 Hospitality Property Management 3
HFT 3753 Convention and Trade Show Management 3
PUR 3000 Principles of Public Relations 3
RTV 3000 Principles of Broadcasting 3

For additional acceptable courses, students should consult with their program advisor.

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*PET 5216 and PET 5256 should be completed during the student's senior year; PET 4946 should be completed during the student's last semester of enrollment.
Subject Specializations

A. Dean Hauenstein, Professor and Chairperson, Technology Education and Vocational Education

Arnhilda Badia, Associate Professor, Modern Language Education

David Y. Chang, Associate Professor, Art Education

Myrna P. Crabtree, Professor, Home Economics Education, Vocational Education (Family and Consumer Sciences Education)

Anna Marie Evans, Assistant Professor, Social Studies Education

Gail P. Gregg, Assistant Professor, English Education

Frank T. Hammons, Assistant Professor, Vocational Industrial Education

Zhonghong Jiang, Assistant Professor, Mathematics Education and Computer Education

Luis A. Martinez-Perez, Associate Professor, Science Education

C. Edwin McClintock, Professor, Mathematics Education and Computer Education

Faye C. McNair-Knox, Associate Professor, Modern Language Education

Dominic A. Mahamed, Associate Professor, Vocational Administration and Supervision, Vocational Education

Clem Pennington, Associate Professor, Art Education

Janice R. Sandiford, Associate Professor, Health Occupations Education, Computer Education, Vocational Education

Linda Spears-Bunton, Assistant Professor, English Education

Jan L. Tucker, Professor, Social Studies Education, Director, Global Awareness Program

Robert Vos, Associate Professor and Associate Dean, Organizational Training, Vocational Education

Michael J. Wagner, Professor, Music Education

The Department of Subject Specializations offers undergraduate and graduate programs for students who are interested in teaching Subject Specializations, and in Art Education and Music Education in K-12 grades.

The undergraduate and certificate programs are as follows:

General: Grades K - 12

Art Education
Modern Language Education
Music Education

Secondary Education: Grades 6 - 12

Biology Education
Chemistry Education
English Education
Mathematics Education
Physics Education
Social Studies Education

Vocational Home Economics Education

Vocational Industrial Education, with tracks in:

Health Occupations Education
Organizational Training

Certificate Programs
Organizational Training
Vocational Teacher Education
Advanced Vocational

General Information

Upon admission to the University and to the College, each student major in the department is assigned an advisor in the teaching field who will assist the student in constructing a program of study. The program of study must comply with the goals of the student. Upon successful completion of the work specified in the program of study, the student is awarded the Bachelor of Science Degree with a major in a specified subject matter area or level of schooling (e.g., art, English, mathematics, music, vocational home economics education) and is eligible for regular teacher certification in the State of Florida upon successful completion of requirements specified by the Florida Department of Education.

Field Experiences

Most courses offered by the department require observation and participation in selected schools. The course descriptions identify the courses which require in-school classroom experiences directed by the classroom teacher and a College of Education faculty member.

The student teaching assignments are fulfilled in designated field centers. This experience is on a full-time basis for one semester. Permission to student teach is contingent upon successful completion of all other requirements specified in the program of study. Students may be assigned to do their student teaching during either the Fall or Spring semesters of their senior year. There is no student teaching during the Summer semester.

Application for student teaching is the responsibility of the student. Necessary forms may be obtained from the Office of the Director of Student Teaching. Deadline dates are July 1 for Spring student teaching and March 1 for Fall placement.

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

Bachelor of Science in Art Education: Grades K-12

Degree Program Hours: 120

Lower Division Preparation

An Associate in Arts Degree in Art, or

Art History Survey 6
Basic and Figure Drawing 6
Two and Three-Dimensional Design 6
Public Speaking 3
Computers 3

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, ACT, or SAT, completed 60 semester hours, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (60)

Subject Matter Specialization: (30)

ARE 4848 Concepts in Art Education 3
ARH 4470 Contemporary Art 3
Art History Electives 3
ART 3331C Figure Drawing 3
ART 2510C Painting 3
ART 2401C Printmaking 3
ART 2702C Sculpture 3
PGY 3410C Photography 3
ART 3110C Ceramics 3
CIE 4471C Creative Textiles 3
ARE 4459 New Media/Crafts 3

Professional Education: (30)

EDF 3515 Philosophical and Historical 3

College of Education / 227
### Undergraduate Catalog

#### Foundations of Education
- **EDF 4634** Cultural and Social Foundations of Education 3
- **EDP 3004** Educational Psychology 3
- **EDG 3321** General Instructional Decision Making 3
- **EDG 3321L** General Instructional Decision Making Laboratory 2
- **ARE 4316** Special Teaching Lab Art K-5 (Fall only) 3
- **ARE 4341** Special Teaching Lab Art 6-12 (Fall only) 3
- **ARE 4935** Special Topics in Art Education 1-3
- **ARE 4940** Student Teaching 9

### Special Methods and Student Teaching

Students must complete the 14 semester hours of foundations courses, and all core courses before enrolling in 4000-level special methods courses.

**Note:** ARE 4316 and ARE 4341 must be taken before ARE 4940.

Applications to student teach are due in the office of the Director of Student Teaching by July 1 for Spring semester placement.

### Bachelor of Science in Biology Education: Grades 6-12

**Degree Program Hours:** 120

#### Lower Division Preparation

Eight semester hours of biology; eight semester hours of general chemistry; eight semester hours of general physics; mathematics through Calculus I.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

#### Upper Division Program: (60)

**Subject Matter Specialization:** (30)
- Genetics 3
- Ecology 5
- Physiology/Biochemistry 5
- Electives in Biology 17

**Professional Education:** (30)
- **EDF 3515** Philosophical Historical Foundations of Education 3
- **EDF 3004** Educational Psychology 3
- **EDG 3321** General Instructional Decision Making 3
- **EDG 3321L** General Instructional Decision Making Laboratory 2
- **EDF 4634** Cultural and Social Foundations of Education 3

**Reading Requirement**
- **RED 4325** Special Teaching Laboratory: Reading 3

#### Area of Professional Emphasis

A student must complete 14 semester hours of foundations courses and all core courses before enrolling in 4000-level special methods courses. A student must enroll for SCE 4330 and SCE 4944 in consecutive semesters.

- **SCE 4330** Special Teaching Laboratory: Science 3
- **SCE 4944** Student Teaching 9
- Advisor approved electives 1

### Bachelor of Science in English Education: Grades 6-12

**Degree Program Hours:** 120

#### Lower Division Preparation

Two courses in freshman English; survey of English literature I, II; six hours of English at the 2000-level, literature and/or composition. If the required courses beyond freshman composition are not completed they will be included in the student’s program in addition to regular upper division requirements.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

#### Upper Division Program: (60)

**Subject Matter Specialization:** (30)
- Organic Chemistry I and II 6
- Organic Chemistry Laboratories 3
- Quantitative Analysis and Laboratories 5
- Physical Chemistry and Laboratory 5
- Electives in Chemistry 8
- Calculus II 3

**Professional Education:** (30)
- **EDF 3515** Philosophical Historical Foundations of Education 3
- **EDF 3004** Educational Psychology 3
- **EDG 3321** General Instructional Decision Making 3
- **EDG 3321L** General Instructional Decision Making Laboratory 2
- **EDF 4634** Cultural and Social Foundations of Education 3

#### Reading Requirement
- **RED 4325** Special Teaching Laboratory: Reading 3

#### Area of Professional Emphasis

A student must complete 14 semester hours of foundations courses and all core courses before enrolling in 4000-level special methods courses. A student must enroll for SCE 4330 and SCE 4944 in consecutive semesters.

- **SCE 4330** Special Teaching Laboratory: Science 3

**Prerequisite or corequisite of 20 hours required in subject matter specialization.**

- **SCE 4944** Student Teaching 9
- Advisor approved electives 1

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**LIN 3670** Grammatical Usage 3 or
Bachelor of Science in Modern Language Education: Grades K-12

Lower Division Preparation

Four semesters of elementary and intermediate modern language (may be waived at the discretion of the advisor for native speakers of the target language).

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program: (60)

Subject Matter Specialization: (31)

- Phonetics or Contrastive Phonology 3
- Introduction to Linguistics or Linguistics in Target Language 3
- Civilization/Culture 6
- Syntax/Composition 12
- Literature in Target Language 6

Bachelor of Science in Music Education: Grades K-12

Degree Program Hours: 127

Lower Division Preparation

An Associate in Arts Degree in Music or the following recommended courses: applied, four semesters; history, four semester hours; organizations, four semesters; techniques secondary instruments, four semester hours; theory, 12 semester hours; sight-singing, four semester hours; class piano, four semesters.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, completed 67 semester hours, and must be otherwise acceptable into the program.

Lower Division Program: (67)

Theory (12)

- MUT 1111 Music Theory I 3
- MUT 1112 Music Theory II 3
- MUT 2116 Music Theory III 3
Sightsinging (4)
MUT 2117 Music Theory IV 3

Class Piano (2)
MVK 1111 Class Piano 1
MVK 1121 Class Piano 1

Piano proficiency must be met. See advisor for specific course requirements.

Applied Lessons (8)
Two freshman applied lessons and two sophomore applied lessons.

Ensembles (6)
Two ensembles each semester. See advisor for specific ensemble requirements.

Recital Attendance (0)
MUS 1010 Recital Attendance
MUS 1010 Recital Attendance
MUS 1010 Recital Attendance
MUS 1010 Recital Attendance

Upper Division Program: (60)
Instrumental Track
Musicology (5)
Music of the World 3
MUT 4311 Orchestration 2

Musical History (9)
MUH 3211 Music History Survey I 3
MUH 3212 Music History Survey II 3
MUH 3211 20th Century Music 3

Conducting (2)
MUG 4101 Basic Conducting 1
MUG 4202 Inst. Conducting 1

Applied Lessons (3)
Two junior applied lessons and one senior applied lesson.

Recital (1)
Senior Recital 0

Ensembles (6)
One major and one other ensemble each semester. See ensemble requirement in Music Student Handbook.

Recital Attendance (0)
MUS 3040 Recital Attendance
MUS 3040 Recital Attendance
MUS 3040 Recital Attendance

Music Education (18)
MUE 2440C String Techniques 1 1
MUE 2450C Woodwind Techniques 1 1
MUE 2460C Brass Techniques 1 1

MUE 2470C Percussion Techniques 1 1

1's exempt in area of major applied area

MUE 3340 Special Teaching Lab I 3
MUE 4341 Special Teaching Lab II 3
MUE 4940 Student Teaching 9

Reading Requirement (3)
RED 4325 Special Teaching Laboratory; Reading 3

General Education (14)
EDG 3321 General Instructional Decision Making 3
EDG 3321L General Instructional Decision Making Laboratory 1
EDP 3004 Intro to Education Psychology 3
EDF 3514 Philosophical and Historical Foundations of Education 3
EDF 4634 Cultural and Social Foundations of Education 3

Bachelor of Science in Physics Education: Grades 6-12

Degree Program Hours: 120

Lower Division Preparation
To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Eight semester hours of general physics; eight semester hours of general chemistry, mathematics through calculus II.

Note: Linear Algebra is a prerequisite for multivariable calculus.

Upper Division Program: (60)

Musicology (5)
Music of the World 3
MUT 4311 Orchestration 2

Music History (9)
MUH 3211 Music History Survey I 3
MUH 3212 Music History Survey II 3
MUH 3211 20th Century Music 3

Conducting (2)
MUG 4101 Basic Conducting 1
MUG 4301 Choral Conducting 1

Applied Lessons (3)
Two junior applied lessons and one senior applied lesson.

Recital (1)
Senior Recital 0

Ensembles (6)
One major and one other ensemble each semester. See ensemble requirement in Music Student Handbook.

Recital Attendance (0)
MUS 3040 Recital Attendance
MUS 3040 Recital Attendance
MUS 3040 Recital Attendance

Music Education (18)
MUE 2440C String Techniques 1 1
MUE 2450C Woodwind Techniques 1 1
MUE 2460C Brass Techniques 1 1

MVV 3630 Vocal Pedagogy 1 1
MVS 1116 Guitar Skills 2 1
1Voice Principals exempt
2Guitar Principals exempt

MUE 3340 Special Teaching Lab I 3
MUE 4341 Special Teaching Lab II 3
MUE 4940 Student Teaching 9

Reading Requirement (3)
RED 4325 Special Teaching Laboratory; Reading 3

General Education (14)
EDG 3321 General Instructional Decision Making 3
EDG 3321L General Instructional Decision Making Laboratory 1
EDP 3004 Intro to Education Psychology 3
EDF 3514 Philosophical and Historical Foundations of Education 3
EDF 4634 Cultural and Social Foundations of Education 3

Professional Education: (30)
EDF 3515 Philosophical Historical Foundations of Education 3
EDP 3004  Educational Psychology 3
EDG 3321  General Instructional Decision Making 3
EDG 3321L General Instructional Decision Making Laboratory 2
EDF 4634  Cultural and Social Foundations of Education 3

Reading Requirement
RED 4325 Special Teaching Laboratory: Reading 3

Area of Professional Emphasis
Students must complete 14 hours of foundations courses and all core courses before enrolling in 4000-level special methods courses. A student must enroll for SCE 4330 and SCE 4944 in consecutive semesters.
SCE 4330 Special Teaching Laboratory: Science 3
SCE 4944 Student Teaching 9
Advisor approved elective 1

Bachelor of Science in Social Studies Education: Grades 6-12
Degree Program Hours: 120
Lower Division Preparation
Two courses in history and one course in the social sciences beyond freshman social science core (select from anthropology, economics, geography, political science, or sociology).

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (60)
Professional Education: (35)
EDF 3515  Philosophical and Historical Foundations of Education 3
EDP 3004  Educational Psychology 3
EDG 3321  General Instructional Decision Making 3
EDG 3321L General Instructional Decision Making Laboratory 2
EDF 4634  Cultural and Social Foundations of Education 3
RED 4325 Special Teaching Laboratory: Reading 3
HIE 3302  Curriculum Development in Vocational Home Economics 3
HIE 4104  Instruction in Vocational Home Economics 3
HIE 4944 Special Teaching Laboratory: Home Economics 3
HIE 4941 Student Teaching: Home Economics 3

Technical Preparation
Total of 39 semester hours needed from lower and upper divisions:
Housing and Home Furnishings 6
Management and Family Economics 3
Family and Child Development 9
Food and Nutrition 9
Textiles and Clothing 9

Technical preparation courses are offered in the Colleges of Education, Arts and Sciences, Engineering and Applied Sciences, Health, and the School of Hospitality Management.
Bachelor of Science in Vocational Industrial Education

Degree Program Hours: 120

Lower Division Preparation
Evidence of appropriate occupational experience must be presented prior to being admitted to the Vocational Industrial Education Bachelor of Science degree program.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (60)
Professional Education: (56-62)
EDP 3004 Educational Psychology 3
EDF 3515 Philosophical and Historical Foundations of Education 3
EDF 4634 Cultural and Social Foundations 3
EDG 3321 General Instructional Decision Making 3
EDG 3321L General Instructional Decision Making Laboratory 2
SPC 3600 Public Speaking 3
EME 3402 Computers for Teachers 3
RED 4325 Special Teaching Laboratory: Reading 3
EVT 3065 Foundations of Vocational Education 3
EVT 3161 Instructional Materials in Vocational Industrial Education 3
EVT 3165C Course Planning in Vocational Education 3
EVT 3367 Testing and Measurements in Vocational Education Subjects 3
EVT 3815C Vocational Education Laboratory Management and Safety 3
EVT 4351 Teaching Limited-English Proficient Students in Vocational Education 3

EVT 4502 Introduction to Vocational Special Needs 3
EVT 4940 Special Teaching Laboratory: Vocational Industrial Education and Technical Education 3
EVT 4941 Student Teaching Vocational Industrial Education and Technical Education 9
EVT 5369 Vocational Educational Media 3
EVT 4905 Directed Study in Vocational/Technical Education 1

Health Occupations Education Track

Degree Program Hours: 120

Lower Division Preparation
Required Technical Preparation
Occupational preparation in the student’s intended area of teaching such as nursing, dental, medical laboratory technician, respiratory therapy, radiologic technology, and other allied health related occupations requiring training beyond the secondary school and licensure in the occupational area where applicable.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (60)
Professional Education: (35)
EDP 3004 Educational Psychology 3
EDF 3515 Philosophical and Historical Foundations of Education 3
EDF 4634 Cultural and Social Foundations of Education 3
EDG 3321 General Instructional Decision Making 3
EDG 3321L General Instructional Decision Making Laboratory 2
EME 3402 Computers for Teachers 3

Specialization Area Requirements: (18)
EVT 4310 Planning and Operating HOE Programs 3
EVT 4311C Special Teaching Laboratory in HOE Programs 3
EVT 4312 Instructional Strategies and Evaluation in HOE Programs 3
EVT 4941 Student Teaching in Health Occupations Education Programs 9
Advisor approved electives 9

Organizational Training Track

The Organizational Training track prepares individuals to become professional trainers and instructors in non-public school settings. The track includes coursework appropriate to occupational training and has two options: (1) a 24 semester hour professional certificate program and (2) a baccalaureate degree. Both options require an internship experience in an industrial, business, public, or private organization setting. Admission to the track is open to experienced workers in industry, business, public or private organizations or agencies who hold an Associate in Arts degree or its equivalent. Minimum GPA and SAT/ACT scores do not assure admission.

This track does not lead to State of Florida Teacher Certification.
Lower Division Preparation

Required Technical Preparation
To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

A minimum of two years occupational experience and technical preparation in the student's intended area of teaching is required for admission to the program.

Upper Division Preparation: (60)

Professional Education: (45)
- ENC 2210 Technical Writing 3
- EME 4103 Production and Use of AV/Media 3
- EDP 3004 Educational Psychology 3
- ADE 4384 The Adult Learner 3
- ADE 4274 Organizational Training and Development 3
- EVT 3165C Course Planning in Occupational Education 3
- EVT 3367 Testing and Measurements in Vocational Education Subjects 3
- EVT 4351 Teaching Limited English Proficient Students in Vocational Education 3
- EVT 4905 Directed Study in Vocational/Technical Education 3
- EVT 4920 Group Training and Development 3
- EVT 4931L Special Topics 3
- EVT 4942C Internship: Training and Development 6
- Advisor approved electives 6

Minor in Business: (15)
- ACG 3024 Accounting for Managers and Investors 3
- FIN 3005 Introduction to Business Finance 3
- MGMT 3025 Organization and Management 3
- MAR 3023 Marketing Management 3
- System Management 3

Minor in Vocational Pedagogy: (15)
- EME 3402 Computers for Teachers 3
- EVT 3065 Foundations of Vocational Education 3
- EVT 3161 Instructional Materials in Vocational Industrial Education 3
- EVT 3815 Vocational Laboratory Management and Safety 3
- EVT 4365 Instructional Strategies and Evaluation in Vocational and Technical Education 3

Professional Certificate in Organizational Training
The professional certificate program in Organizational Training is designed to prepare experienced workers to serve in a variety of education, training, and development settings in industry, business, and public and private agencies and organizations. These settings include three types of training: skills and technical, management, and motivational; and four specific training and development areas: instructional designer, and organizational developer. An internship in a training and development setting in a business, industrial agency or organization setting is required.

A minimum of two years occupational experience and an associate degree or its equivalent is required for admission.

This certificate program does not lead to State of Florida Teacher Certification.

Required Program: (24)
- ADE 4274 Organizational Training and Development 3
- EME 3402 Computers for Teachers 3
- EME 4103 Production and Use of AV/Media 3
- EVT 3165C Course Planning in Vocational Education 3
- EVT 4365 Instructional Strategies and Evaluation in Vocational and Technical Education 3
- EVT 4942C Internship: Training and Development 6

Program for Vocational-Technical Teacher Education Certification
The College offers Vocational-Technical Teacher certification programs at initial, professional, and advanced levels leading to the state-issued certification for degree and local school district issued certification for non-degreed vocational education teachers for middle, secondary and post-secondary vocational subject areas in (Industrial Education, Home Economics Education, Health Occupations Education, Technology Education, Public Service and Occupational Specialists). Courses for Endorsements are offered in Work Experience, Diversified Cooperative Training, Vocational Education for Speakers of Other Languages (VESOL) and Limited English Proficient (LEP). Courses are also available in Agriculture Education, Business Education and Marketing Education except in the areas of "special methods". Courses for renewal/recertification of Professional Teaching and Vocational Administration and Supervision certificates are also offered. Persons seeking initial Professional and Vocational Administration and Supervision certification are encouraged to seek a statement of eligibility from the Florida Department of Education for degree persons and local school district vocational certification office for non-degree teachers where they are teaching or intend to teach prior to taking courses at the university.

The college currently offers, on an annual basis, special programs of vocational teacher certification, designed in cooperation with Dade and Broward school districts. Please consult with a program advisor for further information.

Program for Advanced Vocational Teacher Certification
Special programs at advanced mastery levels in vocational teacher certification, designed in cooperation with local school districts, for salary incentives are offered by the college. Please consult with a program advisor for further information.
## Course Descriptions

### Definition of Prefixes

- **ADE** - Adult Education
- **ARE** - Art Education
- **BIE** - Business Teacher Education
- **CGS** - Computer Applications
- **CHD** - Child Development
- **DAE** - Dance Education
- **EDA** - Education
- **EDF** - Education
- **EDG** - Education
- **EDH** - Education
- **EDP** - Education
- **EDT** - Education
- **EDS** - Education
- **EEC** - Education
- **ERM** - Education
- **FAD** - Family Development
- **FLE** - Foreign Language Education
- **HME** - Home Management Education
- **HOE** - Home Economics
- **LAH** - Language Arts and English Education
- **LEE** - Leisure
- **MAE** - Mathematics Education
- **MHS** - Mental Health Services
- **MUE** - Music Education
- **PEO** - Physical Education
- **PET** - Physical Education
- **PEM** - Physical Education
- **PFP** - Physical Education
- **PET** - Physical Education
- **PHD** - Physical Health Education
- **PET** - Physical Education
- **RED** - Reading Education
- **SCE** - Science Education
- **SPE** - Special Education
- **SSE** - Social Studies Education
- **TSL** - TESOL

F-Spring offering; S-Fall semester offering; SS-Summer semester offering; AL-alternate years; AR-as required.

### ADE 4274 Organizational Training and Development (3)
Describes role of employee training/development in a variety of organizations. History/current trends and future direction noted. Training and development in specific organizations emphasized. (F, alt)

### ADE 4384 The Adult Learner (3)
Identifies the characteristics and evolving development of adults. Reviews the primary learning theories and analyzes those most applicable for adults as learners. (F, alt)

### ADE 5081 Introduction to Adult Education and Human Resource Development (3)
Developing rationale for and philosophy of human resource development/adult education: contrasting agencies, program, and curricula; analyzing factors affecting human resource development, differentiating adults and youth as learners; planning and appraising human resource development programs. (F-UP; SS-Brow)

### ADE 5383 Instructional Processes in AE/HRD (3)
Analyzing models for instructional design; identifying and evaluating variables related to such models; developing designs unique for adult learners and organizational needs. (SS-UP; S-Brow)

### ARE 3313 Teaching Elementary Art (3)
Knowledge and skill in development and implementation of art experiences in elementary curriculum. Prerequisites: EDG 3321, EDG 3322L. Corequisites: EDF 4940, EDF 4941, or EDF 4942. (F, SS)

### ARE 4316 Special Teaching Laboratory: Art in Grades K-6 (3)
Development of instructional skills, techniques, and strategies for teaching art in the elementary school. Laboratory and field participation required. Prerequisites: EDF 3723, EDG 3321, EDG 3322, EDP 3004. Either EDF 3521 or EDF 3542. Minimum prerequisite of 20 hours required in subject matter specialization. (F)

### ARE 4341 Special Teaching Laboratory: Art in Grades 7-12 (3)
Development of instructional skills, techniques, and strategies for teaching art in the middle and senior high school. Laboratory and field participation required. Prerequisites: EDF 3723, EDG 3321, EDG 3322; ARE 4316. Minimum prerequisite or corequisite of 20 hours required in subject matter specialization. (F)

### ARE 4459 New Media - Crafts in the Classroom (3)
Understand the role and evolution of crafts in the schools, their function in child development, planning, assessment and basic production techniques with various media. (F, S)

### ARE 4848 Concepts in Art Education (3)
Understand philosophies and events that influenced the development of Art Education and the application of Discipline-Based Art Education and Aesthetic Education to the classroom. (F, SS)

### ARE 4935 Special Topics in Art Education (1-3)
Research or production in one or more areas of art education. Prerequisite: Consent of professor.

### ARE 4940 Student Teaching in Art (9)
Supervised teaching in an elementary and secondary school. Prerequisites: EDF 3723, EDG 3321, EDG 3322; ARE 4316, 4341; RED 4325, and 18 semester hours of the coursework required in art. Admission to the program. (S)

### ARE 5457C Introduction to Computer Art (3)
Exploration of the color computer, peripherals and selected software as tools for creating expressive art. Individual art. Individual imaging projects, lesson plans, readings and presentation required. (S)

### ARE 5553 Introduction to Art Therapy (3)
An overview of art therapy as a verbal and nonverbal means of communication with special emphasis on psychodynamic fundamentals inherent to the process for the purpose of diagnosis, treatment, and intervention for people with special needs. (F)

### ARE 5555C Advanced Art Therapy (3)
Examination of strategies, techniques and current theoretical approaches in art therapy. Delineation and application of an individual field experience is required. Prerequisite: ARE 5553. (S)

### ARE 5905 Directed Study in Art Education (1-3)
Individual investigation and research in one or more areas of art education. Prerequisite: Consent of professor. (F, SS)

### ARE 5945 Supervised Teaching: Art Education (6)
Supervised teaching in a junior or senior high school. Prerequisites: Admission to the Alternate Track Program and completion of prerequisite coursework in education and subject matter area. Super-
vised teaching in an elementary or secondary school. (S)

CHD 3220 Child Development: Infancy and Early Childhood (3). Systematic study of total developmental process in the child from conception through early childhood emphasizing the effects of home and family environment. Includes observational experiences. (AR)

CHD 4210 Middle Childhood and Adolescent Development (3). Extension of the study of developmental patterns of children, with emphasis on physical, intellectual, social, and emotional maturation through adolescence. Analysis of environmental and home influences. (AR)

CHD 5266 Advanced Studies in Child Development (3). Survey of current literature on selected areas. Analysis of trends and issues, and investigation of recent research in Child Development. Prerequisites: CHD 3220 and CHD 4210 or approved equivalent. (AR)

CGS 5410 Logo for Educators (3). Aspects of Logo as used by educators. Creative aspects, the language, philosophy, structure, and application. Prerequisite: Computers in Classroom or equivalent. (AR)

DAE 3371 Dance in the Elementary and Middle School (3). The study of the scope, structure, and sequence of the dance program for grades K-6. Emphasis on educational dance and simple forms of folk and square dance. Field and laboratory experiences required. (F)

DAE 4362 Dance in the Middle and Secondary School (3). Includes content and methods for teaching dance in grades 6-12. Emphasis on structured multi-cultural dance forms including folk and square dance, social dance, and country-western dance. Prerequisite: Dance activity class from lower division. (AR)

EDE 4451 Evaluation in Elementary Education (3). Knowledge and application of standardized and teacher-made test results in elementary school. Prerequisites: EGD 3321, EGD 3321L. Corequisites: EDE 4940, EDE 4941 or EDE 4942. (F, SS)

EDE 4936 Senior Seminar in Elementary Education (3). Required of undergraduate elementary education majors while student teaching. Provides discussion of classroom management, discipline, school-community relations, and school law. Prerequisites: Successful completion of all program requirements for student teaching. Corequisite: EDE 4943. (F, S)

EDE 4940 Field Experience: Elementary Education (0). Required of undergraduate elementary education majors taking any program course(s) during a Fall semester. Provides experience in observing and performing tasks in public school elementary classrooms. Corequisite: Any program course(s). May be repeated. (F)

EDE 4941 Field Experience: Elementary Education (0). Required of undergraduate elementary education majors taking any program course(s) during a Spring semester. Provides experience in observing and performing tasks in public school elementary classrooms. Corequisite: Any program course(s). May be repeated. (S)

EDE 4942 Field Experience: Elementary Education (0). Required of undergraduate elementary education majors taking any program course(s) during a Summer semester. Provides experience in observing and performing tasks in public school elementary classrooms. Corequisite: Any program course(s). May be repeated. (SS)

EDE 4943 Student Teaching Internship (9). Required of undergraduate elementary education majors as culmination of program. Provides experience in an elementary school where the student assumes all teaching responsibilities for a minimum of ten weeks. Prerequisites: Successful completion of all program requirements. Corequisite: EDE 4936. (F, S)

EDE 5267 Education of the Child in Urban Society (3). For students desiring advanced study in the schooling of inner-city pupils in K-6. Prerequisites: EDE 3723, EDE 3321, EDE 3322. (AR)

EDE 5905 Directed Study in Elementary Education (1-3). Provides for individual investigation in the area of elementary education. Permission of instructor required. (F, SS)

EDE 5925 Special Topics in Elementary Education (3). Opportunities to develop skills and knowledge under the guidance of a specialist in a selected area. (SS)

EDE 1005 Introduction to Education (3). Introductory survey course designed to review education and teaching in America from multiple perspectives. Required of lower division education majors. Field work required. (F, S, SS)

EDF 3515 Philosophical and Historical Foundations of Education (3). Initial experience in professional and pedagogical studies for persons preparing for PK-12 classrooms as well as other school personnel. Special attention will be given to the exploration and the implications for educational practice. (F, SS)

EDF 3521 Education in History (3). An examination of the concepts of childhood and processes of socialization in differing historical American contexts. (F, SS)

EDF 3542 Philosophy of Education (3). Concepts of philosophy and education will be applied in the review of prominent philosophies of education. Special attention will be given to the development of the student's own philosophy of education and to the importance of philosophical assumptions in curriculum design and teaching strategies. (F, SS)

EDF 3723 Schooling in America (3). Systematic, social, cultural and political analysis and examination of critical educational issues and policies in terms of their influence and impact on curriculum and instruction in contemporary society. (F, SS)

EDF 4634 Cultural and Social Foundations of Education (3). Examines the cultural and social realities of teaching and learning in the U.S. Questions of class, race, ethnicity, gender and language are discussed in relation to effective school, teacher, and student performance. Prerequisites: EDF 3321 and EDF 3321L. EDF 3515 and EDF 3004. (F, SS)

EDF 4780 The Teacher and the Law (3). Analysis of legal rights and responsibilities in the classroom, laws related to liability, contract, records, discipline, due process, handicapped and schools. (AR)

EDF 5216 Effective Learning in the Classroom (3). A behavioral approach to effective teaching techniques, including theoretical background, behavioral definitions, writing effective objectives, and evaluation of effective learning in the classroom. Field experience will be included. (AR)
EDF 5287 Instructional Technology: Systems Approach (3). Development of instructional competencies, with an emphasis on the use of a systems approach in the design, implementation, and evaluation of programs. (AR)

EDF 5432 Measurement and Evaluation in Education (3). Competencies required for the design, construction or selection, and evaluation of measuring instruments. Prerequisite: EDF 5481. (F.S.SS)

EDF 5481 Analysis and Application of Educational Research (3). Competencies required for the design, implementation, and evaluation of educational research, including: problem formulation and analysis; sample selection; instrument selection; formulation of research design and procedure; and data analysis. (F.SS)

EDF 5517 History of Education in the Changing Social and Philosophical Context of the American Republic (3). An historical examination of formal education in the changing social and philosophical context of the American republic. Special focus on school society relationship. (AR)

EDF 5812 National Educational Systems: A Comparative Analysis (3). Examination of educational structures and guiding educational objectives in a limited number of both developed and developing countries. Analysis of responses of national educational systems to common educational issues. (S)

EDF 5820 Latin American Education: An Historic and Contemporary Overview (3). Historical and current development of Latin American Education, and analysis of principal forces shaping this development. (AR)

EDF 5821 African Educational Systems: A Comparative Approach (3). Contemporary trends and issues of education in selected independent African countries, with historical analysis of colonial educational policies and practices. (AR)

EDF 5851 Socio/Cultural Conflict in Educational Change (3). Explores radical interpretations of the relationship of education to development in the Third World. Emphasis will be placed on the problem of values conflict and on the use of appropriate educational technologies. (AR)

EDF 5852 Educational Development Issues in Context: A Multidisciplinary Perspective (3). A critical analysis of educational reforms of the past and the present, drawing on social science research and policy issues in the Third World. Prerequisite: EDF 5850. (S)

EDF 5880 Intercultural Education: National and International Perspectives (3). Analysis of concepts and programs of intercultural and international education. Consideration of the role of education in fostering intercultural understanding both nationally and internationally. (F)

EDF 5881 Foundations of Bilingual Education (3). Fundamental theories and models of bilingual education, and information about the historical, philosophical, theoretical and legal background for bilingual multicultural programs in the United States. (AR)

EDF 5905 Directed Study in Education (1-3). The student plans and carries out an independent study project under direction. Topics are to directly relate to content of education courses. Independent study may not substitute for regular course offerings. Prerequisites: Written permission of the chairman of the Division and the approval of the instructor. (F.S.SS)

EDF 5941 Practicum: Urban Elementary Schools (3). Developing teacher competencies for the urban elementary schools. (AR)

EDF 5942 Multicultural Seminar and Practicum in Urban Education (3). Effective methods of educating immigrant and other minority children. (AR)

EDF 5955 Field Study Abroad (3-6). Development of international and cross-cultural understandings of educational philosophies and systems through planned travel and study abroad. (S)

EDG 1700 Introduction to Multicultural Education: Making Choices (3). Designed to introduce prospective teachers to the terms, concepts, elements, purposes, and objectives of multicultural education programs. Corequisite: EDG 2930. (AR)

EDG 2701 Teaching Diverse Populations (3). Introductory course designed to present the theories and realities of teaching diverse populations. Requested of lower division Education majors. Field work required. (F.S.SS)

EDG 3321 General Instructional Decisionmaking (3). Instructional decisions facing classroom teachers including HOTs, multiple intelligences, learning styles, technology, theory and models of instruction. Corequisite: EDG 3321L. (F.S.SS)

EDG 3321L General Instructional Decisionmaking Laboratory (2). Lab builds on theory and work class concepts through video simulations, feedback, fieldwork, and interaction. Corequisite: EDG 3321. (F.S.SS)

EDG 3322 General Teaching Laboratory II: Multicultural Education (3). Enables students to work effectively in multicultural and multi-ethnic communities through the examination of self, the development of human relations and communication skills, and the examination of today's complex urban multicultural society. (F.S.SS)

EDG 4702 Educational Psychology of Multicultural Students (3). Introduction to principles and procedures utilized in teaching students from multicultural communities. Prerequisite: Associate degree equivalent and Educational Psychology. Corequisite: EDG 4703. (AR)

EDG 4703 Educational Psychology Supervised Field Experience with Multicultural Students (3). Demonstration of competencies learned throughout study program in educational psychology of multicultural students. Prerequisite: Associate degree of equivalent. (AR)

EDG 5325 Analysis of Teaching (3). Examination of the research on instruction in teaching, and the development of skills in the observation and analysis of teacher behavior. (AR)

EDG 5414 Instructional Strategies for the Classroom Teacher (4). Specifically designed for the Alternate Master's Program in Education. Focus is on generic teaching strategies suitable for teaching in South Florida. Special Emphasis will be placed on the development of competence and knowledge supportive of a reflective practitioner. Prerequisite: Permission of Instructor. Corequisite: EDG 5414L. (F.SS)

EDG 5414L Instructional Strategies Lab (1). Applies basic knowledge and skills necessary for teaching. Re-
EDG 5417 Learning Styles Applications (3). Designed to help educators use learning styles information to change instruction and improve student achievement. Prerequisite: Tentative admission to Master's program. (AR)

EDG 5707 Cultural and Cross-Cultural Studies (3). Overview of immigration patterns in U.S., discussions of theories of ethnicity, acculturation, intercultural communication. Development of teaching strategies for multicultural classrooms. Multicultural issues in elementary, secondary, adult, vocational, and special education will also be addressed. (F.S.SS)

EDG 5757 Curriculum Development for Bilingual Programs (3). Analysis of the process of curriculum design and application for bilingual/multicultural schooling, with an emphasis of the tools of inquiry within a context of cultural and linguistic compatibility. (AR)

EDG 5941 Practicum: Urban Secondary Schools (3). Developing teacher competencies in urban secondary schools. (AR)

EDP 3004 Educational Psychology (3). Application of principles for understanding individual differences, learning, adjustment, classroom environments, and assessment to instructional and educational issues. Challenges of diversity and teacher effectiveness are addressed. (F.S.SS)

EDP 5005 Educational Psychology: Principles and Applications (3). Theories, empirical bases and principles of development and individual differences, learning, learning environments, and assessment applied to teaching at all educational levels. Challenges of diversity are emphasized. (F.S.SS)

EEC 4266 Curriculum Programs - Infancy (3). Comprehensive knowledge of curricula and educational programs for infants and toddlers. Prerequisites: EDG 3321, EDG 3321L. Corequisites: EEC 4940, EEC 4941 or EEC 4942. (AR)

EEC 4267 Curriculum Programs - Preschooler (3). Comprehensive knowledge of curricula and educational programs for preschoolers. Prerequisites: EDG 3321, EDG 3321L. Corequisites: EEC 4940, EEC 4941 or EEC 4942. (AR)

EEC 4301 Trends in Early Childhood Education (3). Knowledge of critical issues; skill in assessing programs; application of child development principles to study of young children. Prerequisites: EDG 3321, EDG 3321L. Corequisites: EEC 4940, EEC 4941 or EEC 4942. (F.S.SS)

EEC 4524 Development and Administration of Early Childhood Programs (3). Knowledge and skills to prepare administrators of programs for young children. Prerequisite: Background in Early Childhood Education. (AR)

EEC 4704 The Education and Development of Young Children (3). Knowledge of infant, toddler and young child’s physical, intellectual, social and emotional development and educational enhancement. Prerequisites: EDG 3321, EDG 3321L. Corequisite: EEC 4940, EEC 4941 or EEC 4942. (AR)

EEC 4940 Field Experience: Early Childhood (0). Required corequisite for primary education courses taken during a fall semester. Provides experience in observing and performing tasks in kindergarten and primary classrooms. Corequisite: EEC 4005, EEC 4204 or EEC 4301, EEC 4266, EEC 4267 or EEC 4704. (F)

EEC 4941 Field Experience: Early Childhood (0). Required corequisite for primary education courses taken during a spring semester. Provides experience in observing and performing tasks in kindergarten and primary classrooms. Corequisite: EEC 4005, EEC 4204 or EEC 4301, EEC 4266, EEC 4267 or EEC 4704. (S)

EEC 4942 Field Experience: Early Childhood (0). Required corequisite for primary education courses taken during a summer semester. Provides experience in observing and performing tasks in kindergarten and primary classrooms. Corequisite: EEC 4005, EEC 4204 or EEC 4301, EEC 4266, EEC 4267 or EEC 4704. (SS)

EED 4212 Behavioral Approaches to Classroom Learning II (3). Advanced behavior management techniques to include application of theories, crisis intervention, legal issues, and counseling skills. Prerequisites: EEX 2010, 3202, SPA 3000, EEX 3221, EEX 4601. This course is taken as part of the Senior Block. (F)

EED 4243 Strategies for Teaching Students with Emotional Handicaps (3). Instructional strategies and specialized approaches for teaching the emotionally handicapped. Must be taken concurrently with EED 4244 and EED 4212 as ‘the senior block’ and requires significant field work. Prerequisite: All junior-level courses. Corequisites: EED 4212, EED 4244. (F.S.SS)

EED 4244 Curriculum for Teaching Students with Emotional Handicaps (3). Concepts and skills using various curricular models designed for students with emotional handicaps. Must be taken concurrently with EED 4244 and EED 4212 as the Senior Block. Prerequisites: All junior level courses. (F.SS)

EED 5 Strategies for Students with Emotional Handicaps (3). Instructional strategies and specialized approaches for teaching students with emotional handicaps. Prerequisites: EDG 5414, EDG 5414L, EEX 6227, EEX 6051. Extensive field work required. (F.SS)

EEX 2010 Educational Foundations of Students with Exceptionalities (3). Significant concepts in relation to the educational needs of students with exceptionalities. Field experiences required. (F.S.SS)

EEX 3202 Personal and Social Characteristics of Students with Exceptionalities (3). Biological conditions affecting learning and their personal and social consequences
including employability and transitional skills for adulthood. Field experience required. (F,S,SS)

**EEX 3221 Assessment of Students with Exceptionalities (3).** Basic assessment concepts and application to appropriate test selection, administration, scoring, and interpretation. Informal and formal techniques employed for purposes of gathering data for instructional planning. Prerequisites: EEX 2010, EEX 3202. (F,S,SS)

**EEX 4070 Children with Exceptionalities in Inclusive Settings (3).** Characteristics of students with mild disabilities and techniques of identifying, assessing, managing, and instructing them in general education settings. (F)

**EEX 4240 Nature and Needs of Students with Mild Disabilities (3).** History, etiology, characteristics, assessment and treatment of students with mild retardation, emotional handicaps and learning disabilities. Emphasis on theory, research and concepts related to curriculum, K-12. Prerequisite: EEX 2010, EEX 3202. (F,S,SS)

**EEX 4601 Behavioral Approaches to Classroom Learning I (3).** Introductory course in applied behavior analysis for those planning to teach students with exceptionalities. Provides concepts and skills necessary for application of operant conditioning principles. Prerequisites: EEX 2010, EEX 3202, SPA 3000, EEX 3221. (S,SS)

**EEX 4810 Supervised Practicum in Special Education (1-3).** Field experience in classroom of student’s major, applying skills learned throughout the program. Co-requisite: Other Senior block courses. (F)

**EEX 4861 Student Teaching (9).** A field experience for program majors in Special Education providing opportunities to demonstrate competencies learned throughout the program. Prerequisite: Completion of all program requirements. (S)

**EEX 4905 Directed Study in Special Education (1-6).** Concepts or competencies contracted between an undergraduate student and faculty member in accordance with the student’s individual needs. (F,S,SS)

**EEX 4936 Student Teaching Seminar in Special Education (3).** Seminar required of students enrolled in the Bachelor’s and Modified Master’s programs in Special Education. The purpose is to support, encourage and guide students through the transition from “learning how to teach” to independent teaching. Prerequisites: All program courses. Corequisites: EEX 4861 and EEX 6862. (F,S)

**EEX 4940 Field Experience: Special Education (0).** Field based course required of all special education majors. Must be successfully completed before graduating from the program. Students must register for a section of this course with each of the following methods courses: RED 4150, LAE 4314, and MAE 4310. Repeatable. Corequisites RED 4150, LAE 4314, and MAE 4310. (F,S,SS)

**EGI 5051 Nature and Needs of the Gifted (3).** Identification and placement procedures, history of the field, and psychological factors affecting development of the gifted-talented. (F)

**EGI 5232 Educational Procedures and Curriculum for Gifted (3).** Basic curriculum models in education of the gifted. Relation of models to planning, implementation in traditional classrooms, resource rooms, and special classes. (S)

**EIA 5905 Directed Study in Technology Education (1-3).** Identification, research, and reporting on problems of interest to the student in technology education. Subject to approval of program advisor. (F,S,SS)

**EIA 592S Special Topics in Technology Education (3).** Selected topics related to instructional and technical areas. (F,S)

**ELD 4230 Curriculum for Teaching Students with Learning Disabilities (3).** Designed to familiarize students with the terminology, characteristics, curriculum models, specialized curriculum, and instructional materials for students with learning disabilities. Field experiences required. Must be taken concurrently with Senior Block with ELD 4240 and EED 4212. Prerequisites: All junior level courses. (F,S)

**ELD 4240 Strategies for Teaching Students with Learning Disabilities (3).** Instructional strategies and specialized approaches to teaching students with learning disabilities. Must be taken concurrently with ELD 4230 and EED 4212 as the ‘senior block’, and requires significant field work. Prerequisite: All junior level courses. (F,S,SS)

**ELD 5 Strategies in Teaching Students with Learning Disabilities (3).** Instructional strategies and approaches for teaching students with learning disabilities. Extensive field work is required. Prerequisites: EEX 5414 and Lab, EEX 6051, EEX 6227. (F,S,SS)

**EME 3402 Computers for Teachers (3).** An introductory course focusing on instructional uses of computers in pre-college education. Designed to provide skills in using computers as a classroom tool. (F,S,SS)

**EME 4103 Production and Use of Audio/Visual Media (3).** Knowledge and skill in selecting and producing audio-visual media. Emphasis is placed on student production of audio and visual materials and equipment use. (AR)

**EME 5315 Instructional Media (3).** Development of competencies for effective selection and utilization of instructional media. Consideration of sources, selection, evaluation, and methods of implementing media. (AR)

**EME 5403 Introduction to Instructional Delivery Systems (3).** A study of the rapidly expanding electronic media technology and its impact on instructional delivery. Prerequisite: EME 3402 or EME 6405. (AR)

**EME 5602 Multimedia in the Classroom (3).** Use videodisc and compact disc formats; hypermedia; high resolution still images and graphics; audio-program material and text to improve the quality of teaching and student learning. Prerequisites: EME 3402, EME 6405, or equivalent. Corequisite: Basic knowledge of Macintosh environment. (AR)

**EME 5945 Special Topics Computer Education (1-3).** Offers an opportunity for teachers and trainers to participate in activities using specific computer applications. (AR)

**EMR 4221 Curriculum for Teaching Students with Mental Retardation (3).** Significant concepts and skills needed for educational planning, programming and placement decisions for students with mental retardation during school years. Field experiences required. Must be taken concurrently in Senior Block with EMR 4362 and EED 4212. Prerequisites: All junior level courses. (F)

**EMR 4362 Strategies for Teaching Students with Mental Retardation (3).** Familiarizes students with the in-
structural strategies and specialized approaches for teaching the mentally retarded. Must be taken concurrently with EMR 4221 and EED 4212 as the senior block and requires significant field work. Prerequisite: All junior-level courses. (F,S,SS)

EMT 5 Strategies for Teaching Students with Mental Retardation (3). Familiarizes students with instructional strategies and specialized approaches for teaching students with mental retardation. Requires extensive field work. Prerequisites: EDG 5414, EDG 5414L, EEX 6081 and EEX 6227. (SS)

EVT 3065 Foundations of Vocational Education (3). History of vocational legislation, principles and practices on the national, state, and local levels. (SS)

EVT 3161 Instructional Materials in Vocational Industrial Education (3). Evaluation of existing instructional materials and the planning and development of individualized instructional materials. (S)

EVT 3165C Course Planning (3). Knowledge of work analysis, planning, and organizing of vocational content for instruction. Prerequisite: EDG 3321. (S)

EVT 3367 Testing and Measurements in Vocational Education Subjects (3). Knowledge and skill in developing cognitive, effective and performance standards, tests, and measurements in vocational laboratory settings. Prerequisite: EVT 3165. (SS)

EVT 3815C Vocational Education Laboratory Management and Safety (3). Knowledge and skill in analyzing, planning, organizing and controlling laboratory environments and students' safe learning activities. (F)

EVT 4164 Technical Applications in Occupational Areas (3). The incorporation of new technical knowledge and skills of an occupational area into existing vocational education courses of study. Prerequisite: EVT 4946. (F)

EVT 4280 Occupational Safety and Health (OSHA) (3). Knowledge of the history, implications, and applications of the Occupational Safety and Health Act of 1970. For vocational and technical teachers, industrial employees, and management personnel. (AP)

EVT 4310 Planning and Operating HOE Programs (3). An intermediate course that develops an understanding of health occupation education as well as skills and knowledge needed by health care professionals to plan and develop health occupations programs. Approved for "special methods of teaching health occupations education." Prerequisite EVT 3165. (AR)

EVT 4311 Special Teaching Lab in HOE Programs (3). An intermediate course that develops knowledge of institutional structure, policies and roles of school personnel combined with field and actual teaching experiences. (AR)

EVT 4312 Instructional Strategies and Evaluation in HOE Programs (3). An intermediate course that focuses on the development of skills and knowledge needed to analyze, plan, develop, execute and evaluate classroom and laboratory teaching and learning activities in health occupations education. Approved for "special methods of teaching health occupations education." Prerequisite EVT 3165. (AR)

EVT 4351 Teaching Limited English Proficient Students in Vocational Education (3). Knowledge of the history, principles, and practices, as well as skill in analyzing, planning, developing, executing, and evaluating classroom and laboratory teaching and learning activities for limited English proficient students. Meets META requirement. (F)

EVT 4365 Instructional Strategies and Evaluation in Vocational and Technical Education (3). Knowledge and skill in analyzing, planning, developing, executing and evaluating classroom and laboratory teaching and learning activities. For non-degree certification only. (AR)

EVT 4502 Introduction to Vocational Special Needs Education (3). Knowledge of historical developments, legislation, instructional strategies, and program alternatives required to instruct special needs students in vocationally related environments. (S)

EVT 4668 Emerging Emphasis in Career Education (3). A knowledge of current trends and issues in reference to developing and integrating career education into current elementary and secondary educational programs. (AR)

EVT 4905 Directed Study in Vocational/Technical Education (1-3). Identification, research, and reporting on a special problem of interest to the student. Subject to approval of program advisor. (F,S,SS)

EVT 4920 Group Training and Development (3). Knowledge and skills necessary to design, prepare, conduct, and evaluate group training and development programs. Prerequisite: Permission of instructor. (S, alt)

EVT 4931 Special Topics (1-4). Knowledge of recent developments related to problems, practices, programs, and methodologies in organizational setting. Prerequisite: Permission of instructor. (AR)

EVT 4940 Professional Problems in Vocational and Technical Education (3). Knowledge of institutional structure, organization, policies, and roles of school personnel, with actual teaching experience in area of specialization. (S)

EVT 4941 Student Teaching: Vocational Industrial Education and Technical Education (9). Utilization of instructional knowledge, attitudes, and skills in a variety of instructional situations in the vocational educational setting. Prerequisites: EVT 4940, EVT 4311 for Health Education majors. (F,S)

EVT 4942C Internship: Training and Development (3). Knowledge and skills in training and development in non-public school settings. Prerequisites: Admission to Organizational Training Certificate Program and permission of instructor. (F,S,SS)

EVT 4946 Field Experience: Technical Updating (3). The identification and acquisition of current technical knowledge and skills in an occupational area. Prerequisite: Vocational certification. (F,S,SS)

EVT 4949 Occupational Experiences (3-9). Occupational skill developed via field based work-experience in industry, business, or a government agency in the occupation in which the student is preparing to teach. (F,S,SS)

EVT 4999C Credit by Examination (3-9). Technical knowledge and skills in an occupational area such as trade, industry, health and technology, as certified by recognized professional examinations such as the National Occupational Competency Test. Credits cannot be used in lieu of upper division professional program courses. (AR)
EVT 5078 Technical Education in American Society (3). Knowledge of the basic role and current status of technical education in an industrial democracy. Designed for students interested in post-secondary education. (S)

EVT 5168 Curriculum Development in Vocational Education (3). Knowledge and skill in analyzing, planning, and developing curriculum in an area of specialization. (S)

EVT 5255 Cooperative Vocational Education Programs (3). Knowledge and skill in the basic philosophy, principles, processes, and procedures of the cooperative method in vocational and technical education. (F)

EVT 5256 Supervision and Coordination of Vocational Education Programs (3). Knowledge and skill in the supervision of personnel and the coordination of work to achieve institutional goals. (F)

EVT 5315 Improvement of Teaching Strategies in Health Occupations and Nursing Education (3). First in series of graduate courses designed to prepare qualified health professionals holding bachelor's degrees with professional education skills necessary to become competent teachers. Approved for "special methods of teaching health occupations education." (AR)

EVT 5317 Occupational Analyses in Health Occupations and Nursing Education (3). Provides opportunity to expand/update the knowledge base of health care system combining experiences in health care delivery system with curriculum updating. Professional licensure and liability insurance required. May be repeated. (AR)

EVT 5359 Vocational Educational Media (3). Knowledge and skill in selecting, developing, and utilizing vocational instructional media forms to communicate or demonstrate concepts. (S)

EVT 5650 Trends and Issues in Vocational Education (3). Knowledge of the basic philosophical and curricular trends and issues in vocational-technical education at the international, national, state, and local levels. (F)

EVT 5664 Community Relations and Resources for Vocational Education (3). Knowledge and skill in developing and utilizing community resources and establishing public relations procedures and practices to implement vocational education programs. (SS)

EVT 5695 International Comparative Vocational Education (3). Knowledge in comparison of vocational education in the United States in terms of purposes, systems, and problems with those of selected foreign countries. (S)

EVT 5769 Evaluation in Vocational and Technical Education (3). Knowledge and skill in the development of criteria, tests, measurements, and analysis of data to assess teaching, learning, and objectives. (F)

EVT 5905 Directed Study in Vocational/Technical Education (1-3). Identification, research, and reporting on a special problem of interest to the student. Subject to approval of program advisor. (F, SS)

EVT 5925 Special Topics in Vocational Education (1-3). Selected competencies related to instructional and technical areas. (AR)

EVT 5927 Special Topics in Health Occupations Education (1-3). Selected topics related to instructional and technical areas. (AR)

FAD 2230 Family Life Cycle (3). Study of the characteristics, problems, potentials, and adjustments unique to the various stages of the family life cycle, including ethnic and cultural influences on family life patterns. Includes field component with community agencies serving families. (AR)

FAD 3170 Parenting (3). Overview of changing concepts of parenthood and childhood. Explores contemporary issues concerning parenting with emphasis on maximizing human potential of parents and children. Open to non-majors. Recommended prerequisite: DEP 2001. (AR)

FAD 4340/5341 Family Development: Adulthood and Aging (3). Extension of the study of developmental patterns with emphasis on physical, intellectual, social, and emotional influences with particular emphasis on the family and/or family substitute. Graduate students will have additional requirements. (AR)

FAD 4940 Human Development Practicum (2-3). Experience in observing and working with individuals in one or more phases of the human life cycle. Students may select a day care center, public school, nursing home, hospital, or other community service agency. Prerequisites: CHD 3220, 4210, FAD 2230, or equivalent. (AR)

FAD 5260 Family Development (3). Dynamics of family interaction and structure, including analysis of socio-economic and cultural influences, crisis-producing situations, and current issues and trends affecting the family unit. (AR)

FAD 5450 Human Sexuality (3). Provides a cognitive overview of human sexuality. Main emphasis is on the affective dimension - exploration of attitudes and values related to sexuality. (AR)

FLE 4151 Bilingual School Curriculum and Organization (3). Development of a theoretical understanding of the nature of a bilingualism, a rationale for bilingual education, and a set of principles and skills for organizing bilingual-bicultural curriculum experiences in the elementary school. Prerequisites: EDF 3723, EDH 3321, EDG 3322. (AR)

FLE 4314 Methods of Teaching Foreign Languages in the Elementary School (3). Development of instructional skills, techniques and strategies for teaching modern languages in the elementary school. (F)

FLE 4375 Methods of Teaching Modern Language of the Secondary Level (3). Development of instructional skills, techniques, and strategies for teaching modern languages in the junior and senior high school. Prerequisites: EDF 3723, EDG 3321, and EDG 3322. Field experience required. Minimum prerequisite or corequisite of 14 hours in subject matter specialization. (F)

FLE 4870 Teaching Spanish as a Second Language (3). Development of instructional skills, techniques, and strategies for teaching Spanish to non-native speakers of Spanish in the elementary school. Prerequisites: EDF 3723, EDG 3321, EDG 3322, and Spanish proficiency. (AR)

FLE 4871 Teaching Spanish to Speakers of Spanish (3). Development of Understandings and teaching skills needed in presenting integrated non-official language arts programs which would consider factors of languages and cultures in contrast. Prerequisites: EDF 3723, EDG 3321, EDG 3322, and Spanish proficiency. (AR)

FLE 4942 Field Teaching (9). Supervised teaching in a junior or senior high school. Prerequisites: EDF 3723,
EDG 3321, EDG 3322, RED 4325, appropriate Special Teaching Laboratory, appropriate number of hours in subject matter specialization, and admission to the program. (S)

FLE 5895 Bilingual Education Teaching Methodologies (3). Examination of various approaches to bilingual education, including specific school and classroom organizations. Development of specific instructional strategies for bilingual students. Issues in elementary, secondary, adult, vocational, and special education will also be addressed. (AR)

FLE 5908 Directed Study in Foreign Language Education (1-3)(ARR). The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor. (F,S,SS)

FLE 5945 Supervised Teaching: Modern Languages (6). Supervised teaching in a junior or senior high school. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite coursework in education and subject matter area. (S)

HHE 3302 Curriculum Development in Vocational Home Economics (3). Development, adaptation, and evaluation of curriculum for vocational home economics content in a variety of educational settings. Subject to approval of the instructor. (F)

HHE 4104 Instruction in Vocational Home Economics (3). Application of educational principles, practices, and techniques to the teaching of vocational home economics in varied educational settings. Subject to approval of the instructor. (F)

HHE 4941 Student Teaching in Home Economics (9). Utilization of instructional knowledge, attitudes, and skills in vocational home economics instructional settings. Prerequisites: HHE 3302, HHE 4104, HHE 4944. (S)

HHE 4944 Special Teaching Laboratory: Home Economics (3). Acquisition of knowledge of educational institutions, and utilization of planning tools and teaching skills within areas of home economics in selected educational settings. Prerequisites: HHE 3302, HHE 4104 (S)

HHE 5335 Trends and Issues in Home Economics Education (3). Analysis of current social, economic, and educational trends and issues impacting upon home economics education and their implications for current and evolving practices. (F)

HHE 5360 Teaching Child Development (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HHE 5361 Teaching Consumer Education and Family Economics (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HHE 5362 Teaching Clothing and Textiles (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HHE 5363 Teaching Family Life Education (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HHE 5364 Teaching Housing and Home Furnishings (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HHE 5365 Teaching Food and Nutrition (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HHE 5905 Directed Study in Home Economics Education (1-3). Designed for advanced students in home economics education who wish to pursue specialized topics. Requires prior approval of instructor. (F,S)

HHE 5927 Special Topics in Home Economics Education (1-3). Development, organization, instruction, evaluation, and administration of programs related to selected aspects of home economics education. (S)

HES 5319 Teaching Health Education (4). Students will select various modern techniques and tools for teaching health education in elementary and secondary school settings. (AR)

HHE 3420 Home Furnishings and Equipment (4). Principles involved in the construction, selection, operation, and care of furnishings and equipment and their relationship to their environmental use. (AR)

HLP 3013 Teaching Elementary Health and Physical Education (3). Knowledge and skill in development and implementation of programs for leisure time, personal health and family life. Prerequisites: EDG 3321, EDG 3321L Corequisite: EDE 4940, EDE 4941 or EDE 4942. (F,S,SS)

HME 4230 Management of Personal and Family Resources (3). Application of management principles to personal and family decisions including human and non-human resources. Opportunity for community observation of management decisions made by persons of various ethnic groups and life styles and an analysis of the effect of these decisions on family relationships and personal success. (AR)

HME 5225 Problems of Home Management in Contemporary Society (3). Influence of diversified cultural impact on management life styles, with emphasis on problems of management resources. Discussion of problems related to single-parent homes, retirement, poverty, death, working parents, migrant families, and other human situations. Prerequisites: COA 2410, HME 4230, or permission of instructor. (AR)

HME 5255 Independent Living for the Handicapped (3). Explores the special home and personal living skills required in order for persons with mental and physical limitations to achieve their maximum independence. Suitable for students in special education, health, physical education and recreation, social work, home economics, or anyone planning to work with the elderly or handicapped. Approved for certification for teachers of the mentally retarded. (AR)

HOE 4940 Internship in Home Economics (3-6). Community based, supervised practical experience in a home economics-related career, to provide opportunity for career exploration in a chosen field, and application of knowledge to practical situations. Prerequisite: Permission of instructor. (AR)

HSC 5455 Basic Driver Education I (3). Content includes knowledge of the highway transportation system, rules and regulations. For Driver Education Certification endorsement. (AR)
HSC 5456 Advanced Driver Education II (3). Content includes advanced skills for the teaching of driver’s education. Prerequisite: HSC 5455. (AR)

HSC 5465 Administration and Supervision of Driver Safety Education III (3). Content includes competencies for teacher preparation and improvement in driver and traffic safety education. Prerequisites: HSC 5455 and HSC 5465. (AR)

LAE 4192 Classroom Management in the Middle/Secondary English Classrooms (2). This course is designed to provide students with the theoretical and practical principles to deal with the problems of classroom management within the concept of goals, materials, and teaching strategies that form the English language arts. Prerequisites: EDG 3321, EDG 3322, LAE 4335. (F.S)

LAE 4314 Teaching Elementary Language Arts (3). Knowledge and skill in developing communication enhancement through language arts activities. Prerequisites: EDG 3321, EDG 3321L. Corequisites: EDE 4940, 4941, 4942 or EEX 4940. (F.S,SS)

LAE 4335 Special Teaching Laboratory English (3). Development of instructional skills, techniques, and strategies for teaching English in the middle school and senior high school. Prerequisites: EDF 3723, EDG 3321, and EDG 3322. Field experience required. Prerequisite of 21 hours required in English courses beyond lower division English prerequisites for this program. Requires 2-4 hours/week field work. (F.S)

LAE 4464 Experiencing Adolescent Literature in the Middle School and Senior High School (3). An examination of the most familiar types of literature found in the middle and secondary school English curriculum today; and the development of strategies for organizing and providing a variety of literary experiences of students who differ in intellectual abilities and literary tastes. (F.SS)

LAE 4851 Teaching English as a Second Language (3). Development of instructional skills, techniques, and strategies for teaching English as a second language in the elementary school. Prerequisites: EDF 3723, EDG 3321, EDG 3322, and English proficiency. (AR)

LAE 4942 Student Teaching (9). Supervised teaching in a middle school or senior high school. Prerequisites: EDF 3723, EDG 3321, EDG 3322, and English proficiency. (AR)

LAE 4942 Student Teaching (9). Supervised teaching in a middle school or senior high school. Prerequisites: EDF 3723, EDG 3321, EDG 3322, and English proficiency. (AR)

LAE 4945 Supervised Teaching: English Education (6). Supervised teaching in a middle school or senior high school. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite coursework in education and subject matter area. (S)

LAE 3000 Leisure and Recreation in America (3). An introduction to the fundamental concepts of leisure and recreation and their roles in American culture. The class will be structured around a lecture-discussion format. (F)

LEI 3437 Program Development in Recreation & Sports (3). Development of objectives, planning, implementation and administration of recreation and sport programs. (S)

LEI 3501 Liability and Law in Leisure, Recreation and Sports (3). Legal issues related to leisure service management including legal foundations, legal liability, land use policy, employment regulations, handicapped services, and current issues. (S)

LEI 3524 Personnel Management in Parks and Recreation (3). After a study of human interaction in a management setting, students will demonstrate competencies necessary for hiring staff, conducting group dynamics and communicating to the public. (AR)

LEI 3542 Principles of Parks, Recreation and Sport Management (3). An exploration of the field of recreation, parks and sport, including career areas, management responsibilities and supervisory levels and principles and theory. (F)

LEI 3624 Turf Grass Management (3). A practical approach to the care and maintenance of special grasses such as those found on golf courses and other recreational facilities. (AR)

LEI 3630 Care and Maintenance of Grounds (3). A study of procedures for maintaining outdoor facilities. Students will be expected to demonstrate competence in proper maintenance of areas normally found in parks and recreation centers. (F)

LEI 3703 Principles and Practices of Recreational Therapy (3). History, philosophy and current principles of therapeutic recreation processes and application. Emphasis will be given to role of therapeutic recreation services. (F)

LEI 3723 Recreational Therapy Intervention for Persons with Cognitive & Psycho-Social Disabilities (2). Designed to provide "hands on" experience in a diversity of activity interventions. Group leadership skills, use of equipment and supplies for individuals with cognitive and psychosocial disabilities. (S)

LEI 3724 Recreational Therapy Intervention for Persons with Physical Disabilities (2). Designed to provide "hands on" experience in a diversity of activity interventions. Group leadership skills, use of equipment and
LEI 4757 Leisure Services Marketing (3). Application of service marketing principles and practices to both the public and private leisure service industry to improve both effectiveness and efficiency of operations. (S)

LEI 4590 Seminar in Parks and Recreation Sport Management (3). A discussion of current problems, issues and trends in parks, and sport recreation management, which will help the student develop those competencies necessary to deal with everyday aspects of particular programs. (F)

LEI 4700 Programming for Recreational Therapy (3). Principles and practices in planning and implementing programs in therapeutic recreation settings. Special emphasis will be placed on a systematic approach through problem-solving techniques. (S)

LEI 4711 Client Assessment, Evaluation and Documentation in Therapeutic Recreation (3). This course presents an overview of the theory, concepts and techniques used in client assessment, evaluation and documentation for therapeutic recreation treatment. (S)

LEI 4720 Problems, Issues & Concepts in Recreational Therapy (3). An examination of current issues, trends and professionalization concerns in therapeutic recreation. (F)

LEI 4722 Disabling Conditions in Therapeutic Activity Services (3). Review of disabling conditions pertinent to the delivery of therapeutic activities in recreational therapy and adapted activity services. (S)

LEI 4813 Leisure Education and Facilitation Techniques (3). A focused survey of leisure education and counseling as applied in therapeutic recreation delivery systems. (F)

LEI 4842 Private and Commercial Recreation & Sports Management (3). Identification, development, operation and impact of profit-oriented recreation and sport-related enterprises. (AP)

LEI 4931 Special Topics: Leisure Services Management (1-3). Analyzes and utilizes recent developments related to problems, practices, contemporary issues, practices and methodologies in Leisure Service Management. Permission of instructor. (S,F)

LEI 4940 Internship I (9). An on-the-job training program designed to enable students to develop those competencies which can only be gained from practical experience. (SS,AR)

LEI 4941 Internship II (9). Advanced undergraduate supervised internship in a parks and recreation or recreational therapy organizations. Prerequisites: LEI 4940 and permission of instructor. (SS,AR)

LEI 5440 Program Development in Parks, Recreation and Sport (3). The development of specific programs in parks and recreation with emphasis on special programs for young children, retarded, handicapped persons, and the elderly. (S)

LEI 5503 Liability and Law in Leisure, Recreation and Sports (3). A detailed analysis of legal issues related to leisure service, delivery and sport management including legal foundations, legal liability, disabled services and current case analysis. (F,S)

LEI 5510 Program Administration in Parks, Recreation and Sport (3). A detailed analysis of administrative procedures and responsibilities in connection with parks, recreation and sport facilities and personnel. (F)

LEI 5595 Seminar in Parks, Recreation and Sport Management (3). A discussion of current problems, issues, and trends in administration of parks and recreation programs. (F)

LEI 5605 Philosophical and Social Bases of Parks and Recreation Planning (3). Concentration on major phases of pre-design, design, development, actualization of park and recreation facilities. Course will explore funding, budget, site selection, layout, and maintenance. (F)

LEI 5716 Program Planning in Therapeutic Recreation (3). Designed to prepare the student for the development of systematically designed therapeutic recreation service delivery programs from the viewpoint of the T.R. specialist and the T.R. administrator. (S)

LEI 5719 Client Assessment, Evaluation and Documentation in T.R. (3). Addresses client assessment, documentation and evaluation from the direct service perspective, administrative requirements, and health care regulatory agency demands. (S)

LEI 5907 Directed Study in Parks and Recreation Management (3). An opportunity for individuals interested in various aspects of park and recreation administration to work on their own under the close supervision of an advisor. Permission of the instructor is required. (F,S,SS)

MAE 3651 Learning Mathematics with Technology (3). Use innovative software and graphing calculators for students to experience learning mathematics with technology. Revisit topics of school mathematics with a problem solving approach. Corequisite: Calculus I. (F,S)

MAE 4310 Teaching Elementary Mathematics (3). Knowledge and skill in teaching using math as a mode of inquiry. Prerequisites: EDG 3321, EDG 3321L, two college level algebra or higher level math courses. Corequisites: EDE 4940, 4941, 4942, or EEX 4940. (F,S,SS)

MAE 4333 Special Teaching Laboratory: Mathematics (3). Development of instructional skills, techniques, and strategies for teaching mathematics in the middle school and senior high school. Prerequisites: EDF 3723, EDG 3321, and EDG 3322. Field experience required. Minimum prerequisite of 24 hours in subject matter specialization, including COP 2210, MAS 3105, MAS 4213, MIG 3212, STA 3164, or approved electives; permission of instructor required. (F)

MAE 4942 Student Teaching (9). Supervised teaching in a middle school or secondary high school. Prerequisites: EDF 3723, EDG 3321, EDG 3322, appropriate Special Teaching Laboratory, appropriate number of hours in subject matter specialization, and admission to the program. (S)

MAE 5655 Computers in Mathematics Education (3). Examines the use of computers in secondary school mathematics. Designing, evaluating, and using varied types of programs in mathematics classes. Learning to use computers to design mathematics curriculum. (F,S)

MAE 5908 Directed Study in Mathematics Education (1-3). The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor. (F,S)
MUE 5907 Directed Study in Music Education (1-3). Individual investigation in one or more areas of music education. (AR)

MUE 5928 Special Topics in Music (1-3). Applications of materials and techniques in music in a laboratory or field setting. (AR)

MUE 5945 Supervised Teaching: Music Education (6). Supervised teaching in a middle or senior high school. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite coursework in education and subject matter area. (S)

MHS 5340 Educational-Vocational Counseling (3). Concepts and skills pertaining to vocational development, information systems, career education programs, educational-vocational counseling, and sociopsychological influences on career development. (SS)

MHS 5400 Counseling Theories and Skills (3). Major theoretical concepts in counseling, competencies in relationship-building, interviewing, role-playing, simulation, and micro-counseling. (AR)

MHS 5460 Crisis Counseling and Intervention (3). Prevention and intervention strategies in crisis situations including child abuse and neglect, suicide, substance abuse, AIDS, and personal loss. (AR)

MUE 3210 Teaching Elementary Music (3). Knowledge and skills for the development and implementation of music experiences in the elementary curriculum for the elementary classroom teacher. Prerequisites: EDG 3321, EDG 3321L. Corequisite: EDE 4940, EDE 4941 or EDE 4941. (F,S,SS)

MUE 3340 Elementary School Teaching Methods (3). Development of instructional skills, techniques, and strategies for elementary school classroom music for the music teacher. Laboratory and field work required. (S)

MUE 4094 Middle & Secondary School Vocal & Instrumental (3). Development of instructional skills and rehearsal technique, skills and strategies for teaching music in the middle school or senior high school. Laboratory and field work required. (F)

MUE 4940 Student Teaching in Music Education (9). Supervised teaching in an elementary and secondary school. Prerequisite: Admission to the program. (S)

PEM 2462 Fencing (1). The technical art and skill of fencing will be introduced and physically practiced. The skills include but are not limited to lunging, parrying, offensive and defensive actions. This course is repeatable. (F,S)

PEO 4004 Principles and Practices of Coaching (3). Prepares students to examine the organization, philosophies, and skills necessary for coaching interscholastic sports in a diverse, educational environment. (SS)

PEO 4041 Games in the Elementary and Middle School (3). The study of the scope, structure, and sequence of games in Grades K-8. Emphasis on educational games and skill progressions for selected sports. Field experience required. (SS)

PEP 3205 Gymnastics in the Elementary and Middle School (3). The study of the scope, structure, and sequence of the gymnastics program in grades K-8. Emphasis on educational gymnastics and simple formal gymnastics. (S)

PEP 4102 Applied Concepts of Fitness and Health (3). Introduces content and methods for teaching activity/theory classes in which the primary emphasis is the development of fitness. Prerequisites: PET 3351 and EDG 3321. (S)

PEP 4111 Health/Physical Instruction (3). Provides the knowledge and skills to evaluate one's fitness level and to design exercise and health enhancement programs for healthy individuals. Prerequisite: PET 3351. (F)

PEP 4114 Exercise Specialist (3). Provides the knowledge and skills necessary to prescribe and lead exercises for persons with medical limitations especially cardiology and related diseases. Prerequisites: PET 3351 and PET 4387. (S)

PEQ 2126 Adapted Aquatics (2). Develops competencies in adapted aquatic programs and services. May be used for adapted physical education endorsement. (AR)

PET 3020 Foundations of Physical Education (3). Examines the philosophical, historical, sociological and psychological foundations of physical education. (S)

PET 3310 Kinesiology (3). Students study the anatomical and mechanical principles of movement and apply this knowledge in the analysis of physical education and athletic
SPORT ACTIVITIES. (Includes laboratory class periods.) Prerequisite: Anatomy. (S)

PET 3351 Exercise Physiology (3). The study of the immediate physiological responses to exercise and the long-term adaptations that occur as a result of training. (SS)

PET 3640 Adapted Physical Education (3). Students gain knowledge of scientific factors and develop and implement physical education programs for special populations. Laboratory and Field Experience required. (F)

PET 3730 Physical Education in the Middle School (3). The study of the scope, structure, and sequence of the middle school physical education curriculum. Emphasis on teaching strategies, and curriculum development. Field experience required. (S)

PET 4035 Motor Learning and Development (4). Examination of the developmental aspects of movement and the factors influencing the acquisition and performance of motor skills. (F)

PET 4214 Sport Psychology (3). Concepts related to the psychological aspects surrounding sport performance will be discussed. Required course in the Undergraduate Sport Management track. Prerequisite: Upper division status. (S)

PET 4251 Sociology of Sport (3). Basic principles of the sociological bases of sport will be presented and discussed. Required course in the Undergraduate Sport Management track. Prerequisite: Upper division status. (SS)

PET 4383 Evaluation in Exercise Physiology (3). Prepares students to utilize and select or construct appropriate instruments for the assessment of fitness. Prerequisite: PET 3351. (F)

PET 4384 Exercise Test Technology (3). Provides the knowledge and skills required to conduct an ECG monitored graded exercise test. Prerequisite: PET 3351. (F)

PET 4401 Administration of Physical Education & Sport (3). An analysis of the organizational and administrative aspects of interscholastic & intercollegiate physical education and interscholastic & intercollegiate sport programs. (F)

PET 4442 Physical Education in the Secondary School (3). Methods, philosophy, and curriculum for physical education in the urban, culturally diverse secondary school. Field experiences required in addition to class work. Prerequisites: EDG 3321, EDG 3321L. (F)

PET 4510 Evaluation in Physical Education (3). Develops student competencies in motor skill testing, grading, and analysis of written and psychomotor test scores necessary for successful teaching in physical education. (S)

PET 4622 Athletic Injuries (3). Students will demonstrate knowledge of the proper care and prevention of athletic injuries through the application of acceptable training techniques. (S, SS)


PET 4623 Advanced Management of Athletic Injuries (3). Designed to prepare the student for certification through the National Athletic Trainers Association. Prerequisite: Anatomy and basic athletic injuries. (F)

PET 4623L Athletic Injuries Lab (1). A practical approach to the evaluation, treatment and rehabilitation of athletic injuries. Prerequisite: PET 4622. Corequisite: PET 4623. (F, S)

PET 4929 Senior Seminar in Physical Education (3). Required of undergraduate physical education majors in the K-8 and 6-12 programs while student teaching. Provides discussion of current issues and topics related to teaching physical education. Prerequisites: Successful completion of all program requirements. Corequisites: PET 4945 or PET 4944. (F, S)

PET 4940 Internship in Exercise Physiology: Undergraduate (3). Supervised clinical experience designed to offer the student experience in graded exercise testing and exercise leadership. Prerequisites: PET 3351, PET 5387, and PET 5115. (F, SS)

PET 4944 Student Teaching: Grades K-8 (9). Supervised teaching in an elementary school. Prerequisite: Completion of all coursework with a 2.5 GPA. Corequisite: Senior Seminar in Physical Education. (F, S)

PET 4945L Student Teaching: Grades 6-12 (9). Supervised teaching in a middle or secondary school. Prerequisite: Completion of all coursework with a 2.5 GPA. Corequisite: Senior Seminar in Physical Education. (F, S)

PET 4946 Sports Management Internship (6-9). Supervised field experience in an approved sport or recreational setting. Prerequisite: Completion of required program and elective courses. (F, SS)

PET 5206 Youth Sports (3). Provides insight into the issues surrounding youth sport programs including: program development and analysis, parental influences, relationship of sport to psych-socio development. (AR)

PET 5216 Sports Psychology (3). An analysis of psychological variables that influence physical performance. Intended for prospective physical educators, coaches and others interested in motor performance. (S)

PET 5238 Motor Learning (3). Emphasis in this course is on current and advanced topics related to motor skill acquisition. Laboratory practices and applied techniques related to teaching are examined. (F)

PET 5256 Sociology of Sport (3). Students will be introduced to basic principles of the sociological bases of sport and physical activity. (SS)

PET 5436 Physical Education Curriculum (3). Examination of objectives, content, methods of teaching, and evaluative techniques in physical education. Emphasis on curriculum development and refinement of teaching skills. (AR)

PET 5716 Analysis and Observation of Teaching in Physical Education (3). Analysis of the teaching-learning process in physical education. Emphasis on systematic observation instruments and guidelines for systematic development of instructional skills. (AR)

PET 5906 Directed Study in Physical Education (1-3). Students will work independently on a topic concerning some phase of physical education or sport under the guidance of a faculty member. Registration is by permission of advisor. (F, SS)

PET 5925 Practicum in Physical Education (1-3). Production and or application of materials and techniques for physical education in a classroom and or field setting. (S)

PET 5931 Special Topics in Exercise Physiology (1-3). Designed to present contemporary issues and prac-
PET 5936 Special Topics in Physical Education (1-3). Designed to present contemporary issues and practices in physical education and sport. (AR)

RED 4150 Teaching Primary Reading (3). Knowledge and skills in teaching reading in the primary grades. Prerequisites: EDG 3321, EDG 3321L. Corequisite: EDE 4940, EDE 4941, EDE 4942 or EEX 4940. (F,S,SS)

RED 4311 Teaching Intermediate Reading (3). Knowledge and skills in teaching reading in the intermediate grades. Prerequisites: EDG 3321, EDG 3321L. Corequisite: EDE 4940, EDE 4941 or EDE 4942. (F,S,SS)

RED 4325 Special Teaching Laboratory: Reading (3). Skills, techniques and strategies for reading in content areas. Prerequisites: EDG 3321, and EDG 3321L. (F,S,SS)

RED 5447 Analysis and Production Reading Materials (3). Exploration, creation, and evaluation of basic reading materials, commercial and non-commercial. Prerequisite: RED 4150 or equivalent. (AR)

RED 5448C Teaching Reading by Computer (3). Evaluation and creation of computer programs for teaching reading in grades 4-12. No prior computer experience is required. (AR)

RED 5911 Directed Study in Reading Education (1-3). Directed study in area at reading instruction. Permission of instructor required. (F,S,SS)

RED 5925 Special Topics in Reading Education (3). Study in a specified area of reading education. (SS)

SCE 4310 Teaching Elementary Science (3). Knowledge and skills in teaching science as a mode of inquiry. Prerequisites: EDG 3321, EDG 3321L, physical science, biological science. Corequisite: EDE 4940, EDE 4941 or EDE 4942. (F,S,SS)

SCE 4330 Special Teaching Laboratory: Science (3). Development of instructional skills, techniques and strategies for teaching biological and physical sciences in the senior high schools. Prerequisites: EDF 3723, EDG 3321, and EDG 3322. Field experience required. Minimum prerequisite or corequisite of 16-20 hours in subject matter specialization. (F,S,SS)

SCE 4944 Student Teaching (9). Supervised teaching in a middle school or senior high school. Prerequisites: EDF 3723, EDG 3321, EDG 3322, RED 4325, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization. (F,S)

SCE 5435 Secondary Science Laboratories: Methods & Materials (3). Increase the quantity and quality of laboratory experiences for secondary students by managing the laboratory safely, selecting appropriate activities, and evaluating student performance. (AR)

SCE 5905 Directed Study in Science Education (1-3). The student plans and carries out an independent study project under direction. Permission of instructor. (F,S,SS)

SCE 5930 Special Topics in Elementary Science Education (3). Knowledge and skills, content, strategies and materials for teaching elementary science. (AR)

SCE 5945 Supervised Teaching: Science Education (6). Supervised teaching in a middle school or senior high school. Prerequisites: Admission to the Alternate Masters Track Program and completion of prerequisite coursework in education and subject matter area. (F,S)

SPA 3000 Speech Language and Literacy Development (3). Knowledge of normal acquisition of speech, language, and literacy. Includes overview of major speech/language delays and disorders, plus intervention strategies for teachers and parents. (F,S,SS)

SPA 3380 American Sign Language for Teachers (4). Provides introductory training in basic ASL signs and historical and cultural information about "deaf culture" for teachers. Two hrs/wk of lab required. (AR)

SPA 4381 American Sign Language for Teachers II (4). Provides intermediate training in ASL signs and additional information about "deaf culture" for teachers. Two hrs/wk of lab required. Prerequisite: SPA 3380. (AR)

SSE 4312 Teaching Elementary Social Studies (3). Knowledge and skills in teaching social studies as a mode of inquiry. Prerequisites: EDG 3321, EDG 3321L. Corequisite: EDE 4940, EDE 4941 or EDE 4942. (F,S,SS)

SSE 4380 Developing a Global Perspective (3). Theory, context, and practice. Introduction and utilization of learning materials and teaching strategies in Global Education for K-12. (F,S)

SSE 4384 Special Teaching Laboratory: Social Studies (3). Development of instructional skills, techniques, and strategies for teaching social studies in the middle school and senior high school. Prerequisites: EDF 3723, EDG 3321, and EDG 3322. Field experience required. (F)

SSE 4942 Student Teaching (12). Supervised teaching in a middle school or senior high school. Prerequisites: EDF 3723, EDG 3321, EDG 3322, RED 4325, appropriate Special Teaching Laboratory, appropriate number of hours in subject matter specialization, and admission to the program. (S)

SSE 5908 Directed Study in Social Studies Education (1-3). The student plans and carries out an independent study project under direction. Permission of instructor. (AR)

SSE 5929 Special Topics in Elementary Social Studies Education (3). Knowledge and skills, content, strategies and materials for teaching social studies. (F,S,SS)

SSE 5945 Supervised Teaching: Social Studies Education (6). Supervised teaching in a middle school or senior high school. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite coursework in education and subject matter area. (S)

TSL 4140 Curriculum and Materials Development in ESOL (3). Applications of ESOL theories, principles, and current research in the development of curriculum and materials; required for area of concentration in TESOL and for the Florida Add-on ESOL Endorsement. (S)

TSL 4340 ESOL Methods for Grades K-12 (3). Development of instructional skills, techniques and strategies for teaching English to non-native speakers in grades K-12; required for area of concentration in TESOL and for the Florida Add-on ESOL Endorsement. (F,S)

TSL 5245 Developing ESOL Language and Literacy (3). This course examines how linguistic theories are applied in the classroom for the development of language and liter-
TSL 5325 Teaching ESOL through Content-Areas (3). Designed for the content-area teacher of language minority students. The course promotes understanding of the academic, linguistic, and social needs of limited English students. (AR)

TSL 5939 Principles in ESOL Testing (3). Advanced study and research on current issues in the field of ESOL testing. Topics include principles and practices of ESOL testing for classroom use, communicative language test development, criteria for evaluating testing instruments, and study of standardized ESOL tests. (AR)
Divita, Charles, Jr., Ph.D. (Florida State University), Professor, Adult Education and Human Resource Development, Educational Leadership and Policy Studies


Escolet, Miguel-Angel A., Ph.D. (University of Nebraska), Professor, International and Intercultural Development Education and Research, Educational Foundations and Professional Studies

Evans, Anna M., Ph.D. (Iowa State University), Assistant Professor, Social Studies Education, Global Education, Subject Specializations

Fain, Stephen M., Ed.D. (Teachers College, Columbia University), Professor, Curriculum and Instruction, Educational Leadership and Policy Studies

Farouk, Mohammed, Ed.D. (West Virginia University), Associate Professor, Social Studies Education, Elementary Education

Farrell, Robert V., Ph.D. (Teachers College, Columbia University), Associate Professor and Chairperson, Social Foundations of Education, Educational Foundations and Professional Studies

Feinberg, Rosa Castro, Ph.D. (University of Miami), Associate Professor, Educational Foundations, Bilingual Education/TESSL, Educational Foundations and Professional Studies

Fine, Joyce, Ed.D. (Florida International University), Assistant Professor, Reading and Language Arts Education, Elementary Education

Fisher, Allen, Ph.D. (University of Connecticut), Associate Professor, Educational Leadership, Educational Leadership and Policy Studies

Gallagher, Jo D., Ph.D. (Florida State University), Assistant Professor, Adult Education and Human Resource Development, Educational Leadership and Policy Studies

Gallagher, Paul D., Ph.D. (Florida State University), Associate Professor, Educational Research, Educational Leadership and Policy Studies, and Vice President for University Advancement and Budget

Garcia, Delia, M.S.Ed. (University of Miami), Assistant Professor, Educational Foundations and Professional Studies

Gavilan, Marisol, Ed.D. (University of Tennessee), Associate Professor, Educational Psychology and Bilingual Education/TESSL, Educational Psychology and Special Education

Gay, Lorraine R., Ph.D. (Florida State University), Professor, Educational Research, Educational Leadership and Policy Studies

Gilbert, Robert K., Ph.D. (University of Minnesota), Associate Professor, Mathematics Education, Elementary Education

Goldenberg, I. Ira, Ph.D. (University of Connecticut), Professor, Urban, Multicultural and Community Education, Educational Foundations and Professional Studies

Greenberg, Barry, Ph.D. (New York University), Professor, Educational Research and Community College Teaching, Educational Leadership and Policy Studies

Gregg, Goil, Ph.D. (Florida State University), Assistant Professor, English Education, Subject Specializations

Hammons, Frank T., Ed.D. (Virginia Polytechnic Institute and State University), Assistant Professor, Vocational Industrial Education, Subject Specializations

Harlin, Rebecca P., Ph.D. (University of Florida), Associate Professor, Early Childhood Education, Elementary Education

Hassen, Deborah, M.A. (Florida International University), Instructor, Educational Foundations and Professional Studies

Hauenstein, A. Dean, Ph.D. (Ohio State University), Professor and Chairperson, Technology Education, Vocational Education, Subject Specializations

Jiang, Zhonghong, Ph.D. (University of Georgia), Mathematics Education and Computer Education, Subject Specializations

Kaplan, E. Joseph, Ph.D. (Florida State University), Associate Professor, Educational Foundations and General Methodology, Educational Foundations and Professional Studies

Killian, Patricia A., Ph.D. (University of Texas - Austin), Assistant Professor, Teaching English as Second Language, Educational Foundations and Professional Studies

Kossack, Sharon Wall, Ph.D. (University of Georgia), Professor, Reading and Language Arts Education, Elementary Education

Lazarus, Philip J., Ph.D. (University of Florida), Associate Professor, Educational Psychology and School Psychology, Educational Psychology and Special Education

Lopez, Richard, Ed.D. (Florida Atlantic University), Associate Professor, Exercise Physiology, Health, Physical Education, and Recreation

Lucky, Luretha, Ed.D. (Arizona State University), Associate Professor, Special Education for Mental Retardation, Educational Psychology and Special Education

Marshall, Nancy, Ph.D. (Cornell University), Associate Professor, Reading and Language Arts Education, Elementary Education

Martinez-Perez, Luis A., Ph.D. (Florida State University), Associate Professor, Science Education, Subject Specializations

McCintock, C. Edwin, Ed.D. (University of Georgia), Professor, Mathematics Education and Computer Education, Subject Specializations

McEachern, Adriana, Ph.D. (University of Florida), Counselor Education and Educational Psychology, Educational Psychology and Special Education

McNair-Knox, Faye C., Ph.D. (Stanford University), Associate Professor, Modern Language Education, Subject Specializations

Mendez, Carmen, MPA (Florida International University), Public Administration, and Assistant Dean for Budget and Grants Administration

Mendoza, Alicia, Ed.D. (University of Miami), Associate Professor, Early Childhood Education, Elementary Education

Miller, Lynne Ph.D. (University of Arizona), Associate Professor, Reading and Language Arts, Elementary Education

Mohamed, Dominic A., Ph.D. (University of Minnesota), Associate Professor, Vocational Administration and Supervision and Vocational Education, Subject Specializations
O'Brien, George E., Ph.D. (University of Iowa), Associate Professor and Chairperson, Science Education, and Elementary Education

Pankowski, Mary L., Ph.D. (Florida State University), Professor, Adult Education, Educational Leadership and Policy Studies and Vice President, North Campus and University Outreach

Pelaez-Nogueras, Martha, Ph.D. (Florida International University), Assistant Professor, Educational Psychology. Educational Psychology and Special Education

Pell, Sarah W. J., Ed.D. (Duke University), Associate Professor, Educational Leadership, Educational Leadership, and Policy Studies

Pennington, Clem, Ed.D. (Pennsylvania State University), Associate Professor, Art Education, Subject Specializations

Reichbach, Edward M., Ed.D. (Wayne State University), Associate Professor, Social Studies Education, Elementary Education

Reiss, Jodi, M.S. (Teachers College, Columbia University), Instructor, Teaching English as a Second Language, Educational Foundations and Professional Studies

Ritzi, William M., M.S. (Florida International University), Instructor, Art Education, Elementary Education

Rosenberg, Howard, Ed.D. (Teachers College, Columbia University), Associate Professor, Special Education for Mental Retardation, Educational Psychology and Special Education

Ryan, Colleen A., Ph.D. (Ohio State University), Associate Professor, Educational Psychology, Educational Foundations and Professional Studies

Sandford, Janice R., Ph.D. (Ohio State University), Associate Professor, Health Occupations Education and Computer Education, Subject Specializations

Skalko, Thomas, Ph.D., C.T.R.S. (University of Maryland), Professor, Therapeutic Recreation, Health, Physical Education and Recreation

Slater, Judith J., Ed.D. (University of Florida), Assistant Professor, Curriculum and Instruction, Educational Leadership and Policy Studies

Smith, Douglas H., Ph.D. (Ohio State University), Associate Professor, Adult Education and Human Resource Development, Educational Leadership and Policy Studies

Soll, Catherine A., Ed.D. (Florida International University), Instructor, Elementary Education

Soon, Yee P., Ph.D. (Florida State University), Assistant Professor, Mathematics Education, Elementary Education

Spears-Bunton, Linda, Ed.D. (University of Kentucky), Assistant Professor, English Education, Subject Specializations

Strichart, Stephen S., Ph.D. (Yeshiva University), Professor, Special Education for Learning Disabilities, Educational Psychology and Special Education

Toomer, Jethro Ph.D. (Temple University), Professor, Educational Psychology and Community Mental Health Counseling, Educational Psychology and Special Education

Trigoboff, Debra, M.S. Ed. (Northwest Missouri State University), Instructor, Sports Medicine

Tucker, Jon L., Ph.D. (Indiana University), Professor, Social Studies Education and Global Education, Subject Specializations

Vos, Robert, Ed.D. (Rutgers University), Associate Professor and Associate Dean, Organizational Training, and Vocational Education, Subject Specializations

Wagner, Michael J., Ph.D. (Florida State University), Professor, Music Education, Subject Specializations

Williams, Craig C., M.S. (Barry University), Instructor, Elementary Education

Wolff, Robert M., Ph.D. (Ohio State University), Associate Professor, Parks and Recreation, and Sport Management, and Chairperson, Health, Physical Education and Recreation

Woods, S. Lee, Ed.D. (Rutgers University), Associate Dean, North Campus and Associate Professor, Educational Foundations and General Methodology, Educational Foundations and Professional Studies

Zaragoza, Nina, Ph.D. (University of Miami), Assistant Professor, Language Arts, Elementary Education
College of Engineering and Design
College of Engineering and Design

Gordon R. Hopkins, Dean
W. Kinzy Jones, Associate Dean
Iraj E. Majzub, Associate Dean
Gustavo A. Roig, Associate Dean
Lourdes A. Maneses, Assistant Dean
Zully Dorr, Development Officer

The College of Engineering and Design is composed of two schools committed to the development of professionals who will serve the community in a wide variety of fields. In addition, there are two units in the College solely devoted to research and other creative activities.

Bachelor's Degree Programs are offered in the following fields of study:

- Architectural Design
- Civil Engineering
- Computer Engineering
- Construction Management
- Electrical Engineering
- Industrial and Systems Engineering
- Interior Design
- Mechanical Engineering

Undergraduate Professional Certificates are available in:

- Heating, Ventilation and Air Conditioning Design

The programs of the College are directed towards the practical use of scientific, engineering and technical principles to meet the objectives of industry, business, government and the public.

The College provides each student with the opportunity to develop marketable skills and to obtain an education which will prepare him or her for a rewarding career and personal growth.

Underlying the programs of the College is a recognition that the impact of technology upon the quality of life is increasing and that the proper application of technology is critical to meeting current and emerging human needs.

The College is actively engaged in a number of special programs as a service to the community and the University. Among these programs are:

1. The FLAME (Florida Action for Minorities in Engineering) which is a cooperative program with the Dade County Public School System Magnet Program and FIU, aimed at introducing the Profession of Engineering to high school students and to identify, select, enroll and retain Minority Students in the Engineering Field.

2. Gateway Engineering Coalition, sponsored by a grant from the National Science Foundation, is aimed at developing a freshman sequence "up-front" to introduce the students to the process and art of Engineering.

The College faculty is actively engaged with business, industry and government. Faculty members participate in a variety of applied research projects in such areas as energy, transportation, solid waste disposal, biomedical devices and instrumentation, water resources, computer engineering, artificial intelligence, manufacturing, robotics, telecommunications, microelectronics, structural systems, biotechnology, etc.

Research and Development Centers

The Center for Advanced Technology and Education (NSF-CATE)

Malek Adjouadi, Associate Professor, Electrical and Computer Engineering
Department, and Director
Noemi Fernandez, Lab Manager
Sonia Duran, Research Assistant
Patricia Vidal, Research Assistant
John Riley, Research Assistant

The NSF-funded Center for Advanced Technology and Education (CATE) provides a computing environment capable of engaging researchers as well as facilitating classroom and laboratory-based instruction in critical technology areas such as image processing and computer vision, neural networks, distributed and parallel processing, visual programming and 3-D modeling. CATE constitutes an infrastructure that is available for cutting-edge research activities providing an environment that facilitates state-of-the-art educational and research activities. The ONYX parallel machine, confocal microscope, high-speed motion analyzer, roving robot, and several (24) SGI workstations provide the potential for: (a) parallel and distributed processing, (b) high performance 3-D rendering and modeling, (c) real-time processing capability, (d) operating systems and graphics that meet current standards, and (e) high-speed data acquisition, playback, analysis, and communications links.

Drinking Water Research Center

The Drinking Water Research Center conducts basic and applied studies in the area of water resources as it relates to drinking water quality and quantity. The Center also provides the opportunity for undergraduate and graduate students to conduct independent research in cooperation with other departments in the University. See the General Information section "Centers and Institutes" for more details regarding the Center.

Staff

- William J. Cooper, Ph.D., (University of Miami), Research Professor
- Hector R. Fuentes, Ph.D., P.E., D.E.E., (Vanderbilt University) Associate Professor
- David P. Genereux, Ph.D., (Massachusetts Institute of Technology) Assistant Professor
- Rudolf Jaffe, Ph.D., (Indiana University) Associate Professor
- Shonali Laha, Ph.D., (Carnegie Mellon University) Assistant Professor
- Laurie L. Richardson, Ph.D., (University of Oregon), Associate Professor
- Vassilios A. Tsihrintzis, Ph.D., P.E., P.H., (University of Illinois at Urbana) Assistant Professor
Future Aerospace Science and Technology Center for Cryoelectronics (FAST)

Grover Larkins, Associate Professor, Electrical and Computer Engineering Department, and Director

FAST is one of five centers created by the Air Force as part of its minority university enhancement program, providing research experience opportunities for undergraduate and graduate students in the area of Electrical Engineering.

The FAST Center evaluates novel applications of space-based cryoelectronics, initially studying new systems for reduction in losses of feed and phase shift networks in phased array transmitter systems. This involves development of low-loss active integrated low-noise phased array of post-processed phased array down-converter receiving systems, high gain-low loss, low noise micro (and later millimeter) wave circuits and systems for space-based applications. Of particular interest is the ability to design and fabricate integrated systems which could be used as "steerable" phased array antennas with some frequency-ability as well.

Current research is focused on issues relating to: integration and hetero-epoxy of the buffer and dielectric layer with the GaAs semiconductor and 123 high Tc superconductor layers; obtaining good ohmic GaAs contacts at low temperatures, tailoring the surface morphology of the high Tc superconductor to achieve a designed Q value for the passive elements, package design and testing with respect to microwave and thermal cycling consideration, and the identification and minimization of noise source.

Hemispheric Center for Environmental Technology (HCET)

M.A. Ebadian, Professor, Mechanical Engineering Department, and Director

Shara Schenck, Assistant to the Director

Z.F. Dong, CMST-CP Program Manager, LDA & Numerical Modeling

C.X. Lin, Program Manager

F. Mao, Tanks Focus Area Program

Joe Baudreaux, D&D Program Manager

Leo Lagos, D&D Program Manager

Richard Burton, Industrial Liaison Program Manager

S.C. Madaras, Sr. Environmental Scientist

Amer Awwad, Sr. Engineer

Ivan Muguerza, Tanks Focus Area Program

Lilly Ledo, Technology Transfer Coordinator

The Hemispheric Center for Environmental Technology was established by Florida International University and the United States Department of Energy's Office of Science and Technology (OSI) to research, develop, and demonstrate innovative environmental technologies and to establish alliances to facilitate the implementation of these technologies.

HCET's research and development (R&D) activities focus on the decontamination and decommissioning of nuclear facilities and the management and reduction of radioactive and hazardous wastes. These R&D activities support the Department of Energy's Environmental Management programs in the areas of waste characterization, monitoring, and sensor technology; underground storage tank remediation; and decontamination and decommissioning.

HCET's mission is to develop and market technologies to solve environmental problems and foster sustainable development throughout the Americas. To achieve this end, HCET will perform research and development, gather and disseminate market and technology assessment data, facilitate technology transfer, and form partnerships with industries and governments throughout the Americas. HCET targets its technology development organizations and industrial users of environmental technologies.

The foundation for HCET's technological capabilities has successfully been built within Florida International University's College of Engineering and Design. HCET has the capability and resources to develop innovative technologies as well as assess and demonstrate technologies that have been developed or modified both in-house and by other vendors. HCET also has the expertise to certify emerging technologies and pursue, organize, and facilitate technology transfer from suppliers to consumers.

Manufacturing Research Center (MRC)

Chin-Sheng Chen, Professor, Industrial Engineering Department, and Director

The Manufacturing Research Center (MRC) is being developed with a grant from the Advanced Research Projects Administration and is a fully integrated manufacturing system from concept, through prototyping, to finished hardware or manufactured tool and die assemblies. With the rapid movement of industry to reduce time to market from product concept, the Center has been designed to support local industry in the South Florida region and provide an environment for advance manufacturing research. The Center contains a design and rapid prototyping front end, integrated into a CNC machining facility through to a back end injection molding machine with injection mold fabrication and part fabrication, both in plastic and metal by spin casting.

The Center contains: a rapid prototyping system, a mill-turn machining center, a vertical machining center, a coordinate measuring machine, a material handling system, and injection molding equipment, supporting CAD/CAM and cell control software.

Concurrent Engineering: Under the support of ARPA, the MRC has developed an integrated product/process concurrent engineering system. It is a feature-based engineering system for concurrent product and process design, and focuses on the development of unified product information models, an innovative product modeling technique, a manufacturing resources database and various engineering...
applications to demonstrate the feasibility of the concurrent engineering concept.

Production Planning & Scheduling: Funded by the Defense Logistic Agency, this project is to improve the practice of apparel production planning, scheduling, and control, with its focus on development and implementation of a practical computer integrated system for the apparel manufacturing industry. The system will accurately estimate time-phased plant capacity, generate production plans, prepare resource requirements, assign workers to workstations, respond to order inquiries and change, and control shop floor activities. It will be built upon an open system architecture with a set of production engineering tools for master production planning, capacity planning, learning and skill prediction, material requirements planning, plant loading, worker assignment, and shop floor monitoring and control.

Intelligent Cell Engineering and Control: The purpose of this research (funded by NSF) is to design and develop a neural network-based decision support system for use in design and configuration of advanced manufacturing cells and cell control system. This project also explores an intelligent shop floor framework for on-line scheduling and control of flexible manufacturing systems.

Knowledge-Based Data Screening & Analysis for Shuttle Operations: Sponsored by NASA, this project is to design and develop a knowledge-based tool for the shop floor modeling, analysis and reporting.

Southern Technology Application Center STAC
Irma B. Fernandez, Director
The Southern Technology Application Center (STAC) serves nine southeastern states and is part of a national network of technology transfer resources and expertise. STAC’s mission is to help increase U.S. competitiveness and spur economic development in the southeast through the transfer of critical knowledge. One of the programs STAC operates in the Southeast Regional Technology Transfer Center to help companies acquire and commercialize technology developed by NASA and other federal laboratories. It provides assistance in every phase of technology development and commercialization. STAC’s assistance spans from identifying and locating technologies, to analyzing markets, to bringing together experts from government, academic and industry to address complex technical questions. STAC is supported by the State of Florida University System and NASA’s Office of Space Access and Technology, Commercial Technology Division.

School of Engineering
The College offers baccalaureate degree programs in Electrical Engineering, Computer Engineering, Civil Engineering, Industrial Engineering and Mechanical Engineering. These are designed to give the student an education for entry into the profession.

Accreditation
The Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET) accredits engineering programs on a nationwide basis. Students wishing more information about accreditation should consult their respective departmental office or the Office of the Dean. All engineering programs in the College are accredited by ABET.

Plan of Study
The subjects basic to all fields of engineering are generally studied while the student is in the first two years of undergraduate study in a pre-engineering curriculum. Specialized or departmental courses are taken in the third or fourth years with additional interspersed mathematics and humanistic-social studies. To earn a bachelor’s degree in engineering, a student must complete the approved curriculum requirements, and must have a cumulative GPA of at least 2.0 on all engineering courses taken at the University.

The engineering programs include a strong engineering core foundation designed to prepare the prospective engineer not only with a broad base of fundamental courses in mathematics, sciences and technical knowledge, but also with a solid cultural background in humanities, social sciences and English. In addition to the core subjects, the student must complete an engineering discipline specialization under the direction of the respective administrative department.

Transfer of Credits
Engineering courses from non EAC/ABET accredited institutions are not accepted. Special cases require a formal petition to the Dean of Engineering who has the final word.

Admission Preparation
Prospective students who are considering engineering should follow
an academic program to meet engineering prerequisites. The student planning to transfer to the engineering program as a junior should follow a pre-engineering program in the first two years of college work. Many courses required by the engineering curriculum are specialized in their content and students need to select lower division courses with care. The normal maximum number of credits transferred from a community college is 60 semester credits.

Freshman admission to the University is determined by the admission standards of the lower division. The admitted freshmen should discuss their future program intentions with their lower division academic advisor and plan their lower level course selections towards their engineering program goals. The freshman should have had high school preparation of considerable depth and breadth. Specifically, students admitted to the lower division interested in engineering should have minimum preparation in mathematics (algebra, geometry, trigonometry, analytical geometry, or pre-calculus) and chemistry. Physics and introduction to computers are recommended, but not required. Admitted freshmen planning to major in an engineering program should contact an advisor in their respective discipline as early as possible, earning 24 semester credit hours.

Engineering Admission Policy
The admission policy for freshmen and transfer students are different and the policies vary in each department. (Refer to the Admission Policy in the department of your choice.)

FIU Freshmen
Students seeking admission to an undergraduate degree program will be admitted by the Admissions Office if the following criteria are met:

a. All general admission requirements of the University are satisfied.

b. To qualify for admission to Engineering programs, FIU undergraduates must have met all the lower division requirements including having sat for the CLAST, the completion of a minimum of 60 semester hours, and must be otherwise acceptable in the program of their choice.

c. In order to enter the programs in Industrial, Civil, and Mechanical Engineering, a student must earn a grade of ‘C’ or higher in all Calculus courses, Differential Equations, Physics I with Calculus, Physics II with Calculus, and Chemistry I with an overall GPA of 2.5 in these courses.

d. In order to enter Electrical or Computer Engineering, a student must earn a minimum grade of ‘C’ in all Calculus courses, Differential Equations, Physics I with Calculus, and Physics II with Calculus and Chemistry I with an overall GPA of 2.5 in these courses.

The highest grade earned will be counted for a repeated course, but only one repeat of a course will be considered.

Transfer Students
All transfer students must meet the general University requirement for admission and must pass the CLAST. There is a two step process in the evaluation of transfer credits.

a. The Office of Admissions will make a preliminary evaluation of the student background for general compliance and determination of applicable General Education courses taken.

b. A second evaluation is carried out by the specific engineering department for exact transfer of applicable credit. The departmental evaluation is the final word in this matter.

c. FIU adheres to the Board of Regents Articulation Agreement between the Universities and Community Colleges of the State of Florida. Therefore, transfer of credit from Florida Community Colleges is facilitated.

Preference is given to Associate of Arts degree holders from Florida Community Colleges. For holders of other degrees, it is suggested that application is made about three months prior to the beginning of the term.

Core Curriculum Courses for all Engineering Programs

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MAC 2311</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>CHM 1045</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHM 1045L</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>EGN 1110C</td>
<td>Engineering Drawing</td>
<td></td>
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<td></td>
<td>(Required unless</td>
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<td></td>
<td>previously taken in</td>
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<tr>
<td></td>
<td>high school)</td>
<td>3</td>
</tr>
<tr>
<td>MAC 2312</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>Literary Analysis</td>
<td>3</td>
</tr>
<tr>
<td>PHY 2048</td>
<td>Physics with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>PHY 2048L</td>
<td>General Physics Lab I</td>
<td>1</td>
</tr>
</tbody>
</table>

Academic Support Services
The area of academic support services is responsible for the coordination of academic advising and student service activities for the college. This area is also responsible for keeping students informed of educational opportunities such as scholarships, tuition waivers, internships, co-op studies and campus resources; serves as a liaison between the academic departments and the student support services university wide and facilitates the registration process in order to make sure that the students adhere to the college guidelines.

A student who has been accepted to a degree program in the College must obtain and consult an advisor prior to the first class enrollment. An advisor may be seen by contacting the Chairperson of the Department in which an academic major is desired. Continued contact (at least once per semester) with the advisor is urged to review progress and select courses for each succeeding semester. Such contact is required until an approved program of study is completed.

Courses taken without the required prerequisites and corequisites will be dropped automatically before the end of the term, resulting in a grade of 'DR' or 'F'.

Cooperative Education
A Cooperative Education (Co-Op) Program is conducted by the College in conjunction with the Department of Cooperative Education in the Division of Student Affairs. In this program, students spend alternate semesters in school full-time and fully employed in industry in a technical position directly related to their ma-
Students receive full pay for their work in industry.

Placement in co-op positions is arranged by the Co-Op Programs and includes both local and national industrial, business and governmental agencies. Co-Op students must agree to spend at least three work periods in industry and must be able to complete the upper division program within two calendar years.

Applicants for the program are evaluated by the College and should contact the appropriate chairperson. Because of the requirements for three work periods, students should enter the program during the first semester of the junior year. Inquiries from lower-division students, prior to transfer to the University, are encouraged since work may be arranged immediately upon enrollment. The Co-Op program also offers the Parallel Co-Op whereby a student might alternate work and study during the same semester by attending the University part-time and working part-time in industry.

**General Requirements for a Baccalaureate Degree**

In order to obtain a Bachelor's degree from the College, each student must satisfy the following minimum requirements:

1. Obtain the minimum number of semester credits required by the specific program. Some majors require more than the minimum number of credits. Specific requirements beyond the minimum requirements are described in the sections devoted to the various departments in the College.

2. Complete at least 35 semester credits in the upper-division at FUU.

3. Attain a minimum grade-point average of 2.0 in all courses taken at the University.

4. Satisfy the general education requirements of the State of Florida for the Bachelor's degree.

5. Satisfy the particular requirements for his or her own major and all University requirements for graduation.

**Scientific Laboratory Fee**

Scientific laboratory fees are now being assessed for certain courses where laboratory classes are part of the curriculum. Specific information on scientific laboratory fees may be obtained from the academic departments or University Financial Services.

**Prerequisites**

Students must have met the prerequisites and corequisites to register for any course. Otherwise, the student will be dropped from the course before the end of the term, resulting in a grade of DR or DF. Students should refer to the Catalog or see an advisor to determine course prerequisites.

**Course Repeats**

This varies depending upon the particular program. For more information consult your advisor or Chairperson.

**Academic Appeal Procedures**

Academic Appeals not covered under the Academic Misconduct Policy shall be processed in the following manner:

1. The student and faculty member will meet informally in an attempt to resolve the problem within 45 days of the alleged occurrence.

2. If the informal meeting does not result in an acceptable remedy, the student can appeal in writing to the Department/Divisional Chairperson within ten days of the informal meeting. The written appeal should include the nature and conditions of the problem and a summary of the informal meeting with the faculty member involved.

Within ten days of the receipt of the written appeal, the Chairperson, student, and faculty member will meet in an attempt to resolve the problem.

3. If the results from the meeting in Step 2 is not acceptable, the student can appeal in writing to the Dean of the College within ten days. The written appeal should include the nature and conditions of the problem and a summary of the meetings in Step 1 and 2.

Within ten days of the receipt of the written appeal, the Dean will provide a written decision within ten days of the meeting in Step 3.

The Dean's decision is final.
Civil and Environmental Engineering

L. David Shen, P.E., Professor and Chairperson
Nii O. Attoh-Okine, Assistant Professor
Hector R. Fuentes, P.E., Associate Professor
Dongzhou Huang, Visiting Research Associate
Sylvan C. Jolibois, Jr., Assistant Professor
Shanali Laha, P.E., Assistant Professor
Young-Kyun Lee, Assistant Professor
Beth Pascual, Instructor/Undergraduate Advisor
Luis A. Prieto-Portor, P.E., Professor
Wolfgang F. Rogge, Assistant Professor
Lambert Tall, P.E., Professor
Walter Z. Tang, P.E., Assistant Professor
Berrin Tansel, P.E., Associate Professor
LeRoy E. Thompson, P.E., Professor
Vassilios A. Tsihrintzis, P.E., Assistant Professor
Otley Ural, P.E., Professor
Ton-Li Wang, P.E., Associate Professor
Fang Zhao, Assistant Professor

Lehman Center for Transportation Research
L. David Shen, Director
Mercedes Rueda, Coordinator
Uping Wang, Research Associate
Diano I. Ospina, Research Associate
Allison Smith, Research Associate

Bachelor of Science in Civil Engineering

Degree Program Hours: 130

The Civil Engineering curriculum provides a background in general engineering science and engineering fundamentals for students who wish to pursue a career in civil engineering. The coursework will include a broad range of topics such as structural analysis, transportation, water resources, and environmental engineering.

Civil engineers play an essential role in solving problems and meeting the environmental needs of society. These problems range from development of land and physical facilities to environmental pollution.

The academic program is designed to meet the state of Florida's educational policy as well as to satisfy criteria outlined by the Accreditation Board for Engineering and Technology (ABET). To qualify for admission to the upper division program, FIU undergraduates must have met all lower division requirements including CLAST, completed at least 60 semester hours of pre-engineering courses which include 'C' for Engineers', Calculus I & II, Multivariable Calculus, Probability and Statistics, Differential Equations, Chemistry I & II and Labs, Physics I & II with Calculus and Labs, with a grade of 'C' or better, and with an overall GPA of 2.5 in these courses and must be otherwise acceptable into the program. See the example semester by semester program in the following pages.

Effective pursuit of engineering studies requires careful attention to both the sequence and the type of courses taken. It is therefore important, and the college requires, that each student plan a curriculum with the departmental faculty Advisor.

All students must comply with the Core Requirements for the University as well as comply with departmental requirements for Social Science, Humanities, and English. This includes the Humanities electives, one Social Science elective, one sequence course to a previously taken Humanities or Social Science, Engineering Economy, and Ethics and Legal Issues. A minimum of sixteen (16) semester credit hours are required in the area of Humanities and Social Science which must form a coherent sequence. All transfer students should refer to the General Information section of the catalog to determine if they have met the Core Curriculum requirements for Humanities and Social Science.

A minimum grade of 'C' is required in all calculus, physics, chemistry and differential equations, and an overall GPA of 2.5 in these courses.

A minimum grade of 'C' is required of all engineering courses taken at the University.

Students who have been dismissed for the first time from the University due to low grades, may appeal to the Dean for reinstatement. A second dismissal results in no possibility of reinstatement.

Upper Division Course Objectives

The program of study encourages the development of a broadly educated civil engineering graduate, who can succeed as a productive engineer with a continued professional growth. The courses listed as requirements for the BS degree not only provide the students with mathematical and scientific knowledge, but also include other essentials necessary for a successful engineering career. The courses have been designed to increase student competence in written and oral communication skills as well as develop critical thinking and creative problem solving strategies.

Course projects are designed to teach engineering science fundamentals and their applications while providing enriching opportunities for laboratory and computer-based experiences. Furthermore, students are supplied with an understanding of the social and ethical responsibilities of engineers in our society and are encouraged to include sustainable development in all project designs.

Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog's General Information for Admission and Registration and Records.

Upper Division Program

The basic upper division requirements for the BSCE degree are as follows:

Engineering Sciences (20)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>CGS 2423</td>
<td>'C' for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CWR 3201</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CWR 3201L</td>
<td>Fluid Mechanics Laboratory</td>
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<tr>
<td>EEL 3003</td>
<td>Electrical Engineering I (Non EE)</td>
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<tr>
<td>EGM 3520</td>
<td>Engineering Mechanics of Materials</td>
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<td>EGM 3520L</td>
<td>Materials Testing Lab</td>
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<tr>
<td>EGII 3311</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3321</td>
<td>Dynamics</td>
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**Civil Engineering Curriculum (41)**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>CEG 4011</td>
<td>Geotechnical Engineering I</td>
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<tr>
<td>CEG 4011L</td>
<td>Soil Testing Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CES 3100</td>
<td>Determine Structural Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CES 4101</td>
<td>Indeterminate Structural Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CES 4065</td>
<td>Steel Design</td>
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<tr>
<td>CES 4702</td>
<td>Reinforced Concrete Design</td>
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<tr>
<td>CGN 4802</td>
<td>Civil Engineering Senior Design</td>
<td>3</td>
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<tr>
<td>CWR 3103</td>
<td>Water Resources Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENV 3001</td>
<td>Introduction to Environmental</td>
<td>3</td>
</tr>
<tr>
<td>ENV 3001L</td>
<td>Environmental Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>SUR 3101C</td>
<td>Surveying</td>
<td>3</td>
</tr>
<tr>
<td>TTE 4201</td>
<td>Transportation and Traffic</td>
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<tr>
<td>C.E. Elective</td>
<td>(min) 3</td>
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<tr>
<td>C.E. Elective</td>
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<tr>
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<td>(min) 3</td>
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</table>

**Civil and Environmental Engineering Program**

Students may have a different sequence of courses as arranged with their advisor. For a complete program information, students should refer to the Program Summary Sheet available in the Department.

**First Semester: (15)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MAC 2311</td>
<td>Calculus I</td>
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<tr>
<td>CHM 1045</td>
<td>General Chemistry I</td>
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<td>CHM 1045L</td>
<td>General Chemistry I Lab</td>
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<td>ENC 1101</td>
<td>Freshman Composition</td>
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<td>EGN 110C</td>
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<td>SLS 1501</td>
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<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>CEG 4011</td>
<td>Geotechnical Engineering I</td>
<td>3</td>
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<tr>
<td>CEG 4011L</td>
<td>Soil Testing Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CES 3100</td>
<td>Determine Structural Analysis</td>
<td>3</td>
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<tr>
<td>CES 4101</td>
<td>Indeterminate Structural Analysis</td>
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<td>CES 4702</td>
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<td>CWR 3103</td>
<td>Water Resources Engineering</td>
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<td>ENV 3001</td>
<td>Introduction to Environmental</td>
<td>3</td>
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<tr>
<td>ENV 3001L</td>
<td>Environmental Engineering Lab</td>
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<tr>
<td>EIN 3354</td>
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**Second Semester: (17)**

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<td>MAC 2312</td>
<td>Calculus II</td>
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<td>PHY 2048</td>
<td>Physics with Calculus</td>
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<td>PHY 2048L</td>
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<tr>
<td>ENC 1102</td>
<td>Literary Analysis</td>
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<td>Suggested Summer Term: (4)</td>
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<td>CHM 1046</td>
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**Third Semester: (18)**

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<tr>
<td>PHY 2049</td>
<td>Physics with Calculus</td>
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<tr>
<td>PHY 2049L</td>
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<td>EGN 3311</td>
<td>Statics</td>
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<tr>
<td>Literature/Art/Elective</td>
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<tr>
<td>Historical Analysis</td>
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**Fourth Semester: (15)**

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<th>Course Code</th>
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<tr>
<td>MAP 2302</td>
<td>Differential Equations</td>
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<td>EGN 3321</td>
<td>Dynamics</td>
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<td>SUR 3101C</td>
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<td>Humanities elective (Philosophical Analysis)</td>
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<td>HUM/SS Sequence</td>
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**Fifth Semester: (17)**

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<tr>
<td>STA 3033</td>
<td>Introduction to Probability and</td>
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<td>Statistics for CS</td>
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<td>EGM 3520</td>
<td>Engineering Mechanics of</td>
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<td>Materials</td>
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<td>EGM 3520L</td>
<td>Engineering Mechanics of</td>
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<td></td>
<td>Material Lab</td>
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<td>CWR 3201</td>
<td>Fluid Mechanics</td>
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<td>CWR 3201L</td>
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<td>ENC 2210</td>
<td>Technical Writing and Communication</td>
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<td>Electrical Engineering I</td>
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<td>CWR 3103</td>
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<tr>
<td>CES 3100</td>
<td>Determine Structural Analysis</td>
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</tr>
<tr>
<td>ENV 3001</td>
<td>Introduction to Environmental</td>
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<tr>
<td>ENV 3001L</td>
<td>Environmental Engineering Lab</td>
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<tr>
<td>EIN 3354</td>
<td>Engineering Economy</td>
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**Seventh Semester: (16)**

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<tr>
<td>CES 4101</td>
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<td>3</td>
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<tr>
<td>CES 4605</td>
<td>Steel Design</td>
<td>3</td>
</tr>
<tr>
<td>CEG 4011</td>
<td>Geotechnical Engineering I</td>
<td>3</td>
</tr>
<tr>
<td>CEG 4011L</td>
<td>Soil Testing Laboratory</td>
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<tr>
<td>TTE 4201</td>
<td>Transportation &amp; Traffic Engineering</td>
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**Eighth Semester: (15)**

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<tbody>
<tr>
<td>CES 4702</td>
<td>Reinforced Concrete</td>
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<tr>
<td>CGN 4802</td>
<td>Civil Engineering Senior Design</td>
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<tr>
<td>EGN 2030</td>
<td>Ethics &amp; Legal issues</td>
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<tr>
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<tr>
<td>CE Elective</td>
<td>(minimum)</td>
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**Suggested Electives (other electives may be chosen, as approved by Department Advisor):**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CEG 4012</td>
<td>Geotechnical Engineering I</td>
<td>4</td>
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<tr>
<td>ENV 4401</td>
<td>Water Supply Engineering</td>
<td>4</td>
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<tr>
<td>CCE 4001</td>
<td>Heavy Construction</td>
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**Electives for Environmental Engineering Option**

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<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>ENV 4101</td>
<td>Elements of Atmospheric Pollution</td>
<td>3</td>
</tr>
<tr>
<td>ENV 4330</td>
<td>Hazardous Waste Assessment and</td>
<td>3</td>
</tr>
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<td></td>
<td>Remediation</td>
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<tr>
<td>ENV 4351</td>
<td>Solid Waste Management</td>
<td>3</td>
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<tr>
<td>ENV 4401</td>
<td>Water Supply Engineering</td>
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</tr>
<tr>
<td>ENV 4551</td>
<td>Sewerage and Wastewater Treatment</td>
<td>4</td>
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</table>

Note: Minimum required credits towards graduation are 130 credit hours.
Course Descriptions

Definition of Prefixes

CCE-Civil Construction Engineering; CEG-Engineering, General; CES-Civil Engineering Structures; CGN-Civil Engineering; CWR-Civil Water Resources; EGM-Engineering Mechanics; EGS-Engineering Science; ENV-Environmental Engineering; SUR-Surveying and Related Areas; TTE-Transportation and Traffic Engineering

CCE 4001 Heavy Construction (3).
Contractor's organization, contracts, services, safety, planning and scheduling, equipment and their economics. Special project applications, cofferdams, dewatering, river diversions, tunneling. Prerequisite: CWR 4702. (F)

CEG 4011 Geotechnical Engineering I (3).
Engineering geology, soil properties; stresses in soils; failures; criteria; consolidation and settlement, compaction, soil improvement and slope stabilization. Prerequisite: CWR 3201 and EGM 3520, and L, CHM 1046 and PHY 2049. (F.S)

CEG 4011L Soil Testing Laboratory (1).
Laboratory experiments to identify and test behavior of soils and rocks. Prerequisite: CWR 3201, CWR 3201L, EGM 3520L, EGM 3520. Corequisites: CEG 4011. (Lab fees assessed). (F.S)

CEG 4012 Geotechnical Engineering II (4).
Principles of foundation analysis and design: site improvement for bearing and settlement, spread footings, mat foundations, retaining walls, cofferdams, piles, shafts, casings, tunnels, and vibration control. Computer applications. Prerequisite: CES 4702, CEG 4011 and L. (S)

CES 3100 Determinate Structural Analysis (3).
To introduce the student to the basic concepts and principles of structural theory relating to statically determinate beams, arches, trusses and rigid frames, including deflection techniques. Prerequisite: EGM 3520. (F.S.S)

CES 4101 Indeterminate Structural Analysis (3).
To introduce the student to the basic concepts and principles of structural theory relating to statically indeterminate beams, trusses and rigid frames, including slope deflection, moment distribution and matrix methods. Prerequisite: CES 3100. (F.S.S)

CES 4605 Steel Design (3).
The analysis and design of structural elements and connections for buildings, bridges, and specialized structures utilizing structural steel. Both elastic and plastic designs are considered. Prerequisite: CES 3100. (F.S.S)

CES 4702 Reinforced Concrete Design (3).
The analysis and design of reinforced concrete beams, columns, slabs, retaining walls and footings; with emphasis corresponding to present ACI Building Code. Introduction to prestressed concrete is given. Prerequisite or Corequisite: CES 4101. (F.S.S)

CGN 3949 Co-Op Work Experience (1-3).
Supervised full-time work experience in engineering field. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.

CGN 4321 GIS Applications in Civil and Environmental Engineering (3).
Introduction to the basics of geographic information systems, their software and hardware, and their applications in civil and environmental engineering, landscape architecture, and other related fields. Prerequisites: CGS 2420 or CGS 2423 or SUR 3101C and consent of instructor. (F)

CGN 4802 Civil Engineering Senior Design Project (3).
Compulsory course for all senior students, to experience the design of a practical project by utilizing knowledge learned from previous courses for presenting a solution. Done under the supervision of a faculty member and professional engineer. Prerequisite: Civil Engineer senior standing. (F.S.S)

CGN 4930 Special Topics in Civil Engineering (1-4).
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

CGN 4949 Co-Op Work Experience (1-3).
Supervised full-time work experience in engineering field. Limited to students admitted to the co-op program with consent of advisor. Evaluation and report required. Corequisite: CES 4101.

CWR 3103 Water Resources Engineering (3).
Hydrology, probability, ground and surface water studies. Closed conduit flow and hydraulic machinery. Prerequisites: CWR 3201 and STA 3033. (F.S)

CWR 3201 Fluid Mechanics (3).
A study of the properties of fluids and their behavior at rest and in motion. Continuity, momentum, and energy principles of fluid flow. Prerequisite: EGN 3321. Corequisite: CWR 3201L. (F.S)

CWR 3201L Fluid Mechanics Laboratory (1).
Application of fluid mechanics principles in the laboratory. Experiments in surface water, groundwater and pipe flow. Corequisite: CWR 3201. (Lab fees assessed). (F.S)

Analysis of axial, torsional, bending, combined stresses, and strains. Plotting of shear, moment and deflection diagram with calculus applications and interpretation. Prerequisites: MAC 2313, MAP 2302 and EGN 3311. (F.S.S)

EGM 3520L Materials Testing Laboratory (1).
Introduction to measurements of basic mechanical properties of materials. Experiments include axial tension, compression, torsion, flexure, and the response of simple structural elements. Prerequisites: MAC 2312 and EGN 3311. (Lab fees assessed). (F.S)

EGN 1110C Engineering Drawing (3).
Introduction to elementary design concepts in engineering, principles of drawing, descriptive geometry, pictorials and perspectives and their computer graphics counterpart. (F.S.S)

EGN 2030 Ethics and Legal Aspects in Engineering (3).
Codes of ethics, professional responsibilities and rights, law and engineering, contracts, torts, evidence. (F.S.S)

EGN 3311 Statics (3).
Forces on particles, equilibrium of forces, moments, couples, centroids, section properties, and load analysis of structures. Prerequisites: MAC 2312 and PHY 2048. (F.S.S)

ENV 3001 Introduction to Environmental Engineering (3).
Introduction to environmental engineering problems: water and wastewater treatment, air pollution, noise, solid and hazardous wastes. Prerequisites: CHM 1046 and L, PHY 2049 and PHY 2049L, MAC 2312 and permission of undergraduate advisor. Corequisite: ENV 3001L. (F.S.S)

ENV 3001L Environmental Laboratory (1).
A corequisite to ENV 3001. Practical applications of the theory learned in the course and exper-
ence in detecting and measuring some environmental problems. Prerequisites: CHM 1046 and CHM 1046L, PHY 2049 and PHY 2049L, MAC 2312 and permission of undergraduate advisor. Corequisite: ENV 3001. (Lab fees assessed). ENV 3949 Co-Op Work Experience (3). Supervised full-time work experience in engineering field. Limited to students admitted to the co-op program with consent of advisor.

ENV 4101 Elements of Atmospheric Pollution (3). The air pollution problem, causes, sources, and effects. Historical development. Physical, political, and economic factors in control. Prerequisites: CWR 3201 and CWR 3201L or EML 3126 and 3126L. ENV 3001 and ENV 3001L.

ENV 4330 Hazardous Waste Assessment and Remediation (3). Generation, transport, treatment and disposal of hazardous waste; risk assessment and treatment of contaminated media. Prerequisite: One year of General Chemistry.

ENV 4351 Solid Waste Management (3). Sources, amounts and characteristics of solid wastes; municipal collection systems; method of disposal; energetic consideration in the recovery and recycle of wastes. Prerequisites: PHY 2049 and PHY 2049L, and CHM 1046 and CHM 1046L.

ENV 4401 Water Supply Engineering (3). Quantity, quality, treatment, and distribution of drinking water. Prerequisites: CWR 3201 and CWR 3201L, ENV 3001 and ENV 3001L. Corequisite: ENV 4401L.

ENV 4401L Water Laboratory (1). Laboratory exercises in the physical, chemical, and bacteriological quality of potable water. Prerequisites: CWR 3201, ENV 3001 and ENV 3001L. Corequisite: ENV 4401. (Lab fees assessed).

ENV 4551 Sewerage and Wastewater Treatment (3). Collection and transportation of wastewater, design of sanitary and storm sewers. Physical, chemical, and biological principles of wastewater treatment. Prerequisites: CWR 3201 and CWR 3201L, ENV 3001 and ENV 3001L. Corequisite: 4551L.

ENV 4551L Wastewater Laboratory (1). Laboratory exercises in the physical, chemical, and bacteriological quality of raw and treated wastewaters. Prerequisites: CWR 3201 and CRW 3201L, ENV 3001 and ENV 3001L. Corequisite: ENV 4551L. (Lab fees assessed).

ENV 4930 Special Topics in Environmental Engineering (1-4). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

ENV 4949 Co-Op Work Experience (3). Supervised full-time work experience in engineering field. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.

SUR 3101C Surveying (3). Computations and field procedures associated with the measurement of distances and angles using tape, level, transit, EDMs, and total station. Laboratory is included with field measurements. Prerequisite: EGM 1110C. (F,S,S

TIE 4201 Transportation and Traffic Engineering (3). Transportation characteristics; transportation planning, traffic control devices, intersection design, network design, research. Prerequisites: STA 3033 and SUR 3101C. (F,S,S)

TIE 4804 Geometric Design of Highways (3). Parameters governing geometric design of highways; curve superelevation, widening of highway curves, intersection design; highway interchanges, use of AASHTO design guidelines. Prerequisite: TIE 4201.

TIE 4930C Transportation Seminar (1-3). Oral presentations made by students, guests, and faculty members on current topics and research activities in traffic and transportation engineering. Prerequisite: TIE 4201.
Students must earn a minimum grade of "C-" in all EEL courses required for graduation.

Students who have been dismissed for the first time from the University due to low grades may appeal to the Dean for reinstatement. A second dismissal results in no possibility of reinstatement.

Lower Division Preparation
To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. For transfer applicants, at least 60 hours in pre-engineering credits must be earned, including C programming language, Calculus I & II, Chemistry I and Lab, Physics with Calculus I & II and Labs, Statics, Mechanical Engineering and Computer Engineering and a minimum of 16 credit hours worth of social science (preferably Economics) and humanities with at least two of the courses being in the same discipline. Two Gordon Rule courses, and Engineering Graphics or CAD (unless previously taken in high school). A minimum grade of "C-" is required in all calculus, physics, chemistry, and differential equations courses, with an overall GPA of 2.5 in these courses. See the example semester-by-semester program on the following pages.

Foreign Language Requirement
Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog’s General Information.

Upper Division Course Objectives
The courses listed as requirements for a B.S. degree not only supply the students with mathematical and scientific knowledge, but also supply other essentials for a successful engineering career. Therefore, our courses have been designed to increase student competence in written and oral communication skills as well as supply an understanding of social, ethical, economic, and safety considerations for engineers. Furthermore, course projects will be designed to supply appropriate computer-based experience with software tools as well as basic programming skills in order for the students to utilize computers for circuit analysis, mathematical calculations, and other engineering applications.

Upper Division Program
The program includes Dynamics, Multivariable Calculus, Materials of Engineering, Signals and Systems, Differential Equations, and the following:

Electrical Engineering Curriculum (Major only): (53)

- EEL 311I Circuits I 3
- EEL 311IL Circuits Lab 1
- EEL 3112 Circuits II 3
- EEL 3303 Electronics I 3
- EEL 3303L Electronics Lab 1
- EEL 3396 Introduction to Solid State 3
- EEL 3514 Communication Systems 3
- EEL 3567 Control Systems 3
- EEL 3712 Logic Design I 3
- EEL 3712L Logic Design Lab I 1
- EEL 4011C Electrical Engineering Systems Design 4
- EEL 4304 Electronics II 3
- EEL 4304L Electronics II Lab 1
- EEL 4213 Power Systems I 3
- EEL 4213L Energy Conversion Lab 1
- EEL 4314 Integrated Circuits and Systems 3
- EEL 4314L Integrated Circuits and Systems Lab 1
- EEL 4410 Introduction to Fields and Waves 3
- EEL 4611L Systems Lab 1
- EEL 4709C Computer Design 3
- Electrical Engineering Electives (two courses) 6

Electrical Engineering Program Freshman to Senior

First Semester: (17)
- MAC 2311 Calculus I 3
- ENC 1101 Freshmen Composition 3
- Social Science 3
- CHM 1045 General Chemistry I 4
- CHM 1045L General Chemistry Lab I 1
- SLS 1501 Freshman Experience 1
- EGN 1002 Engineering Orientation 2

Second Semester: (13)
- MAC 2312 Calculus II 5
- PHY 3048 Physics with Calculus 5
- ENC 1102 Literary Analysis 3

Third Semester: (15)
- MAC 2713 Multivariable Calculus 3
- PHI 2011 Philosophical Analysis
Bachelor of Science in Computer Engineering

Degree Program Hours: 128

The curriculum structure provides an in-depth study of the major areas of computer engineering by providing a strong mathematical foundation, a balanced view of hardware and software design and application techniques. The goals and objectives of the program are to train students in the skills of the electrical engineer specialized in the design and application of both computer hardware and software.

Any course taken without the required prerequisites and corequisites will be automatically dropped before the end of the term, resulting in a grade of ‘DR’ or ‘DF’.

Students must earn a minimum grade of ‘C’ in all calculus, physics, chemistry and differential equations, with a minimum 2.5 GPA in these courses, and a ‘C’ in Discrete Math, Numerical Analysis, all CIS, CEN, COP, and EEL courses required for graduation.

Students who have been dismissed for the first time from the University due to low grades may appeal to the Dean for reinstatement. A second dismissal results in no possibility of reinstatement.

The lower division preparation for transfer students seeking a degree in computer engineering is the same as for those pursuing a degree in electrical engineering except for multivariable calculus and ‘C’ language requirements. Knowledge of PASCAL is required as a prerequisite for the computer software curriculum and Discrete Math.

Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog’s General Information.

Upper Division Course Objectives

The courses listed as requirements for a BS degree not only supply the students with mathematical and scientific knowledge, but also supply other essentials for a successful engineering career. Therefore, our courses have been designed to increase student competence in written and oral communication skills as well as supply an understanding of social, ethical, economic, and safety considerations for engineers.

Furthermore, course projects will be designed to supply appropriate computer-based experience with software tools as well as basic programming skills in order for the students to utilize computers for circuit analysis, mathematical calculations, and other engineering applications.

Upper Division Program

The upper division program includes Numerical Analysis, Discrete Math, Differential Equations, Signals and Systems, and the following:

Computer Software Curriculum: (19)

CEN 4010 Introduction to Software Engineering 4
COP 2212 Intermediate Programming 3
COP 3223 Advanced Programming 3
COP 3530 Data Structures 3
COP 4610 Operating Systems Principles 3
COP 4225 Advanced Unix Programming 3

Electrical Engineering Curriculum: (26)

EEL 3111 Circuits I 3
EEL 3111L Circuits I Lab 1
EEL 3201 Circuits II 3
EEL 4213 Energy Conversion Lab 1
EIN 3354 Engineering Economy 3

Eighth Semester: (16)

EEL 4304 Electronics II 3
EEL 4304L Electronics II Lab 1
EEL 4011C Electrical Engineering Systems Design 2
EEL 4601L Systems Laboratory 1
EE Elective I 3
EGN 3311 Statics 3
EGN 3365 Materials 3

Ninth Semester: (12)

EEL 4314 Integrated Circuits 3
EEL 4314L Integrated Circuits Lab 1
EEL 4011C EE Systems Design 2
EEL Elective II 3
EGN 3321 Dynamics 3

Note: If not previously taken in High School:
EGS 1110 Engineering Drawing or
Ch 1045 General Chemistry I 4
CHM 1045L Gen. Chemistry Lab I 1
SLS 1501 Freshman Experience 1
EGN 1002 Engineering Orientation 2

Second Semester (13)
MAC 2312 Calculus II 5
PHY 3048 Physics with Calculus 5
ENG 1102 Literary Analysis 3

Third Semester (12)
PHI 2011 Philosophical Analysis or
REL 2011 Religion Analysis or
ENG 2012 Approaches to Literature 3
PHY 2049 Physics with Calculus II 5
PHY 2049L General Physics Lab II 1
Comp. Cultures (same as Social Science) 3
COP 2212 Intermediate Programming 3

Fourth Semester (12)
MAP 2302 Differential Equations 3
History Writing Course 3
CDA 2201 Intermediate Programming 3

Fifth Semester (16)
EEL 3111 Circuits I 3
EEL 3111L Circuits I Lab 1
EEL 3135 Signals and Systems 3
MAD 3401 Numerical Analysis 3
COP 3223 Advanced Programming 3
MAD 2104 Discrete Math 3

Sixth Semester (16)
EEL 3112 Circuits II 3
EEL 3514 Communications 3
EEL 3712 Logic Design I 3
EEL 3712L Logic Design Lab I 1
EEL 3354 Engineering Economy 3
COP 3530 Data Structures 3

Seventh Semester (17)
EEL 3303 Electronics I 3
EEL 3303L Electronics I Lab 1
EEL 3357 Control Systems I 3
EEL 4704C Computer Design 3
EEL 3511 Statics 3
CDA 3001 Introduction to Software Engineering 4

Eighth Semester (13)
EEL 4304 Electronics II 3
EEL 4304L Electronics II Lab 1
EEL 4311C EE System Design 2
EEL 4311L Systems Lab 1
Minor Computer Electives 3
CDA 4614 Operating Systems 3

Ninth Semester: (12)
EEL 4314 Integrated Circuits 3
EEL 4314L Integrated Circuits Lab 1
EEL 4011C EE System Design 2
Computer Engineering Elective 3
COP 4225 Programming in Unix 3

Note: If not previously taken in High School:
EGS 1110 Engineering Drawing
or
EGN 3123 CAD 3
COP 2210 Pascal 3

Course Descriptions

Definition of Prefixes
EEL - Engineering; Electrical
F - Fall semester offering; S - Spring semester offering; SS - Summer semester offering.

CDA 4400 Computer Hardware Analysis (3). The study of hardware functions of a basic computer. Topics include logic elements, arithmetic logic units, control units, memory devices, organization and I/O devices (for non-EE majors only). Prerequisites: CDA 4101 and MAD 2104.

EEL 3003 Electrical Engineering I (3). For non-EE majors. Basic principles of DC and AC circuit analysis, electronic devices and amplifiers, digital circuits, and power systems. Prerequisite: MAC 2312. Corequisite: MAP 2302. (F.S, S.S)

EEL 3111 Circuits I (3). Introductory electronics course dealing with DC, AC, and transient electrical circuit analysis, involving passive elements such as resistors, capacitors, inductors, transformers, etc. Prerequisites: MAC 2312 and PHY 2049. Corequisites: MAP 2302, C or FORTRAN and EEL 3111L. (F.S)

EEL 3111L Circuits Lab (1). This lab introduces basic test equipment, oscilloscopes, multimeters, power supply, function generator, etc., and uses this equipment in various experiments on resistors, capacitors, and inductors. Prerequisite: EEL 3049L. Corequisite: EEL 3111. (F.S)

EEL 3112 Circuits II (3). Application of operational methods to the solution of electrical circuit effect of poles and zeros on the response and transfer function of electrical networks. Laplace and Fourier transforms, network parameters. Prerequisites: EEL 3111, MAP 2302, EEL 3135, Fortran or C Language. (S.S)

EEL 3135 Signals and Systems (3). Use of Fourier analysis in electrical and electronic systems. Introduction to probability theory, linear algebra and complex variables. Prerequisites: MAP 2302. (F.S)

EEL 3160 Computer Applications in Electrical Engineering (3). Interactive techniques of computers to simulate and design electrical engineering circuits and systems. Prerequisites: Permission of instructor and FORTRAN or 'C'.

EEL 3303 Electronics I (3). Introductory electronics course dealing with the properties of basic electronic devices such as diodes, transistors, Fets, SCRs, etc., and their circuit applications. Prerequisites: EEL 3111 and FORTRAN or C. Corequisites: EEL 3303L. (F.S, S.S)

EEL 3303L Electronics Lab (1). Designing, building, and testing electronic circuits which use diodes, transistors, and field effect transistors. Prerequisite: EEL 3111L. Corequisite: EEL 3303. (F.S, S.S)

EEL 3396 Introduction to Solid State Devices (3). Introduction to the physics of semiconductors: charge carrier statistics and charge transport in crystalline solids. Basic operations of solid state devices including the p-n junction diode, and the bipolar junction transistor. Prerequisite: MAP 2302. Corequisite: EEL 3111. (F.S)

EEL 3514 Communication Systems (3). An introductory course in the field of digital communication systems. Transmitters, receivers, and different modulation and demodulation techniques are studied. A basic treatment of noise is also included. Prerequisite: EEL 3135. Corequisite: EEL 3112. (F.S)


EEL 3712 Logic Design I (3). Boolean Algebra, Binary number systems. Combinatorial logic design using MSI, MSI, and LSI. Sequential logic design. Prerequisite: EEL 3111. Corequisite: Minimum of a 'D' in EEL 3712L. (S.S)
EEL 3712L Logic Design I Lab (1). Laboratory experiments, including gates, combinational networks, SSI, MSI, LSI, and sequential logic design. Prerequisite: 3111L. Corequisite: EEL 3712L. (S,SS)

EEL 4011C Electrical Engineering Systems Design (1-3). Design of a complete EE system including use of design methodology, formulation, specifications, alternative solutions, feasibility, economic, reliability, safety criteria, and social impact. Prerequisites: Senior standing and two EE electives. (S,F,SS)

EEL 4015 Electrical Design in Buildings I (3). Application of electrical codes and regulations. Design of loads, circuits, surge protection, feeders, panels, and breakers. Prerequisites: EEL 3111 and EEL 3111L.

EEL 4016 Electrical Design in Buildings II (3). Electrical design of industrial buildings, size and design of distribution rooms, switchboards, transformers, bus ducts, motor control centers, starters, voltage drop calculations, lighting distribution. Prerequisite: EEL 4015.

EEL 4140 Filter Design (3). Approximation techniques. Active RC second order modules. Low pass filters, bandpass filters, high pass filters, notch filters are studied in detail. Sensitivity and high order filters. Design and laboratory implementation. Prerequisites: EEL 3657, EEL 4304, or permission of instructor. (F)

EEL 4213 Power System I (3). Introductory course to power systems components: transformer, induction machines, synchronous machines, direct current machines, and special machines. Prerequisite: EEL 4410. Corequisites: EEL 3112 and EEL 4213L. (F,SS)

EEL 4213L Energy Conversion Lab (1). Operation, testing, and applications of energy conversion machines including AC and DC motors and generators. Starts with experiments on magnetic circuits and transformers. Prerequisite: EEL 4410. Corequisite: EEL 4213. (F,SS)

EEL 4214 Power Systems II (3). Transmission line models, the bus admittance matrix, load flow studies and solution techniques, economic dispatch with and without losses, computer applications. Prerequisite: EEL 4213. (F,SS)

EEL 4215 Power Systems III (3). Short circuit calculations, symmetrical and unsymmetrical fault analysis, transient stability and dynamic studies as well as power system control. Computer applications. Prerequisite: EEL 4214. (F,SS,SS)

EEL 4216 Power Electronics (3). Power semiconductor devices, power supplies, DC choppers, AC voltage controller, power inverter, AC and DC drives. Prerequisites: EEL 4213 and EEL 4304.

EEL 4304 Electronics II (3). Second course in electronics with particular emphasis on equivalent circuit representation and analysis of electronic analog and switching circuits and systems, their frequency response and behavior under feedback control. Prerequisites: EEL 3112 and EEL 3303. Corequisite: EEL 4304L. (F,SS)

EEL 4304L Electronics II Laboratory (1). Design and measurement experiments of advanced electronics, including applications of integrated circuits. Prerequisite: EEL 3303L. Corequisite: EEL 4304L. (F,S)


EEL 4314 Integrated Circuits and Systems (3). Continuation of Electronics II with major emphasis on design and applications of integrated circuits. Includes design of analog, control, communication and digital oriented electronic systems. Prerequisite: EEL 4304. Corequisite: EEL 4314L. (F,SS,SS)

EEL 4314L Integrated Circuits Laboratory (1). Laboratory experiments in integrated circuits. Includes design of filters, analog systems, A/D and D/A systems. Prerequisite: EEL 4304L. Corequisite: EEL 4314L. (F,SS,SS)

EEL 4410 Introduction to Fields and Waves (3). Static electric field, the steady electric current, magnetic field of ferro magnetic materials. The relation between field and circuit theory waves and wave polarization, reflection, refraction, and diffraction. Prerequisite: EEL 3111. (F,SS,SS)

EEL 4461C Antennas (3). Introduction to linear antennas, linear arrays and aperture antennas. Far field pattern calculation and measurement techniques. Prerequisite: EEL 3514 or permission of instructor.


EEL 4515 Advanced Communication Systems (3). Advanced senior level course designed for those students who desire to enhance their engineering knowledge in communication systems. State-of-the-art techniques in FM, digital communication, phase locked loops, noise treatment, threshold improvement, etc. Prerequisites: EEL 3514, EEL 4304 or permission of instructor.

EEL 4611 Control Systems II (3). Design by Root-Locus, Bode plot, and Builfin-Trufax approach; characteristics of some typical industrial controllers and sensors. Computer simulation and other modern topics are included. Prerequisite: EEL 3657 or permission of instructor. (F)

EEL 4611L Systems Laboratory (1). Laboratory experiments in various systems. Includes position and velocity control systems, zeroth order, first order, and second order systems. Communication Systems. Corequisites: EEL 3657 and EEL 3514. (S,F)

EEL 4709C Computer Design (3). Computer architecture, arithmetic units, RAM, ROM, tape, disk, CPU, memory systems, data, input/output devices. Distributed and centralized control. Prerequisites: EEL 3712 and EEL 3712L. (F,SS)

EEL 4713 Digital Logic Design II (3). Upper division course in system design using state-of-the-art digital integrated circuits and concepts leading to realization of practical digital electronic systems. Prerequisite: EEL 4746 or permission of instructor. (S)


EEL 4746L Microcomputers I Laboratory (1). Hands-on design experience with microcomputer systems and applications including buses, interfaces, and in-circuit emulation. Prerequisite: EEL 4709C. Corequisite: EEL 4746L. (F)
EEL 4747 Microcomputers II (3). Design of interfacing schemes of microcomputers such as video, disk, etc., and state-of-the-art hardware and software features of advanced microprocessors' families. Prerequisite: EEL 4709C or permission of instructor.

EEL 4798 Special Topics in Computer Engineering (1-3). Special topics in computer engineering not covered in other courses. Prerequisite: Permission of instructor.

EEL 4905 Individual Problems in Electrical Engineering (1-3). Selected problems or projects in the student's major field of electrical engineering. It can be extended to a maximum of six hours. Student works independently with a minor advisement from designated faculty member. Prerequisites: Senior level and permission of instructor.

EEL 4930 Special Topics in Electrical Engineering (1-3). Special topics in electrical engineering not covered in other courses. Prerequisite: Permission of instructor.

EEL 4949 Co-Op Work Experience (3). Practical co-op engineering work under approved industrial supervision. Prerequisite: EEL 3949.

EGL 1002 Engineering Orientation (2). Introduction to aspects of the engineering profession. Computer tools and basic engineering science. Team-based engineering projects.

ELR 4202C Medical Instrumentation Design (4). Concepts of transducers and instrumentation systems; origins of biopotentials, electrical safety, therapeutic and prosthetic devices. Prerequisite: EGL 4304 or permission of instructor (SS).

Industrial and Systems Engineering

Shih-Ming Lee, Associate Professor, Chairperson
Martha Centeno, Assistant Professor
Chin-Sheng Chen, Professor
F. Frank Chen, Associate Professor
Joe Chow, Associate Professor
Julie Jacko, Assistant Professor
Khokiat Kengskaol, Associate Professor
Memberu Lulu, Associate Professor
Sergio Martinez, Instructor
Marc Resnick, Assistant Professor
Fredrick Swift, Professor

Bachelor of Science in Industrial and Systems Engineering

Degree Program Hours: 128

As defined by the Institute of Industrial Engineers, Industrial Engineering is concerned with the design, improvement and installation of integrated systems of people, materials, information, equipment and energy. A major distinction between industrial engineering and other branches of engineering is that the industrial engineer must consider not only the behavior of inanimate objects as they are governed by physical laws but also the behavior of people as they operate together in organizations, and as such it is often called the people oriented engineering discipline.

The program emphasizes areas of simulation and modeling, manufacturing systems, human factors/ergonomics, and engineering management. It is also soundly based in the traditional industrial engineering areas such as work measurement and simplification, probability and statistics, and facility and work place design.

Lower Division Preparation

Students entering FIU with fewer than 36 transfer hours must satisfy all Core Curriculum Requirements while students transferring to FIU with at least 36 hours must satisfy the General Education Requirements. To qualify for admission to the Industrial Engineering upper division program, students must have passed the CLAST and completed at least 60 semester hours of pre-engineering courses which include Calculus I & II, Differential Equations, Statistics, Chemistry I and Lab, and Physics with Calculus I & II and Labs.

Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog's General Information for Admission and Registration and Records.

Upper Division Program

The program includes 21 semester hours of General Engineering courses, 44 semester hours of required Industrial Engineering courses, and nine hours of technical electives.

General Engineering: (21)

EEL 3003 Electrical Engineering I 3
EGL 3123 Computer Assisted Drawing 3
EGL 3311 Statics 3
EGL 3321 Dynamics 3
EGL 3343 Thermodynamics I 3
EGL 3365 Materials in Engineering 3
CGS 2423 C for Engineers 3

Industrial Engineering Core Courses: (44)

EIN 3354 Engineering Economy 3
EIN 3365 Facilities Planning 5
EIN 3390 Manufacturing Processes 2
EIN 3390L Manufacturing Processes Lab 1
EIN 3331 Quality Control 3
EIN 3600 Industrial Automation II 2
EIN 3600L Industrial Automation Lab 1
EIN 4243 Human Factors in Engineering 2
EIN 4243L Human Factors Lab 1
EIN 4314 Work Design 2
EIN 4314L Work Design Lab 1
EIN 4334 Production Planning & Control 3
ESL 3161 Industrial Applications of Microprocessors 3
ESI 3314 General Models I 3
ESI 4322 General Models II 3
ESI 3523 Simulation Models 2
ESI 3523L Simulation Models Lab 1
ESI 4452 Project Management 3
ESI 4554 ISE Systems Design 3

Industrial Engineering Electives (9)

(select three courses)

EIN 3102 Collective Bargaining 3
EIN 3214 Safety in Engineering 3
EIN 3949 Industrial Engineering Co-Op 1-3
### Industrial Engineering Program

**First Semester:** (13)
- **EIN 4116** Industrial Information Systems 3
- **EIN 4122** Industrial Marketing 3
- **EIN 4261** Industrial Hygiene 3
- **EIN 4326** Industrial Research and Development 3
- **EIN 4333** Productivity Planning 3
- **EIN 4387** Technology Assessment 3
- **EIN 4389** Technological Forecasting 3
- **EIN 4391** Concurrent Engineering 3
- **EIN 4935** Computer Integrated Manufacturing 3
- **EIN 4933** Special Topics 3
- **EIN 4949** Co-Op Work Experience 1-3
- **EIN 5249** Occupational Biomechanics 3
- **EIN 5322** Engineering Management 3
- **EIN 5332** Quality Engineering 3
- **EIN 5369** Industrial Financial Decisions 3
- **EIN 5367** Production Systems 3
- **EIN 5605** Robotic Assembly Cells 3

**Second Semester:** (14)
- **SLS 1501** Freshman Experience Seminar 1
- **MAC 2311** Calculus I 3
- **CHM 1045** General Chemistry I 4
- **CHM 1045L** General Chemistry I Lab 1
- **ENC 1101** Freshman Composition 3
- **Art** 1

**Third Semester:** (15)
- **MAP 2302** Differential Equations 3
- **PHY 2049** Physics with Calculus 5
- **PHY 2049L** General Physics Lab II 1
- **EGN 3311** Statics 3

**Suggested Summer Term:** (6)
- Critical Inquiry 3
- Social Studies Electives 3

**Fourth Semester:** (15)
- **Comparative Culture & Gender Studies** 3
- **EGS 2423** C for Engineers 3
- **EGN 3321** Dynamics 3
- **EIN 3235** Evaluation of Engineering Data 3
- **Social Science** 3

**Fifth Semester:** (15)
- **EIN 3331** Quality Control 3
- **EIN 3354** Engineering Economy 3
- **EIN 4243** Human Factors 2
- **EIN 4243L** Human Factors Lab 1
- **ESI 3161** Industrial Applications of Microprocessors 3
- **ESI 3314** Generic Models I 3

**Sixth Semester:** (18)
- **EGN 3123** Computer Assisted Drawing 3
- **EGN 3365** Materials in Engineering 3
- **EIN 3390** Manufacturing Process 2
- **ESI 3390L** Manufacturing Process Lab 1
- **EIN 3600** Industrial Automation 2
- **EIN 3600L** Industrial Automation Lab 1
- **EIN 4314** Work Design 2
- **EIN 4314L** Work Design Lab 1
- **ESI 4322** Generic Models II 3

**Seventh Semester:** (17)
- **EGN 3343** Thermodynamics 3
- **EIN 3365** Facility Planning 5
- **EIN 4334** Production Planning and Control 3
- **ESI 3523** Simulation Models of Industrial System 2
- **ESI 3523L** Simulation Models Lab 1
- **ESI 4452** Project Management Systems Design 3

**Eighth Semester:** (15)
- **EEL 3003** Electrical Engineering I 3
- **EIN 4554** ISE System Design 3
- **IE Elective** 3
- **IE Elective** 3
- **IE Elective** 3

**Course Descriptions**

**Definition of Prefix**
- **EGN** - Engineering General; **EIN** - Engineering; **ESI** - Engineering Systems Industrial.
- **F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.**

**EGN 3123 Computer Assisted Drawing and Design (3).** Application of computer assisted design technology to product design, feasibility study and production drawing. (F,S,SS)

**EIN 1396C Basic Industrial Shop and Manufacturing Practices (3).** Fundamentals of basic capabilities and requirements for a modern shop or industrial manufacturing facilities. Rudiments of safety requirements, wood technology, metal technology and plastic technology. (F)

**EIN 3102 Collective Bargaining in Industrial Systems (3).** A comprehensive study of collective bargaining with emphasis upon the private sector. Included will be negotiations and scope of contracts, day-to-day contract administration, and major bargaining issues. (S)

**EIN 3235 Evaluation of Engineering Data (3).** Analysis of industrial data and subsequent characterization of industrial processes. Prerequisite: MAC 2312. (F,S)

**EIN 3331 Quality Control (3).** Modern concepts for managing the quality function of industry to maximize customer satisfaction at minimum quality cost. The economics of quality, process control, organization, quality improvement, and vendor quality. Prerequisite: EIN 3235. (S,SS)

**EIN 3354 Engineering Economy (3).** Basic methods of engineering economic analysis including equivalence, value measurement, interest relationships and decision support theory and techniques as applied to capital projects. (F,S,SS)

**EIN 3365 Facilities Planning and Materials Handling (5).** Application of methods and work measurement principles to the design of work stations. Integration of work stations with storage and material handing systems to optimize productivity. Prerequisite: EGN 3123 and ESI 3523. (F,S)

**EIN 3390 Manufacturing Processes (2).** Study of interrelationships among materials, design and proc-
EIN 3390L Manufacturing Processes Laboratory (1). Experiments are conducted using the machines, equipment and tools in the laboratory to provide students with hands-on experience on product design, process planning, fabrication and quality assurance. Corequisite: EIN 3390. (Lab fees assessed). (F,S,S)

EIN 3600 Industrial Automation (2). Basic concepts of industrial automation and robotics. Performance characteristics, criteria for use, planning, selection, and implementation of computer automated equipment. Open to non-majors. Prerequisite: ESI 3101. Corequisite: EIN 3600L. (F,S)

EIN 3600L Industrial Automation Lab (1). Experiments in the use of CNC machines and robots demonstrating performance characteristics of CNC equipment and robotic arms. Corequisite: EIN 3600. (Lab fees assessed). (F,S)

EIN 3949 Industrial Engineering Co-Op (1-3). Entry level work experience on an Industrial Engineering intern. Jointly supervised by IE and Industry personnel. Written report required. Student must obtain approval from IE faculty and sign up for course before starting work. Prerequisite: Approval of advisor. (F,S,S,S)

EIN 4116 Industrial Information Systems (3). The integration of information flows and data bases with the production planning and control systems into productive and manageable systems. Prerequisite: Programming Language. (S)

EIN 4122 Industrial Marketing (3). The performance of business activity that directs the flow of goods and services from producer to industrial user. Covers new product development, marketing research, sales engineering, pricing, distribution, and promotion. (SS)

EIN 4214 Safety in Engineering (3). Introduces occupational safety and health hazards associated with mechanical systems, materials handling, electrical systems, and chemical processes. Illustrates controls through engineering revision, safeguarding, and personal protective equipment. Emphasizes placed on recognition, evaluation and control of occupational safety and health hazards. Prerequisites: EIN 4314 or permission of instructor. (F)

EIN 4243 Human Factors Engineering (2). Examination of the ways to fit jobs and objects better to the nature and capacity of the human being. Lectures will review man's performance capability, singly and in groups, in interacting with his work environment. Stresses the practical application of human factors principles. Prerequisite: EGN 3321 and EIN 4314. Corequisite: EIN 4243L. (F,S)

EIN 4243L Human Factors in Engineering and Design Laboratory (1). Experiments are conducted which measure human factors indicators and differences by age, sex, and race, as well as physiological and anatomical differences. Corequisite: EIN 4243. (Lab fees assessed). (F,S)

EIN 4261 Industrial Hygiene (3). A continuation of Safety in Industry. An introduction to OSHA regulations on health hazards. Noise, radiation, and dust problems in Industry. Special hazards with solvents, asbestos, lead, silica, and other chemicals. OSHA compliance procedures. Prerequisite: Junior standing. (S)

EIN 4314 Work Design and Industrial Ergonomics (2). The analysis, design, and maintenance of work methods. Study of time standards, including time and motion studies, statistical work sampling. Prerequisite: EGN 3123, EIN 3235 or equivalent. Corequisite: EIN 4314L. (F,S)

EIN 4314L Work Design and Industrial Ergonomics Laboratory (1). Experiments in the different Work Design techniques including Performance Sampling, Time Studies, Pre-Determined Time Systems and Workplace Design. Corequisite: EIN 4314. (Lab fees assessed). (F,S)

EIN 4326 Industrial Research and Development (3). Research and development for new product strategies, technological assessment, product and product liability, and sales engineering. An independent study subject product will be required by each student. Prerequisite: Senior status. (S)

EIN 4333 Productivity Planning (3). The improvement of productivity as a functional activity of the enterprise. Productivity definitions, measurement, methodologies, and reporting systems. Prerequisites: EIN 4314, ESI 3161, and statistics. (F)

EIN 4334 Production Planning and Control (3). Production systems, demand forecasting, capacity planning, master production planning, material requirements planning, shop floor control, and assembly line balancing. Prerequisites: EIN 3354 and EIN 4314. (F,S)

EIN 4387 Technology Assessment (3). Development of systematic efforts to anticipate impacts on society that may occur when a technology is introduced, extended, or modified. Prerequisites: Senior standing in Engineering, ESI 3161 and Statistics. (S)

EIN 4389 Technological Forecasting (3). Emphasis on forecasting future trends and specific developments in the area of capabilities and needs. Prerequisites: Senior standing in Engineering, and EIN 4334. (F)


EIN 4933 Special Topics in Industrial Engineering (2-3). Permits in-depth study in areas relating to specific student interests, recent advances, and problems in industrial technology or systems. Prerequisite: Senior standing consent of faculty advisor and approval of department chairman. (F,S,S,S)

EIN 4949 Co-Op Work Experience (1-3). Practical co-op work experience under approved industrial supervision. Written report required at the conclusion of the work assignment. Prerequisite: Permission of department chairperson. (F,S,S,S)

EIN 5106 Regulatory Aspects of Engineering (3). A survey of the legal and regulatory requirements encountered by engineers. Included will be OSHA Act, NIOSH, ADA, EEOC, Worker's Compensation and Product Liability. Prerequisite: senior standing.
EIN 5249 Occupational Biomechanics (3). Study of the theoretical fundamentals for the mechanics of the body. The link system of the body and kinematic aspects of body movement including applications of biomechanics to work systems. (S)

EIN 5322 Engineering Management (3). Organization of engineering systems including production and service organizations. Inputs of human skills, capital, technology, and managerial activities to produce useful products and services. (F)

EIN 5332 Quality Engineering (3). This course examines quality control from an engineering standpoint. It covers ways to meet the challenge of designing high-quality products and processes at low cost. Prerequisite: EIN 3331 or equivalent. (S)

EIN 5359 Industrial Financial Decisions (3). The use of financial techniques and data in planning, controlling and coordinating industrial activities. This course will familiarize the student with accounting concepts and analytical methods. Prerequisite: EIN 3354. (SS)

EIN 5367 Design of Production Systems (3). The design of an industrial enterprise including feasibility, plant layout, equipment specifications, auxiliary services, economics and scheduling. Prerequisite: EIN 3365. (SS)

EIN 5605 Robotic Assembly Cell (3). Concepts of robot manipulation and sensing, part design for robotic assembly, planning manipulator trajectories, machine vision, robot programming language, cell control, and material transfer. Prerequisite: EIN 3600. (S)

ESI 3161 Industrial Applications of Microprocessors (3). Basic concepts of microprocessors; an overview of computer architecture, local area networks, micro-mainframe linking, and operating systems as they apply to industrial systems. (F,S)

ESI 3314 Generic Models of Industrial Systems I (3). Modeling principles with emphasis on applications of Markov Chains, queing models, systems reliability, Bayesian decision analysis. Prerequisites: ESI 3314, EIN 3235 or equivalent, STA 3033. (S,SS)

ESI 3523 Simulation Models of Industrial Systems (2). Simulation methodology, design of simulation experiments, implementation of simulation effort through computer software. Application to the solution of industrial and service-system problems. Prerequisites: ESI 3161, ESI 3314 and EIN 3235 or equivalent. Corequisite: ESI 3523L. (F,S)

ESI 3523L Simulation Models of Industrial Systems Laboratory (1). Simulation Modeling on a micro-computer. Analyze and validate design models using both a general purpose programming language and a special-purpose simulation language. Prerequisite: STA 3033. Corequisite: ESI 3523. (F,S)

ESI 4315 Generic Models of Industrial Systems II (3). Modeling principles with emphasis on applications of Markov Chains, queing models, systems reliability, Bayesian decision analysis. Prerequisites: ESI 3314, EIN 3235 or equivalent, STA 3033. (S,SS)

ESI 4452 Project Management Systems Design (3). Project planning, scheduling and control using activity network logic. System development techniques and strategies. Prerequisite: Permission of instructor. (F,S)

ESI 4554 ISE Systems Design (3). To integrate all prior ISE required courses into a cohesive and consistent professional philosophy. Prerequisite: Permission of instructor. (F,S)

ESI 4556 Industrial and Systems Engineering in the Office (3). Paperwork reduction, overhead and expense cost containment, and white-collar productivity through office automation and systems analysis.
Mechanical Engineering

Kuang-Hsi Wu, Professor and Acting Chairperson
Yiding Cao, Assistant Professor
Genady Cherpanov, Professor
M. Ali Ebadian, Professor
Gordon Hopkins, Professor and Dean
W. Kinzy Jones, Professor
Umil Kaylu, Assistant Professor
Rane Leonard, Associate Professor
Cesar Levy, Professor
James E. Moore, Jr., Assistant Professor
Norman Mordechai Perl, Courtesy Professor
Luis Pujol, Instructor
Carmen Schenck, Counselor
Richard Schoephoerster, Associate Professor
Ibrahim Tonsel, Associate Professor
Sabir Tosunoglu, Assistant Professor
Qian (Jane) Wang, Assistant Professor
Tachung Yih, Associate Professor

The academic program provides a well balanced curriculum in the following three major areas of Mechanical Engineering:

1. Fluid/Thermal Science
2. Mechanics and Materials
3. Design and Manufacturing

Further specializations in any of these areas may be obtained by the proper choice of electives.

The courses in the Manufacturing Methods area and Robotics are offered by both the Mechanical and the Industrial Engineering departments. Biomechanics and Biomedical Engineering are interdisciplinary areas offered by both the Mechanical and Electrical Engineering departments.

Mechanical Engineering Curriculum

Engineering Science, Engineering Design, Laboratory, and Elective semester credit hours requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGN 1100</td>
<td>Introduction to Engineering</td>
<td>1</td>
</tr>
<tr>
<td>EGN 3311</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3321</td>
<td>Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3365</td>
<td>Materials in Engineering</td>
<td>3</td>
</tr>
<tr>
<td>EMA 3702</td>
<td>Mechanics and Material Science</td>
<td>3</td>
</tr>
</tbody>
</table>

and a course in Mechanics and Materials Science Lab | 1 |

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EML 3126</td>
<td>Transport Phenomena</td>
<td>1</td>
</tr>
<tr>
<td>EML 3126L</td>
<td>Transport Phenomena Lab</td>
<td>1</td>
</tr>
<tr>
<td>EGN 3343</td>
<td>Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>EML 3101</td>
<td>Thermodynamics II</td>
<td>3</td>
</tr>
<tr>
<td>EML 3262</td>
<td>Kinematics &amp; Mechanisms Design</td>
<td>3</td>
</tr>
<tr>
<td>EML 4220</td>
<td>Mechanical Vibrations</td>
<td>3</td>
</tr>
<tr>
<td>EML 4312</td>
<td>Automatic Control Theory</td>
<td>3</td>
</tr>
<tr>
<td>EML 4140</td>
<td>Heat Transfer</td>
<td>3</td>
</tr>
<tr>
<td>EIN 3390</td>
<td>Manufacturing Processes</td>
<td>2</td>
</tr>
<tr>
<td>EIN 3390L</td>
<td>Manufacturing Processes Lab</td>
<td>1</td>
</tr>
<tr>
<td>EEL 3003</td>
<td>Electrical Engineering I</td>
<td>3</td>
</tr>
<tr>
<td>EEL 3111L</td>
<td>Circuit Lab</td>
<td>1</td>
</tr>
<tr>
<td>EML 3301L</td>
<td>Instrumentation &amp; Measurement Lab</td>
<td>1</td>
</tr>
<tr>
<td>EML 4906L</td>
<td>Mechanical Lab I</td>
<td>1</td>
</tr>
<tr>
<td>EML 4421L</td>
<td>Mechanical Lab II</td>
<td>1</td>
</tr>
<tr>
<td>EML 3500</td>
<td>Mechanical Design I</td>
<td>3</td>
</tr>
<tr>
<td>EML 4501</td>
<td>Mechanical Design II</td>
<td>3</td>
</tr>
<tr>
<td>EML 4706</td>
<td>Design of Thermal and Fluid Systems</td>
<td>3</td>
</tr>
<tr>
<td>EML 4905</td>
<td>Senior Design Project</td>
<td>4</td>
</tr>
<tr>
<td>EML 4906</td>
<td>Mechanical Engineering I</td>
<td>3</td>
</tr>
<tr>
<td>EML 4906L</td>
<td>Mechanical Engineering II</td>
<td>3</td>
</tr>
<tr>
<td>EML 4936</td>
<td>Mechanical Engineering Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**These courses are four contact hours to include a one hour non-credit tutorial.**

**The Senior Design Project is token in two consecutive semesters during the senior year.** During the first semester of their senior year, the student must register for one credit hour. At this time, the student has to finalize his or her design topic with individual faculty members. During the last semester, the student will register for three credit hours of the project.
Senior Design Project and complete the Project.

3Attendance during the senior year is a requirement for graduation.

A minimum grade of "C" or better is required for all ME courses in the ME curriculum.

A grade of "C" or better is required for all prerequisites in engineering courses. Any course taken without the required prerequisites and corequisites will be dropped automatically before the end of the term, resulting in a grade of "DR" or "DF".

Students may repeat a course two times only.

Students who are dismissed from the University due to low grades may appeal to the Dean for reinstatement. A second dismissal results in no possibility of reinstatement.

Laboratories

Over and above the laboratory requirements in Physics and Chemistry, the program consists of six semester hours of required Engineering laboratory work. The students are assigned three hours of laboratory work (one hour each in Instrumentation and Measurement Lab, Mechanical Lab I and II) which are specially devoted to solving design problems by using experimental methods. The laboratory experience includes the following areas: Circuits, Fluid Mechanics, Mechanics of Materials and Materials Testing, Advanced Applications in Fluid and Thermal Science, Instrumentation and Measurement, and Vibration Laboratory.

The elective areas offer the following additional laboratories: Air Conditioning and Refrigeration, Biomedical Engineering, Material Sciences, Computer Aided Design, and Computer Integrated Manufacturing.

Electives

The four concentration areas of the Mechanical Engineering program with some of their elective offerings are listed below.

**Fluids/Thermal Sciences and Energy Systems**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EML 3450</td>
<td>Energy Systems</td>
<td>3</td>
</tr>
<tr>
<td>EML 4411</td>
<td>Mechanical Power Theory</td>
<td>3</td>
</tr>
<tr>
<td>EML 4419</td>
<td>Propulsion Systems</td>
<td>3</td>
</tr>
<tr>
<td>EML 4421</td>
<td>Internal Combustion Engines</td>
<td>3</td>
</tr>
</tbody>
</table>

**Mechanics, Materials and Design**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EML 4601</td>
<td>Refrigeration and Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>EML 4601L</td>
<td>Refrigeration and A/C Lab</td>
<td>1</td>
</tr>
<tr>
<td>EML 4603</td>
<td>Air Conditioning Design I</td>
<td>3</td>
</tr>
<tr>
<td>EML 4608</td>
<td>Mechanical Systems in Environmental Control</td>
<td>3</td>
</tr>
<tr>
<td>EML 4702</td>
<td>Fluid Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>EML 4706</td>
<td>Design of Thermal and Fluid Systems</td>
<td>3</td>
</tr>
<tr>
<td>EML 4711</td>
<td>Gas Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>EML 5103</td>
<td>Intermediate Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>EML 5104</td>
<td>Classical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>EML 5152</td>
<td>Intermediate Heat Transfer</td>
<td>3</td>
</tr>
<tr>
<td>EML 5606C</td>
<td>Advanced Refrigeration and A/C Systems</td>
<td>3</td>
</tr>
<tr>
<td>EML 5615C</td>
<td>CAD in Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>EML 5708</td>
<td>Advanced Design of Thermal and Fluid Systems</td>
<td>3</td>
</tr>
<tr>
<td>EML 5709</td>
<td>Intermediate Fluid Mechanics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Biomechanics and Biomedical Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEL 5071</td>
<td>Bioelectrical Models</td>
<td>3</td>
</tr>
<tr>
<td>EEL 5085</td>
<td>Biomedical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>EGM 4580</td>
<td>Principles of Bioengineering</td>
<td>3</td>
</tr>
<tr>
<td>EGM 4580L</td>
<td>Biomedical Engineering Lab</td>
<td>1</td>
</tr>
<tr>
<td>EGM 4581</td>
<td>Biomechanics of Cardiovascular Systems</td>
<td>3</td>
</tr>
<tr>
<td>EGM 4582</td>
<td>Engineering Hemodynamics</td>
<td>3</td>
</tr>
<tr>
<td>EGM 4583</td>
<td>Orthopaedic Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>ELM 4585</td>
<td>Design of Biomedical Systems &amp; Devices</td>
<td>3</td>
</tr>
</tbody>
</table>

**Manufacturing and Robotics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIN 3354</td>
<td>Engineering Economy</td>
<td>3</td>
</tr>
<tr>
<td>EIN 3600</td>
<td>Introduction to Robotics</td>
<td>2</td>
</tr>
<tr>
<td>EIN 4391</td>
<td>Product Design for Manufacturing and Automation</td>
<td>3</td>
</tr>
<tr>
<td>EIN 4395</td>
<td>Computer Integrated Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>EML 4535</td>
<td>Mechanical Computer Aided Design</td>
<td>3</td>
</tr>
<tr>
<td>EML 4561</td>
<td>Introduction to Electronic Packaging</td>
<td>3</td>
</tr>
<tr>
<td>EML 5562</td>
<td>Advanced Electronic Packaging</td>
<td>3</td>
</tr>
</tbody>
</table>

Students must take six credit hours of electives.

Students with special needs may take other elective courses (not
listed above) with their advisor's permission. Students are not restricted to these four areas but may choose courses, with the advisor's consent, that will form a coherent concentration area. Special topics may be counted as an elective.

Financial Assistance
The faculty in the Mechanical Engineering Department is involved in a number of on-going funded research projects. Many graduate students are supported by these projects as research assistants. Additionally, some teaching assistantships, tuition waivers and scholarships are available.

Areas of Specialization
Air Conditioning and Refrigeration
Applied Mechanics
Bioengineering/Biomechanics
Computer Aided Engineering
Computer Integrated Manufacturing Design
Energy Systems
Environmental and Waste Management
Finite Elements Analysis
Fluids Mechanics
Heat Transfer
Material Sciences
Robotics
Thermal Science
Tribology
In order to specialize in the areas of manufacturing, students need to collaborate with the faculty of the Industrial Engineering Department.

Options in Mechanical Engineering
The following options are available:

Biomechanical/Biochemical Option
STA 3033 Introduction to Probability and Statistics for CS 3
EML 4585 Design of Biomedical Systems and Devices 3
EGM 4581 Biomechanics of Cardiovascular Systems 3
EGM 4582 Engineering Hemodynamics 3
EML 4930 Special Topics 3
Includes bioremediation, environmental restoration, and hazardous waste management.

Mechanical Engineering Program Requirements
First Semester: (16)
MAP 2311 Calculus I 3
CHM 1045 General Chemistry I 4
CHM 1045L General Chemistry I Lab 1
ENC 1101 Freshman Composition 1 3
Humanities 2 3
EGN 1100 Introduction to Engineering (Freshman and Lower Division) or
EML 3006 Concepts of Engineering (Upper Division Transfer students) 1
EGN 1110C Engineering Drawing
SLS 1501 Freshman Experience Seminar 1
Second Semester: (17)
MAP 2312 Calculus II 3
PHY 2048 Physics I with Calculus 5
PHY 2048L General Physics I Lab 1
CGS 2420 Programming for Engineers or equivalent 3
ENC 1102 Literary Analysis 1 3
Third Semester: (18)
MAP 2313 Multivariable Calculus 3
PHY 2049 Physics II with Calculus 5
PHY 2049L General Physics II Lab 1
EGN 3111 Statics 3
EGN 3365 Materials in Eng 3
Humanities 2 3
Fourth Semester: (16)
MAP 2302 Differential Equations 3
EGI 3321 Dynamics 3
EGN 3390 Manufacturing Processes 2
EGN 3390L Manufacturing Processes Lab 1
Social Science 2 3
EMA 3702 Mechanics and Materials Science 3
and a course in Mechanics and Materials Science Lab 1
Fifth Semester: (14)
EML 3126 Transport Phenomena 3
EML 3126L Transport Phenomena Lab 1
EGN 3343 Thermodynamics I 3
EML 3262 Kinematics and Mechanisms Design 3
EEL 3003 Electrical Engineering I 3
EEL 3111L Circuits Lab 1
Sixth Semester: (16)
EML 4220 Mechanical Vibrations 3
EML 3301L Instrumentation and Measurement Lab 1
EML 3101 Thermodynamics II 3
EML 4140 Heat Transfer 3
EML 3500 Mechanical Design I 3
Humanities/Social Science 2 3
Seventh Semester: (17)
EML 4312 Automatic Control Theory 3
EML 4501 Mechanical Design II 3
EML 4706 Design of Thermal and Fluid Systems 3
EML 4905 Senior Design Project 1
EML 4906L Mechanical Lab I 1
Engineering Elective I 3
Social Science 3
Eighth Semester: (13)
EML 4421L Mechanical Lab II 1
EML 4905 Senior Design Project 3
EML 4936 Mechanical Engineering Seminar 0
Mechanical Engineering Elective II (Design) 3
Mathematics Elective 3
Humanities/Social Science Course 3
Note: If not previously taken in High School.
EGS 1110 Engineering Drawing
EGN 3123 CAD 3
1 Gordon Rule courses requiring a "C" or better.
2 All entering freshmen must satisfy the core curriculum requirements.
Note: All entering freshmen must satisfy a summer residency require-
Course Descriptions

Definition of Prefixes
EGM - Engineering Mechanics; EGN - Engineering; General; EMA - Engineering; Materials; EML - Engineering: Mechanical

EGM 3311 Analysis of Engineering Systems (3). Analysis of engineering problems, from modeling principles to their solution via linear and non-linear differential equations. Lumped parameter analysis and numerical methods available for solutions. Prerequisites: MAP 2312 and EGM 3321.

EGM 3503 Applied Mechanics (3). Statics and dynamics of solids and fluids. Science of engineering materials. Open to non-mechanical engineering students only. Prerequisite: Permission of instructor.

EGM 4580 Principles of Bioengineering (3). Medical instrumentation and design, regulations for medical devices, application of computers in medicine, biomaterials, biocommunications, artificial implants, clinical engineering. Prerequisite: Permission of instructor.

EGM 4580L Biomedical Engineering Lab (1). Introduction to the principles of biological signal measurements, biological data acquisition and image processing. Prerequisite: Permission of instructor.

EGM 4581 Biomechanics of Cardiovascular Systems (3). Functional cardiovascular physiology and anatomy; analysis and computation of cardiovascular flow; constitutive properties of tissue; coronary and systemic circulation; flow and stress considerations in cardiovascular assist devices. Prerequisites: EMA 3702 and EML 3126.

EGM 4582 Engineering Hemodynamics (3). Fluid Mechanics of the circulatory system, rheology of blood, lubrication mechanics. Prerequisite: EML 3126 and EML 3126.

EGM 4583 Orthopedic Biomechanics (3). Introduction to the fundamentals of human musculoskeletal physiology and anatomy and computation of mechanical forces as it applies to orthopaedic biomechanics. Prerequisites: EGN 3321 and EMA 3702.

EGM 4610 Introduction to Continuum Mechanics (3). Introduction to modern continuum mechanics, mathematical preliminaries, stress and equilibrium, deformations and compatibility, constitutive equations, balance laws, problems solution strategies. Prerequisite: EMA 3702.

EGM 5315 Intermediate Analysis of Mechanical Systems (3). First course at the graduate level in the analysis of mechanical systems. Modeling of both system and analytical and numerical methods of solution of the governing equations will be studied. Fluid and thermodynamic systems will be emphasized in this course. Prerequisite: EGM 3311 or permission of instructor.

EGM 5354 Finite Element Method Application in Mechanical Engineering (3). Utilize the finite element method to solve problems in heat transfer, fluid dynamics, diffusion, acoustics, vibration, and electromagnetism, as well as the coupled interaction of these phenomena. Prerequisites: CGS 2420, EMA 3702, and EML 4140.

EGM 5346 Computational Engineering Analysis (3). Application of computational methods to mechanical engineering problems of transnational, rotational, control, thermal and fluid systems employing linear/nonlinear system elements. Prerequisites: CGS 2420 or equivalent; MAP 2302, EML 3222, EML 3126, EML 4140, or permission of instructor.


EGM 5935 Review of Topics in Mechanical Engineering (4). To prepare qualified candidates to take Mechanical Engineering PE written examination. Reviewed courses include Thermodynamics, Fluid Mechanics, Mechanics of Materials, Mechanical Design and Heat Transfer.

EGN 1100 Introduction to Engineering (1). Course will provide a broad exposure to the engineering profession by entering freshmen.

EGN 1110C Engineering Drawing (3). Laboratory experiences in the principles and practice of idea development and expression through free hand sketching and conventional instrument drafting. A beginning course for students with no prior drafting experience.

EGN 2010 Engineering Systems II (3). Similarities in fluid, mechanical, thermal and electrical systems, modeling equivalent elements, constructing systems and analyzing system response, gateway course. Prerequisites: MAP 2312 and PHY 2048.

EGN 3311 Statics (3). Forces on particles, and two and three dimensional rigid bodies, equilibrium of forces, moments, couples, centroids, section properties, and load analysis of structures; vector approach is utilized. Prerequisites: EGM 3311 and PHY 2048.

EGN 3321 Dynamics (3). Study of the motion of particles and rigid bodies, conservation of energy and momentum. A vector approach is utilized. Prerequisites: EGM 3311 and PHY 2048.

EGN 3343 Thermodynamics I (3). Fundamental concepts of basic thermodynamics including first and second law topics, equations of state and general thermodynamic relationships. Prerequisites: MAP 2312, PHY 2048 and CHM 1045.

EGN 3365 Materials in Engineering (3). A study of materials used in engineering. Includes atomic structure phase diagrams and reactions within solid materials. Prerequisite: CHM 1045.

EGN 5126 Industrial Materials and Engineering Design (3). Industrial materials, material selection, and engineering design process, including synthesis, analysis, optimization, and evaluation.

Mechanics, Mechanic of Materials, Material Science and Thermodynamics.

EMA 3066 Polymer Science and Engineering (3). Introduction to preparation, molecular structure, property relationships, processing and applications of macromolecular materials. Prerequisite: EGM 3365.

EMA 3521L Mechanics and Materials Science Lab (1). Introduction to measurements of basic mechanical properties of materials. Experiments including tension, bending, torsion, fatigue, buckling, strain gage, and stress visualization. Prerequisites: MAP 2312, EGN 3311. Corequisite: EMA 3702.

EMA 3702 Mechanics and Materials Science (3). A midlevel course addressing the selection of engineering materials based on static and dynamic loadings, environmental analysis and the experimental analysis of mechanical systems. Emphasis on metals and composite materials. Prerequisites: MAP 2312 and EGN 3311.

EMA 4121 Physical Metallurgy (3). Correlation of properties, structural and mechanical history, thermal history and service behavior of various metals and their alloys. Prerequisite: EGN 3365.

EMA 4121L Materials Laboratory (1). Laboratory techniques in materials, including metallography, mechanical testing, heat treatment and non-destructive testing techniques. Prerequisite: EGN 3365.

EMA 4223 Mechanical Metallurgy (3). Fundamentals of plastic deformation of crystalline solids, elementary theory of statics and dynamics of dislocations, applications to deformation of single crystals and polycrystals, fracture of metals. Prerequisites: EGN 3365 and EMA 3702.

EMA 5295 Principles of Composite Materials (3). The mechanical behavior of composite materials used in the automotive, aircraft and sporting goods industries. Material and lamellar properties, design of composites, failure analysis, and environmental effects. Prerequisite: EGM 3615 or permission of instructor.

EMA 5507C Analytical Techniques of Materials Science (3). Fundamental theories and techniques of the analytical methods for materials including X-ray diffraction, scanning and transmission electron microscopy, thermal and surface analysis, and vacuum systems. Prerequisite: EGN 3365.

EMA 5584 Biomaterials Science (3). Materials used in prostheses for skin and soft tissue, vascular implant devices, bone repair, and artificial joints. Structure-property relationships for biological tissue. Prerequisites: EGN 3365, and EMA 3702.

EMA 5935 Advanced Topics in Materials Engineering (3). Topics include Thermodynamics of solids, principles of physical metallurgy, including phase transformation and diffusion and analytical methods in materials engineering.

EML 3006 Concepts of Engineering (1). This course will provide a broad exposure, "Birds-eye" view of engineering profession to juniors and seniors.

EML 3101 Thermodynamics I (3). Topics include Thermodynamics of solids, principles of physical metallurgy, including phase transformation and diffusion and analytical methods in materials engineering.

EML 3126 Transport Phenomena (3). Fundamental principles of transport phenomena: Governing Equations; Compressible Flow. Prerequisite: EGN 3321.

EML 3126L Transport Phenomena Laboratory (1). Experiments illustrating the principles of transport phenomena: wind tunnel, shock tubes, airfoils. Prerequisite: EGN 3321.

EML 3222 Systems Dynamics (3). Introduction to modeling of mechanical systems; derivation of system equations and system's response of fluid, thermal, and vibrational systems. Solution methods available will be discussed. Prerequisites: MAP 2302 or EGM 3311, EGN 3321, EMA 3702, CGS 2420 or permission of instructor.

EML 3262 Kinematics and Mechanisms Design (3). Fundamentals of kinematics and mechanism design; study of the mechanisms used in machinery and analysis of the motion. Two and three dimensional analytical and numerical methods of computer application and design is emphasized. Prerequisites: EGN 3321 and CGS 2420.

EML 3301C Instrumentation (3). A practical study of common instrumentation techniques. Use of instrumentation and measurement methods to solve problems is emphasized. Prerequisite: EEL 3003.

EML 3301L Instrumentation and Measurement Laboratory (1). A practical study of common instrumentation elements and measurement systems used in mechanical and electro-mechanical applications. Prerequisites: EEL 3003 and EEL 3111L.


EML 3500 Mechanical Design I (3). Design of basic machine members including shafts, springs, bolts, clutches, chains, etc., Prerequisites: EGN 3321, EMA 3702, and EGN 3365.

EML 3800 Practices in Mechanical Engineering (2). This course will provide the mechanical engineering student with knowledge of the current practices in the field of mechanical engineering. Prerequisites: EGN 3343, EGN 3365, EML 3126 and EMA 3702.

EML 4140 Heat Transfer (3). Study of fundamentals of basic heat transfer including conduction, convection, and radiation. Computer applications and design problems emphasized. Prerequisites: CGS 2420, EGN 3343, EML 3126, and MAP 2302.

EML 4220 Mechanical Vibrations (3). Theory and application of mechanical vibrations. Includes damped and undamped vibrations with one or more degrees of freedom computer methods emphasized. Prerequisites: EGN 3321, EMA 3702, and CGS 2420.

EML 4246 Tribological Design for Machines and Elements (3). Introduction to friction and wear, analysis of tribological systems, and applications of Tribological Principles to machine and machine element design. Prerequisites: EML 4501 or permission of instructor.

EML 4260 Dynamics of Machinery (3). Acceleration and force analysis of reciprocating and rotating mechanisms and machines. Dynamic balancing of idealized systems, Torsional and lateral critical
speeds of a rotor and self-excited instability. Prerequisite: EGN 3321.

EML 4312 Automatic Control Theory (3). Feedback control systems; stability analysis; graphical methods. Applications with emphasis on hydraulic, pneumatic and electro-mechanical devices. Prerequisites: EGN 3321, MAP 2302 or EGM 3311, CGS 2420 or permission of instructor.

EML 4411 Mechanical Power Theory (3). Study of various techniques used in generating power. Emphasis of large central station power plants. Prerequisites: EGN 3343 and EML 3101.


EML 4421L Mechanical Lab II (1). Experiments in internal combustion engines, gas turbines, steam turbines, ballers. Prerequisites: EGN 3343 and EML 4140.

EML 4501 Mechanical Design II (3). Continuation of design analysis of elementary machine elements, including lubrication bearings, and gears. Introduction to advanced analysis techniques. Prerequisite: EML 3500.

EML 4503 Production Machine Modeling and Design (3). The modeling of metal removing, forming, and polymer processing operations will be introduced. The design of production machines will be discussed based on the models. Prerequisite: Senior or graduate standing.

EML 4525 Mechanical Design Synthesis and Analysis (3). This course is an introduction to the use of numerical simulation tools in the areas of mechanical design. Finite element analysis and other numerical simulation techniques will be used to analyze and synthesize real life design problems. Prerequisite: EML 3500.

EML 4535 Mechanical Computer Aided Design (3). Introduction to computer in the design process. Course emphasizes the use of interactive computing and computer graphics in developing CAD applications. Programming project is required. Prerequisites: CGS 2420 and EGN 3321.

EML 4561 Introduction to Electronic Packaging (3). Introduction to mechanical packaging of electronic systems. Integrates concepts in mechanical engineering to the packaging of electronic systems, such as hybrid microelectronics. Prerequisites: EML 3126 and EGN 3321.

EML 4565 Design of Biomedical Systems and Devices (3). Mechanical design and material choices of various biomedical systems and devices such as cardiovascular assist devices, total artificial heart, pulmonary assist devices, total hip prosthesis and other orthopaedic devices. Prerequisites: EGN 3365, EMA 3702, EML 3126 or permission of instructor.

EML 4601 Refrigeration and Air Conditioning (3). Application of principles of Heating, Ventilation, Refrigeration, and Air Conditioning to design problems. Prerequisite: EGN 3343 or permission of instructor.

EML 4601L Refrigeration and Air Conditioning Lab (1). Experiments in Air Conditioning and Refrigeration applications.

EML 4603 Air Conditioning Design I (3). Psychometry comfort; mechanical refrigeration; heat pumps load calculations; cooling coil performance; heating and humidification; and distribution duct design fans. Prerequisite: Senior standing or permission of instructor.

EML 4608C Mechanical Systems in Environmental Control (3). Analysis of refrigeration, heating and air distribution systems. Synthesis of environmental control systems. Prerequisite: EGN 3343.

EML 4702 Fluid Dynamics (3). A mid-level course on ideal fluid flow, compressible flow and viscous flow. Analysis and numerical techniques of continuity and Navier-Stokes equation for incompressible and compressible flow. Prerequisite: EML 3126.

EML 4706 Design of Thermal and Fluid Systems (3). Design of thermal and fluid systems and components.
EML 4949 Co-op Work Experience (3). Supervised full-time work experience in engineering field. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.

EML 5103 Intermediate Thermo dynamics (3). Thermodynamic approach to processes and engines; alternative formulations and Legendre transformations; maxwell relations, first and second order phase transitions. Prerequisites: EML 3101 and EGM 3311.

EML 5104 Classical Thermodynamics (3). Mathematical analysis of the laws of classical reversible and irreversible thermodynamics. Applications to mechanical, electromagnetic, and chemical systems, under ideal and real current interest. Prerequisite: EML 3101.


EML 5385 Identification Techniques of Mechanical Systems (3). FFT, time series analysis and neural networks are introduced. Applications of these techniques are discussed for identification of mechanical structures and machine diagnostics. Prerequisite: EML 4312.

EML 5509 Mechanical Design Optimization (3). Finite element analysis and sensitivity analysis combined with numerical optimization techniques to optimize the design. Prerequisite: EGM 5254 or permission of instructor.

EML 5514 Aerodynamics and Flight Mechanics (3). Fundamentals of aerodynamics; defense of aerodynamic theories, analysis of aerodynamic forces, optimum performance, and flight stability and control. Prerequisites: EGN 3321, EML 3126, EGN 3343.

EML 5519 Fault-Tolerant System Design (3). Fault tolerance in mechanical, manufacturing, computer, and aerospace systems. Basic stages of fault isolation, fault tolerance measures, architectures, and mechanical system design methodologies. Prerequisite: Permission of instructor.

EML 5528 Digital Control of Mechanical Systems (3). Discrete modeling of mechanical systems. Digital feedback systems. Computer interface of mechanical systems. Controller design with emphasis on hydraulic, pneumatic, and electromechanical devices. Prerequisite: Permission of instructor.

EML 5530 Intermediate Computer Aided Design/Computer Aided Engineering (3). Computer aided geometrical modeling of spatial mechanical systems. Design criteria and analytical approaches for planar kinematic systems will be emphasized. Prerequisites: EML 4535 or permission of instructor.

EML 5552 Advanced Electronic Packaging (3). Advanced topics in electronic packaging. Evaluation of first through fourth level assembly. Applications of computer layout design, thermal management and mechanical stability analysis. Prerequisite: EML 4561 or permission of instructor.

EML 5599 Heat Pipe Theory and Applications (3). Heat pipe theory, heat pipe design and its applications; especially in the areas of energy conversion and conservation. Prerequisite: Permission of instructor.

EML 5606C Advanced Refrigeration and Air Conditioning Systems (3). The various methods used in the thermal design and analysis of both refrigeration and heat pump systems are investigated. Various methods of producing heating and cooling are examined including vapor compression, absorption, air cycle, steam jet, thermoelectric, solar heating and cooling systems. Prerequisite: EML 4603.

EML 5708 Advanced Design of Thermal and Fluid System (3). Advanced design of pumps, compressors, heat exchangers, HVAC systems and thermal and fluid control devices. Prerequisite: EML 4706.

EML 5709 Intermediate Fluid Mechanics (3). Basic concepts and scope of fluid dynamics; non-inertial reference frames; two-dimensional potential theory; Applications to airfoils. The Navier-Stokes equations; selected exact and approximate equations. Prerequisite: EML 3126.

EML 5748 Boundary Layer Theory (3). Advance fluid dynamics to analyze the Navier-Stokes equation. Focus will be on solutions of thermal and fluid boundary layers. Prerequisite: EML 3126.

EML 5810 Control Technology for Robotic Systems (3). State-space equations of robots. Controller design based on linearization, non-linearity cancellation, optimal control, adaptive control and other methods. Stability analysis, performance comparison. Prerequisites: EGN 3321, EML 4312 or equivalent; or approval of the instructor.

EML 5825 Sensors and Applied Machine Intelligence (3). Sensors, signal analysis techniques, and error compensation methods will be introduced for machine intelligence. Prerequisites: EML 4312, Production Machine Modeling and Design, or equivalent, or permission of instructor.
Engineering Professional Development
Dr. Irma Fernandez, STAC Director
Laura Ruiz, FEEDS Coordinator
Florida Engineering Education Delivery System (FEEDS) provides graduate engineering education courses to place-bound professionals located throughout the State via video tape and ITFS.

STAC, The Southern Technology Applications Center (STAC) is an important link in a far-reaching network of technology transfer resources sponsored by the State University System of Florida and the National Aeronautics and Space Administration (NASA). STAC functions as the NASA Southeast Regional Technology Transfer Center (RTTC) to assist private sector clients in obtaining and applying technology and critical knowledge to produce technological innovation on scales. It also provides proactive linkages with a wide range of university, government and industry organizations to help companies commercialize technology and remain competitive in the marketplace.

Engineering Software Institute (ESI) provides national seminars on engineering specific software. ESI is an authorized Intergraph Training Center and Bridgeport E2CAM Educational Center.

Strategic Commercial Utilization Initiative (SCUI), a regional technology transfer center directed at minority manufacturing for economic development by linking engineering schools, federal labs, and minority manufacturers.

SCUI Seminars on P.E. and E.I.T.
Revies, Power Management, and Quality Management Seminars.

Satellite downlinks for presentation of national seminars on topics relating to manufacturing engineering, quality management, and SBIR proposals.

ITFS closed circuit broadcast of courses, training sessions and seminars, is available in Dade and Broward County.

Pictoretel Telecommunications is available throughout Florida.

School of Design
Iraj E. Majzub, Professor, Interim Director and Associate Dean
Edward T. Baker, Assistant Professor
Juan A. Bueno, Associate Professor
Cladia Busch, Assistant Professor
Jaime Canaves, Associate Professor
Reid Ewing, Associate Professor
Christopher Fannin, Assistant Professor
Joseph Ford, Lecturer
Rene Gonzalez, Assistant Professor
Gisela Lopez-Mata, Associate Professor
Camilo Rosales, Assistant Professor
John Stuart, Assistant Professor

The School of Design is dedicated to advancing the professions of architecture, urban planning, landscape architecture, and interior design. In keeping with the nature of these professions, the programs are taught in an interdisciplinary manner, taking full advantage of the resources and areas of expertise offered by each.

Only "C" grades or higher are accepted for transfer of applicable prerequisite and core courses from other institutions. No grade below a "C" will be accepted for graduation in prerequisite or core courses.

Student work submitted to the School in satisfaction of course or degree requirements, becomes the physical property of the School. However, students retain all rights to the intellectual property of such work. This work may include papers, drawings, models, and other materials. The School assumes no responsibility for safeguarding such materials. At its discretion, the School may retain, return, or discard such materials. The School will not normally discard the materials of current students without giving them a chance to reclaim them.

Students must petition the faculty of the School in writing for any deviation from the established policies. The faculty will decide on the cases on an individual basis.

Community Involvement
The School maintains close ties with the architecture, landscape architecture, and interior design industries. Industry advisory committees periodically review the curriculum to maintain program relevance.

Admission Preparation
Prospective students who are considering majors within the School of Design must meet the University's general admission requirements. The School's academic programs require specific prerequisite preparation prior to enrollment in certain courses. Students should check individual program requirements.

Bachelor of Design in Architectural Studies

Degree Program Hours: 128
This preprofessional program provides the student with a broad base of multidisciplinary knowledge related to the field of architecture. Graduates are prepared for entry into a professional Master of Architecture program. Emphasis is on the balance between the technical, managerial, theoretical and design aspects of architecture. Additionally, computers are treated not as a specialty but rather as a tool to be integrated into the various areas of study including design, construction documents, management, structures, scheduling, cost estimating and environmental controls. Many of the courses are taught in an interdisciplinary environment sharing expertise with construction management, interior design, and landscape architecture.

Lower Division Preparation
To qualify for admission to the program, normally FIU undergraduates must have met all the lower division requirements including CLAST. In addition, FIU undergraduates with less than 36 semester hours, must meet all the University Lower Division Core Requirements.

Lower Division Common Core (40)

| ARC 1131 | Graphic Communication I | 3 |
| ARC 1301 | Design I | 4 |
| ARC 1461 | Methods & Materials of Construction I | 3 |
| ARC 2132 | Graphic Communication II | 3 |
| ARC 2212 | Introduction to Design Theories (H) | 3 |
| ARC 2302 | Design 2 | 4 |
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ARC 2701 Survey of Architectural History (H) 3
ARC 2303 Architectural Design 3 4
ARC 2304 Architectural Design 4 4
CGS 2060 Introduction to Microcomputers (M) 3

(M) Fulfills mathematics requirements.
(H) May fulfill humanities requirements. Check with Departmental Advisor.

Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog’s General Information for Admission and Registration and Records.

Upper Division Transfer Applicants

Completion of an Associate's degree in Pre-Architecture or a related field or completion of at least 60 semester hours and submission of a portfolio, is required of all upper division transfer applicants. All applicants will have their credentials reviewed by the Faculty Admissions Review Board prior to full admission to the program. Conditional admission can be granted pending review of credentials. Applicants should consult the department for specific information.

Graduation Requirements

To graduate, students must complete all of the Lower Division Common Core requirements, General Education or Core Curriculum requirements for undergraduates as established by the university, all Upper Division Program Core Requirements.

All upper division students must complete a minimum of 68 semester hours to graduate, which include the following core requirements or their equivalent.

Upper Division Program (49 minimum)

Major Requirements

ARC 3483 Methods and Materials of Construction I 3
ARC 4558 Computers Applications in Architecture 3
ARC 4270 Professional Office Practice 3
ARC 4324 Architectural Design 5 4
ARC 4336 Architectural Design 6 4
ARC 4338 Architectural Design 7 4
ARC 4343 Architectural Design 8 4
ARC 4553 Structural Design 4
ARC 4783 Architecture of the 19th & 20th Century 3
ARC or LAA History or Theory Elective 3
BCN 3402 Structures I 3
BCN 3611 Construction Cost Estimating 3
BCN 4561 Environmental Controls 4
IND 2430 Lighting Design 3

Upper Division Electives (9)

Selected with an advisor to meet degree requirements and program objectives (ARC-BCN-LAA)

Bachelor of Science in Interior Design

Degree Program Hours: 120

The Interior Design program is designed to enable graduates to work with other professionals such as architects and engineers in the design of commercial and institutional projects. The program incorporates the recommendations and standards of national and local professional societies and prepares students for work in a design firm or for self-employment at the professional level.

The interdisciplinary program allows students to integrate the technical, managerial, theoretical and design aspects of Interior Design.

The program has developed a strong relationship with the trade and practicing professionals exemplified by the Designers Lecture Series and Annual Festival of the Trees.

Lower Division Preparation

To qualify for admission to the program, FIU undergraduates must have met all lower division university requirements including CLAST and must otherwise be acceptable to the program. In addition, FIU undergraduates with less than 30 semester hours must meet all of the University Lower Division Core Requirements.

Lower Division Common Core

ARC 1131 Graphic Communication I 3
ARC 1301 Design I 4
ARC 1461 Methods & Materials of Construction I 3
ARC 2132 Graphic Communication II 3
ARC 2212 Introduction to Design Theories (II) 3

ARC 2302 Design 2 4
ARC 2701 Survey of Architectural History (H) 3
CGS 2060 Introduction to Microcomputers (M) 3
IND 2 Interior Design 4
IND 2100 History of Interiors 1 3
IND 2130 History of Interiors 2 or equivalent 3

(H) May fulfill humanities requirement (check with advisor)

(M) Fulfills mathematics requirements.

Upper Division Transfer Applicants

Completion of an Associate's degree in Interior Design or related field or completion of at least 60 semester hours. Conditional admission can be granted pending review of credentials. Applicants should consult the department for specific information.

Graduation Requirements

To graduate, students must complete all of the Lower Division Common Core requirements, General Education or Core Curriculum requirements for undergraduates as established by the university, all Upper Division Program Core Requirements for Interior Design review by faculty advisor.

Upper Division Program: (47)

Major requirements: (44)

IND 2210 Interior Design 5 4
IND 2220 Interior Design 6 4
IND 2221 Interior Design 7 4
IND 4441 Furniture Design 3
IND 4 Interior Design 8 3
IND 4 Interior Design Research 1
IND 4311 Media & Methods of Presentation 3
IND 4501 Interior Design Practice 3
IND 2423 Sources, Materials & Cost Estimating for Interiors 3
IND 3 Interior Design Construction Drawing I 3
IND 3451 Interior Design Construction Drawing 2 4
IND 2430 Lighting Design 3
BCN 4561C Environmental Controls I 3
ARC 4058 Computers in Architecture 3
Electives (3)
Selected with an advisor to meet degree requirements and program objectives.

Course Descriptions

Definition of Prefixes
ARC-Architecture; IND-interior Design; LAA-Landscape Architecture
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

ARC 1001 Introduction to Design (3).
A practical introduction to the professional, technical, and aesthetic aspects of architecture, interior design, landscape architecture, and environmental and urban systems.

ARC 1131 Graphic Communication I (3).
The introductory graphic and drafting course. Basic techniques and materials: orthographic and isometric projections, perspective, freehand and mechanical drawings, lettering, pencil, ink, film, papers, and boards. Corequisite: ARC 1301. (F)

ARC 1136 Portfolio Design 1 (3).
An introduction to creating, binding, and reproducing graphic materials for presentation.

ARC 1137 Portfolio Design 2 (3).
The second course in Portfolio Design. Students will develop their own portfolios using a variety of techniques. Prerequisite: Portfolio Design 1.

ARC 1301 Design I (4).
An introduction to the basic perceptual, social, cultural, environmental and technical issues of design. Corequisite: ARC 1131. (F)

ARC 1461 Methods and Materials of Construction I (3).
The first course in methods and materials. Physical and chemical properties of materials, manufacture, size and shape, and performance under normal loads in a variety of light construction assemblies. (F)

ARC 1930 Special Topics/Architectural Design I (4).
An introduction to the basic perceptual, social, cultural, environmental and technical issues of architectural design. Basic architectural design projects. (F)

ARC 2132 Graphic Communication II (3).
The second course in graphic communication. Students will develop presentation skills and broaden their visual experience. Presentations will incorporate two and three-dimensional design elements. Prerequisite: ARC 1131, ARC 2302 (Corequisite). (S)

ARC 2210 Design Concepts (3).
Introduction to principles of design and perception, study of user's need for relationship with environmental and human factors. Examination of design ideas and their development. (S)

ARC 2212 Introduction to Design Theories (3).
Introduction to the environmental parameters, morphological concepts and ideological principles that generate form and meaning in architecture and landscape architecture. (F)

ARC 2302 Design 2 (4).
Integration of the natural and built environments with psychological, functional, organizational, spatial and environmental forces. Prerequisite: ARC 1301, ARC 2131 (Corequisite).

ARC 2303 Architectural Design 3 (4).
Methodology of planning and design of architectural projects. Solutions to design problems emphasizing space, form, textures, color, orientation, and structure. Prerequisites: ARC 1461, ARC 2302, and ARC 2212. (S,SS)

ARC 2304 Architectural Design 4 (4).
Research on community design and affordable housing issues serves as a point of departure for the development of architectural design solutions focused on creating appropriate residential environments. Prerequisites: ARC 2303 and ARC 2701. (F,SS)

ARC 2701 Survey of Architectural History (3).
Comprehensive study of architectural forms, styles and construction techniques throughout history. (F,SS)

ARC 3057 Computer Graphics in Design (3).
An intensive hands-on introduction to software for processing text and graphics, as it relates to the field of graphic design. Various computer applications in design. Prerequisite: CGS 2060.

ARC 3133 Graphic Communication (3).
To develop the understanding and graphic skills necessary to the conception and communication of design and engineering technology. The course is flexible in order to accommodate different student backgrounds. Basic graphic methods and media including orthographic and isometric projection; one and two-point perspective; composition, lettering, and presentation techniques.

ARC 3463 Methods and Materials of Construction II (3).
Methods, materials, and details of general construction emphasizing the physical and chemical properties of materials; the behavior of materials and assemblies under normal applied loads. Prerequisites: ARC 1461 and BCN 1252. Corequisite: BCN 3257. (F)

ARC 3464 Materials and Methods of Construction (3).
A study of the types of construction and materials used in building interiors. How materials are properly installed and inspected, including the use of special equipment, in accordance to drawings, specifications, codes, standards, and agencies' recommendations.

ARC 4058 Computer Applications in Architecture (3). Advanced study of computer software packages applicable to the architecture office environment, with particular emphasis on CAD software, graphics packages and Desktop Publishing. Prerequisite: CGS 2060 or equivalent. (F,SS)

ARC 4270C Professional Office Practice (3).
Assignments in office administration, negotiation of contracts, fee structure, client and public relations, business organization, procedure scheduling and task allocation within an architectural office. Prerequisite: Senior standing. (F)

ARC 4324 Architectural Design 5 (4).
Integration of cultural, aesthetic, environmental, economic, structural and programmatic determinants in the resolution of moderately complex architectural programs. Prerequisites: ARC 2304 and BCN 3402C. (F,SS)

ARC 4335 Architectural Design 6 (4).
Fundamentals of site planning and design. Emphasis is on the integration of building and site through careful consideration of spatial, environmental and formal characteristics of the project. Prerequisites: ARC 2304. (SS)

ARC 4342 Architectural Design 7 (4).
Integration of cultural, aesthetic, environmental, economic, structural and programmatic determinants in the resolution of complex architectural problems. Prerequisites: ARC 2304. (F,SS)

ARC 4343 Architectural Design 8 (4).
Architectural design solutions for
complex problems requiring research and integration of innovative building concepts and state-of-the-art technological developments. Prerequisite: ARC 2304. (F,S,SS)

ARC 4553 Structural Design (4). Elements of structural design in steel, reinforced concrete, and timber, with design specifications per AISC, ACI and NDS. Introduction to prestressed concrete design. Loads and structural elements commonly encountered in construction will be used for analysis and design. Prerequisite: BCN 3402C or equivalent. (S)

ARC 4696 Basic Utilities and Housing (3). The study of the importance of basic utilities (such as roads, sewer and water supply systems) in housing planning and construction. A relative cost analysis. Health problems and sociological effects of lack of basic utilities. Innovative concepts to incorporate basic utilities to all housing projects in developing countries. Prerequisite: Permission of instructor.

ARC 4752 American and Colonial Architecture (3). A study of architectural forms, patterns and styles reflecting colonial environments, including the United States, Southeast Asia and Post-Columbian America. Prerequisite: ARC 2701 or equivalent.

ARC 4783 Architecture of the 19th and 20th Centuries (3). A study of the development of architectural forms, styles and theories of the 19th and 20th centuries in relation to the socio-political and artistic evolution of the designed environment. Prerequisite: ARC 2701 or equivalent. (F,S)

ARC 4799 The Architecture and Landscape Architecture of South Florida (3). Overview of the natural resources, cultural traditions and architectural precedents which have influenced the regional architecture and landscape architecture of South Florida. Prerequisite: Departmental approval. (S,S)

ARC 4905 Independent Study (1-5). Specialized individual studies under supervision of faculty advisor. Consent of faculty advisor required. Prerequisite: Departmental approval. (F,S)

ARC 5176C Computer Practices in Design II (3). Advanced study in concepts, tools and methods of computer-aided architectural design. Prerequisite: ARC 4056 or equivalent.

ARC 5916 Innovations in Building Technology (3). Experimental approach to new materials and methods applicable to the field of construction. Prerequisite: Senior standing.

EIN 1931 Special Topics/Industrial Design I (4). An introduction to the basic perceptual, social, cultural, environmental and technical issues of industrial design. Basic industrial design projects. (F)

IND 1932 Special Topics/Interior Design I (4). An introduction to the basic perceptual, social, cultural, environmental and technical issues of interior design. Basic interior design projects. (F)

IND 2100 History of Interiors I (3). An analysis of the history of architectural interiors, furniture and decorative arts from ancient times through the Neo-Classical Period. Prerequisite: ARC 2701. (F)

IND 2130 History of Interiors II (3). An analysis of the history of architectural interiors, furniture and decorative arts from the Neo-Classical Period to the present. Prerequisite: IND 2100. (SS)

IND 2210 Interior Design 5 (4). Consideration and application of design criteria with an emphasis on planning and design of interiors for small offices, businesses and other work environments. Students develop programs, work on space planning, as well as furniture selection, illumination and selected architectural details. Prerequisite: ARC 2303. (F)

IND 2220 Interior Design 6 (4). Analysis, programming and design of commercial facilities including stores, restaurants and galleries. Students research the functions, and requirements of the project; design the interior spaces, develop architectural details and work on the selection of furniture and finishes. Prerequisite: IND 2210. (S)

IND 2221 Interior Design 7 (4). Analysis of the human condition in design. Topics include the behavioral and environmental sciences, ergonomics, and ecology and their impact on design. (F)

IND 2423 Sources, Materials, and Cost Estimating for Interiors (3). Sources and materials used by interior designers in the development of a design project. Materials available in the market for furniture finishes and equipment and its costs are analyzed. Prerequisite: IND 2210.

IND 2430 Lighting Design (3). A fundamental course in lighting with emphasis on interaction with the design of an interior space. Prerequisites: BCN 4561C and IND 2210. (F,S)

IND 3450 Interior Design Construction Drawing 1 (3). Development of Interior Design working drawings with emphasis on detailing and cabinetry. Prerequisites: ARC 2132.

IND 3451 Interior Design Construction Drawing 2 (3). Development of Interior Design working drawings with emphasis on details and schedules. Prerequisite: IND 3450. (F)

IND 4311 Media and Methods of Presentations (3). Applications of media and materials used in presentation of design concepts and programs to clients, groups, and organizations. Emphasis on visual and graphic techniques available, their application and use in simple and detailed communications. Corequisite: IND 2210. (F)

IND 4441C Furniture Design (3). Introduction to the human factors, concepts, function, materials and techniques of furniture design. (S)

IND 4501 Interior Design Practice (3). The student will be introduced to the specific skills necessary to succeed in the preparation of legal documents and specifications. Prerequisites: BCN 3611 and IND 2210. (S)

IND 4905 Final Project (4). Simulated conditions of an interior design commission assuming all responsibilities of a professional interior designer, providing all required services including: cost estimate, contract, conceptual design drawings, selection of furniture and accessories, lighting systems, and treatment of walls, floors and ceilings. Prerequisite: Completion of Interior Design curriculum. (F,S)

Interior Design Research (1). Research required prior to registering Interior Design 8. Prerequisite: IND 2220 and IND 2221.

Interior Design 8 (3). The final studio involves projects of increased scale and complexity. The studio emphasizes the diversity of aspects that integrate the design process from conceptual formulations and programming to the full development of the design thesis. Prerequisite: In
interior Design. Research and the completion of all the Interior Design Studios.

LAA 1933C Landscape Design I (4). An introduction to the basic perceptual, social, cultural, environmental and technical issues of landscape architecture design. Basic landscape architecture design projects.

LAA 2934C Landscape Design II (4). An introduction to proportioning systems for landscape architecture students stressing the understanding of human proportions related to several scales of the natural and man-made environments. Prerequisite: LAA 1933.

LAA 3350 Landscape Design I (4). Application of Basic Design principles to the design of landscape and garden. A general survey of design elements, restraints, plant materials, and other garden materials will aid the student to develop projects in a laboratory environment. Prerequisite: ARC 3133 (S).

LAA 3712 History of Landscape (3). A survey of landscape history throughout the ages. From the gardens of Mesopotamia, Roman and Islamic periods, the Monastery and Castle gardens of middle ages and the Renaissance, to the influence of Oriental gardens and the modern era. Prerequisite: Permission of instructor.

LAA 5235 Theory of Landscape Architecture (3). Critical review of the environmental parameters, morphological concepts and ideological principles that generate form and meaning in landscape architecture. (S)

LAA 5335 Site Development (3). Issues, controls, and methods pertinent to the physiographic, topographical, and cultural determinants of site development. Prerequisite: LAA 5652 or equivalent. (F)

LAA 5371 Computer Practices in Design I (3). Introduction to computer applications in landscape architecture. Prerequisites: approval of advisor. (SS)

LAA 5424 Landscape Construction I (3). Study of materials and methods used in landscape construction. Introduction to manipulation and calculation of site work. Prerequisite: LAA 5335. (S)

LAA 5425 Landscape Construction II (3). Production of a set of landscape construction documents, including drawings and project manual with bidding documents, contract documents and technical specifications. Prerequisite: LAA 5424. (F)

LAA 5521 Tropical Landscape Systems I (3). Overview of the natural and cultural aspects pertinent to the planning, design and management of Florida's tropical and subtropical landscapes. (F)

LAA 5652 Interdisciplinary Design Studio I (6). Introduction to two- and three-dimensional representational techniques. Fundamental geometric constructions, spatial theory, three-dimensional perception and color theory. Programmed designs are executed. Prerequisite: Program approval. (F)

LAA 5653 Landscape Architectural Design I (6). Introduction to the design process and sources of form in landscape architecture. Projects focus on spatial composition and the use of landscape materials in the solution of design problems. Prerequisite: LAA 5652. (S)

LAA 5715 History and Theory of Architecture (3). Overview of architectural history and theory, from the beginnings of western architecture and urban design to the present, including current trends. Prerequisite: Program approval. (SS)

LAA 5716 History of Landscape Architecture (3). Historical survey of the principal sites and traditions manifested in the evolution of landscape architecture and urban design from antiquity to the present. Prerequisite: Consent of instructor. Program approval. (F)

URP 5316 Environmental and Urban Systems (3). Overview of basic issues and principles of environmental and urban planning/design systems. Emphasis will be placed on multi-disciplinary linkages.

URP 5912 Research Methods (3). Methods of information search, data interpretation, and hypotheses formulation used in the field.
Construction Management

Jose D. Mitriani, P.E., Associate Professor and Chairperson
Irlashid Ahmad, Associate Professor
Kenneth H. Carpenter, Associate Professor
Bhaskar Chaudhari, P.E., Professor
John M. Dye, Instructor
William C. Epstein, Assistant Professor
Eugene D. Farmer, A.I.A., Associate Professor
Ayman Morad, Assistant Professor
Julio Olazo, Assistant Professor

Bachelor of Science in Construction Management

Degree Program Hours: 126

The undergraduate program in Construction Management is nationally accredited by the American Council for Construction Education. Its purpose is to increase student awareness of the construction industry, promote fellowship and professionalism, and to provide service to the Department, University, and Community. Membership is open to all Construction related majors. Activities include sponsoring guest lecturers, attendance at local, regional and national A.G.C. meetings and conferences, and undertaking a variety of service projects.

Student Chapter of the National Association Of Women In Construction: This national student organization is sponsored by the National Association Of Women In Construction. Its purpose is to promote knowledge of the construction industry and fellowship within the student body. Activities include monthly meetings with guest lecturers, field trips and a variety of service projects. The FIU student chapter of NAWIC was the first such chapter established in the United States. Membership is open to all construction related majors.

Program of Study

The four year program leading to a Bachelor of Science in Construction Management is for students who are interested in preparing for professional careers in construction management, techniques, operations, and related areas in the construction industry.

The Lower Division Core Courses, i.e. Freshman and Sophomore levels, are designed to provide easy transfer for community college graduates. With proper planning, transfer students with an A.A. degree may be able to complete the four year degree program in four remaining semesters at the University. Prospective community college transfer students should contact an advisor for program information and Lower Division transfer requirements prior to enrolling at FIU.

Students already working full time, many with trades or construction licenses, are generally able to plan their program around job commitments and responsibilities. Faculty advisors are on hand days and evenings to assist students in course selection and scheduling. Course offerings are generally rotated to serve daytime, evening, and weekend students.

Admission

The Department of Construction Management encourages applications for admission from qualified students of both sexes, from all cultural, racial, religious or ethnic groups. It should be understood that minimum requirements have been established and that admission to the Department is a selective process.

Grade Point Average

Admission into the undergraduate program requires a minimum 2.0 grade point average. Students transferring from another university or community college should review the Florida International University Undergraduate Catalog for university policies, application procedures, and financial aid information. Transfer students must also contact a Construction Management advisor to review transcripts and determine allowable transfer credits.

Transfer Credits

No grade below a 'C' shall be acceptable for transfer into the program. Lower Division courses (courses at the 1000 or 2000 level) designated as equivalent by the statewide course numbering system will be accepted by the Department as fulfilling the Upper Division requirements. Credits from these Lower Division courses may be used to offset Upper Division core credit requirements. Other 1000 and 2000 level courses designated as equivalent by the department advisor may be accepted by the Department as fulfilling Upper Division requirements. When equivalent Lower Division courses are used to fulfill Upper Division course requirements a student will be required to complete an equal number of 3000 level (or above) credits from approved Departmental electives. Extra credits above the 60 semester credit hours required for admission into the Construction Management program will not reduce the number of credit hours to be completed in the Upper Division, including electives, to earn a degree and may not be accepted for equivalent credit in Upper Division.

Core and General Education Requirements

Students entering the university with less than 36 semester credit hours will be required to meet the requirements of the University Core Curriculum, in addition to the Department Lower Division Core. Students entering the university with more than 36 semester credit hours will be required to meet the University General Education requirements, in addition to the Department Lower Division Core.
Non-degree seeking

Students wishing to enroll in courses during the application process may do so as a non-degree seeking. Students must consult an advisor for approval and complete a non-degree seeking enrollment waiver. Without this waiver and advisor approval, there is no guarantee that the courses taken will be accepted for graduation. No more than 15 semester credits of work taken as a non-degree seeking can be applied towards graduation. Students may take courses under the non-degree seeking designation for one semester only.

General Regulations

Normal Loads

Students taking a minimum of 12 semester credit hours per semester are considered full time students. Students taking under 12 hours are considered part time and should be aware that certain university privileges and benefits may not be applicable to part time students. Students are not recommended to take excessive loads. Special exceptions may be made, at the option of the Department, in the case of students with a grade point average of 3.0 or greater. Students that meet this criteria wishing to take over 18 semester credit hours must have the approval of both the Chairperson of the Department and the Dean of the College of Engineering and Design, prior to registering for an overload.

Grades

The Department of Construction Management requires a minimum grade of 'C' or better in all Lower Division and Upper Division core courses and electives.

Grade of Incomplete

A grade of 'I' (Incomplete) may be granted, at the option of the Instructor and the Department Chairperson, to a student who, due to serious, documented, and verifiable extenuating circumstances beyond his/her control (such as an illness requiring hospitalization) is unable to complete the work required to obtain a grade for a course. In no case shall a grade of 'I' be granted to a student because he/she is not passing a course and desires additional time to attempt to obtain a passing grade. A student granted a grade of 'I' must complete the work deemed by the Instructor necessary to complete the course no later than two semesters after the grade was assigned to the student, or the grade shall automatically revert to a grade of 'F' (failing grade).

Independent Study

Students who wish to enroll in an independent study course must have the prior written approval of both the instructor and the Department Chairperson the semester prior to registering. Independent Study courses can not be substituted for required Lower or Upper Division departmental core courses or for elective courses.

Credit By Examination

The Department does not generally offer credit by examination for required Lower or Upper Division departmental core courses or electives. A student with outstanding, exceptional, and documented skills in a particular subject as well as an outstanding academic record may request credit by examination, and it is the option of the Department Faculty and the Department Chairperson whether to grant the request.

Credit For Non-College Learning

The Department does not award credit for credit for non-college learning (life work experience).

Student Work

The Department reserves the right to retain any and all student work for the purposes of record, exhibition or instruction.

Normal Academic Progress

The student will have maintained normal academic progress when the student earns a minimum grade point average of 2.0 for all work attempted.

Course Sequence and Prerequisites

Course prerequisites are clearly indicated on the Undergraduate Program sheets, available in the Department office. It is the students' responsibility, not the advisor's, to ascertain that required prerequisites have been taken and passed prior to registering for a course. Failure to comply with prerequisite requirements may result in the student being dropped from or failed in a class without prior warning from the instructor.

Probation or Dismissal

Students who do not make satisfactory academic progress may be excluded from further registration.

Class Attendance

Class attendance may be required and may be used for grade determination at the option of the instructor.

Graduation

In order to be eligible to graduate, the student must meet all University and Departmental requirements. The program of studies consists of a minimum of 63 Lower Division semester credit hours and 63 Upper Division semester credit hours for a minimum total of 126 semester credit hours. The waiving of any required course shall not reduce the minimum of 126 semester credit hours required for graduation. A student must have successfully completed the University Core Curriculum (for those students that entered the program having completed less than 36 semester credit hours) or the University General Education Requirements (for those students that entered the program having completed more than 36 semester credit hours) with minimum acceptable grades as determined by Undergraduate Studies (see catalog for additional information).

In addition, all Lower Division and Upper Division Construction Management Core courses and electives must be completed with a grade of 'C' or better. In order to graduate, a student must also have a minimum grade point average of 2.0, have successfully completed all portions of the CLAST test, and have met the foreign language requirement.

Students should contact an advisor at least one semester prior to their projected graduation and request a review of his/her file. At the start of the final semester the student is required to complete and have his advisor approve an Application for Graduation, available from the Department. (See catalog for additional information on graduation procedures and scheduling.) If for any reason a student fails to graduate in the semester after applying for graduation, that student must reapply for graduation.

It is the student's responsibility, not his/her advisor's responsibility, to ascertain that all requirements for graduation, as stated in the University Catalog and in the Department Program sheets, have been met.
Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog's General Information for Admission and Registration and Records.

Undergraduate Curriculum

The following courses comprise the undergraduate curriculum leading to a degree of Bachelor of Science in Construction Management. Courses numbered 'I' shall be taken before courses numbered 'II'. Some credits of the Lower Division Core can be used to satisfy University Core or General Education requirements. Those courses designated by a (4) are Departmental Lower Division Core courses. All Upper Division courses are considered Departmental Upper Division Core courses.

Departmental Lower Division Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
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</tr>
<tr>
<td>Mathematics</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Sciences</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Historical Foundations/Critical Inquiry</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Comparative Cultures/Gender Studies</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Arts or Modern Language</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Freshman Experience</td>
<td>1</td>
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<tr>
<td>GLY 1010 Physical Geology</td>
<td>3</td>
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<tr>
<td>GLY 1010L Physical Geology Laboratory</td>
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<tr>
<td>BCN 1252 Building Construction Drawing I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BCN 2210 Construction Materials</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BCN 2256 Building Construction Drawing II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BCN 2452 Structural Design I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BUL 4320 Business Law</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MAC 2233 Calculus For Business</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHY 2053 Physics without Calculus</td>
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<tr>
<td>PHY 2048L Physics Laboratory</td>
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<tr>
<td>COP 2172 Programming in Basic I</td>
<td>3</td>
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</tr>
<tr>
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<td>3</td>
<td></td>
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<tr>
<td>or ECO 2023 Micro Principles</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>or ACG 3024 Accounting for Managers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>STA 3132 Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BCN 2281 Construction Surveying</td>
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Upper Division Courses

<table>
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<tr>
<th>Course Code</th>
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<tr>
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<td>BCN 3730 Construction Safety</td>
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<tr>
<td>BCN 3740 Legal Aspects of Construction</td>
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<tr>
<td>BCN 3762 Building Codes and Quality Control</td>
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</tr>
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<td>BCN 4461 Structural Design II</td>
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</tr>
<tr>
<td>BCN 3611 Construction Cost Estimating I</td>
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</tr>
<tr>
<td>BCN 4612 Construction Cost Estimating II</td>
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<td></td>
</tr>
<tr>
<td>BCN 3720 Construction Scheduling I</td>
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</tr>
<tr>
<td>BCN 4724 Construction Scheduling II</td>
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<tr>
<td>EIN 3354 Engineering Economy</td>
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<td></td>
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<tr>
<td>BCN 3640 Financial Planning for Construction</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BCN 3753 Financial Management of Construction Organizations</td>
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<td></td>
</tr>
<tr>
<td>BCN 3727 Construction Site Work</td>
<td>3</td>
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</tr>
<tr>
<td>BCN 4465 Temporary Structure in Construction</td>
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<tr>
<td>BCN 4561 Environmental Control in Buildings I</td>
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<td></td>
</tr>
<tr>
<td>BCN 4564 Environmental Control in Buildings II</td>
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<tr>
<td>BCN 3703 Management of Construction Projects</td>
<td>3</td>
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<tr>
<td>BCN 4910 Business Elective</td>
<td>3</td>
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</tr>
</tbody>
</table>

1. Consult the Core Curriculum Section for approved courses to satisfy these requirements
2. Consult the Department of Construction Management advisor for approved courses to satisfy these requirements
3. Departmental Lower Division Core Course

Business-Management Electives

One 3,000 or 4,000 level 3 credit business/management elective, selected in consultation with the undergraduate advisor of the department.

Sample Program of Study

The following is a sample program of study for a student seeking to earn a degree of Bachelor of Science in Construction Management. This program of study assumes the student has successfully completed MAC 2132 (Pre-Calculus Mathematics) or its equivalent prior to enrolling for his/her first semester of study at FIU. It also assumes that the student enters FIU with less than 36 credits and without meeting the foreign language requirement. The reader is reminded that all students entering a university in the State University System with fewer than 60 credit hours are required to earn at least nine credit hours prior to graduation by attending one or more summer terms at a state university.

Department of Construction Management

Bachelor of Science in Construction Management

Degree Program Hours: 126

Undergraduate Program

The following analysis assumes that the student enters the university from high school or with less than 36 credits and no foreign language experience.

First Semester: (18)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENC 1101</td>
<td>Elements of Writing</td>
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</tr>
<tr>
<td>MAC 2233</td>
<td>Calculus For Business</td>
<td>3</td>
</tr>
<tr>
<td>GGL 1010</td>
<td>Physical Geology</td>
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<td>GGL 1010L</td>
<td>Physical Geology Laboratory</td>
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<td>BCN 1252</td>
<td>Building Construction Drawing I</td>
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</tr>
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<td>BCN 2210</td>
<td>Construction Materials</td>
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<td>BCN 2256</td>
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<td>BCN 2452</td>
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<td>MAC 2233</td>
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<td>PHY 2053</td>
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<td>PHY 2048L</td>
<td>Physics Laboratory</td>
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<td>COP 2172</td>
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<tr>
<td>ECO 2013</td>
<td>Macro Principles</td>
<td>3</td>
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<td>or ECO 2023</td>
<td>Micro Principles</td>
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</tr>
<tr>
<td>or ACG 3024</td>
<td>Accounting for Managers</td>
<td>3</td>
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<tr>
<td>STA 3132</td>
<td>Statistics</td>
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<td>BCN 2281</td>
<td>Construction Surveying</td>
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Second Semester: (18)

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<tr>
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<tr>
<td>STA 3132</td>
<td>Business Statistics</td>
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<tr>
<td>PHY 2053</td>
<td>Physics w/o Calculus</td>
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<tr>
<td>PHY 2048L</td>
<td>Physics Lab</td>
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<tr>
<td>BCN 2256</td>
<td>Building Construction Drawing II</td>
<td>4</td>
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<td>ECO 2013</td>
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<td>or ECO 2023</td>
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| Third Semester: (15)
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<tr>
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<tr>
<td>Historical Foundations</td>
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<tr>
<td>Arts</td>
<td>3</td>
<td></td>
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<tr>
<td>BCN 2210</td>
<td>Construction Materials</td>
<td>3</td>
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<tr>
<td>COP 2172</td>
<td>Programming in Basic I</td>
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<tr>
<td>BCN 3240</td>
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Fourth Semester: (15)

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<th>Course Title</th>
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<tr>
<td>Foreign Language</td>
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<tr>
<td>Critical Inquiry</td>
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<tr>
<td>Comparative Culture and Gender Studies</td>
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</table>
ACG 3024 Accounting for Managers 3
BCN 2281 Construction Surveying 3
EIN 3354 Engineering Economy 3

Fifth Semester: (15)
BUL 4320 Business Law 3
BCN 3727 Construction Sitework 3
BCN 2402 Structural Design I 3
BCN 3611 Construction Estimating I 3
BCN 3730 Construction Safety 3

Sixth Semester: (18)
BCN 3762 Building Codes and Quality Control 3
BCN 3720 Construction Scheduling I 3
BCN 3740 Legal Aspects of Construction 3
BCN 4612 Construction Estimating II 3
BCN 4461 Structural Design II 3
BCN 4462 Structural Design III 3

Seventh Semester: (15)
BCN 3640 Economic Planning for Construction 3
BCN 4561 Environmental Control I 3
BCN 4724 Construction Scheduling II 3
BCN 4465 Temporary Structures 3
BCN 3703 Management of Construction Projects 3

Eighth Semester: (12)
BCN 3753 Financial Management of Construction Organizations 3
BCN 4564 Environmental Control II 3
BCN 4910 Senior Project 3

Upper Division Business Elective 2 3

Course Descriptions

Definition of Prefixes
BCN-Construction.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

BCN 1252 Building Construction Drawing I (4). The laboratory application of Methods and Materials of Construction I. Students prepare plans, elevations, sections, and details appropriate to light construction. (F)

BCN 2256C Building Construction Drawing II (4). The laboratory application of Methods and Materials of Construction II. Students prepare plans, elevations, sections, and details appropriate to general construction. Prerequisite: BCN 1252 and BCN 1002. (S)

BCN 2281 Construction Surveying (3). Principles and practices of surveying as it applies to building construction. Prerequisite: Trigonometry. (S)

BCN 2402C Structural Design I (3). Applications of the principles of mechanics to engineering problems of equilibrium, strength, and stiffness. Topics include equilibrium of forces, stress, strain, torsion, beams, and columns. Prerequisites: PHY 2053, 3043L, and MAC 2132. (F)

BCN 3002 Principles of Construction Management (3). A course covering the history of the construction industry with emphasis on the principles of construction management. (F)

BCN 3240 Construction Equipment (3). Methods, procedures, and equipment used in residential, commercial, and heavy construction. Equipping the construction plant. Production value analysis. Work effectiveness studies. Prerequisite: MAC 2132 or equivalent. (F)

BCN 3611 Construction Cost Estimating I (3). Principles and practices of estimating providing application and drill in surveying quantities of labor and materials for general construction projects: excavation, concrete, masonry, structural steel, wood, and interior finishes. Prerequisites: ARC 1461 and BCN 2256. (F)

BCN 3640 Economic Planning for Construction (3). Nature of construction costs, funding sources and arrangements, capital requirements, bonding, insurance, risk and contingency evaluation, general office operations, and bidding procedures. Prerequisites: MAC 2132 and EIN 3354, or equivalent. (F)

BCN 3703 Management of Construction Projects (3). Organization and management theory elements of leadership and human supervision, organization, office operations, labor relations, safety, and work improvement, as they relate to project field operations. Prerequisites: BCN 3762 BCN 3740, BCN 3730, and senior level standing. (F)

BCN 3720 Construction Scheduling I (3). The application of the Critical Path Method and Program Evaluation Review Technique to construction planning, scheduled vs. actual job expenditures. Cost forecasting. Development of unit prices from field data. Laboratory is included, which consists of computer applications. Prerequisite: MAC 2132. (F)

BCN 3727 Construction Sitework (3). Expansions and critical analysis of practical and sequential aspects of converting raw land to finished product. Course will define various steps and discuss techniques of accomplishment. Prerequisites: BCN 3240, GLY 1010, and BCN 2256. (F)

BCN 3730 Construction Safety (3). Introduces occupational safety hazards associated with the construction industry. Emphasis placed on recognition, evaluation, and control of safety hazards particularly as they relate to the Occupational Safety and Health Act. Prerequisite: Introduction to Construction Management. (F)

BCN 3740 Legal Aspects of Construction (3). Legal and business aspects of engineering contracts and specifications in the construction industry. Analysis, study of precedents, and application of contract clauses, including changes, changed conditions, termination, disputes, payments, risk and insurance, inspection, litigation, dam, and technical requirements. Prerequisites: BUL 4320 and Introduction to Construction Management. (F)

BCN 3753 Financial Management of Construction Organizations (3). Accounting for construction operations; labor, materials, equipment, and overhead costs. Money management, depreciation, taxes, loans, profit/loss analysis. Prerequisite: ACG 3024 or equivalent. (S)

BCN 3761 Specifications Writing (4). Study of methodology for acquisition of information and transmission of technical and legal requirements for construction projects. Preparation of outline specifications, building description, and purchasing specifications. Problems of format, review, and updating. Prerequisites: ARC 3463, BCN 3257, BCN 3762 and BCN 3740 or consent of instructor.

BCN 3762 Building Codes and Quality Control (3). Study of building codes required by local, county, and state levels and their relation to quality control. Prerequisite: BCN 1002 and ARC 1461. (S)
BCN 4260 Quality Control in Construction (3). Quality control as governed by the job inspector, contractor superintendent, architect-engineer, building official, and governmental agencies and requirements. Prerequisites: BCN 3762 or equivalent.

BCN 4461C Structural Design 2 (3). An introduction to the material properties, allowable stresses, applicable codes and standards for the design of timber and steel structures. Prerequisite: BCN 2402C (S).

BCN 4462C Structural Design 3 (3). An introduction to the material properties, allowable stresses, applicable codes and standards for the design of reinforced concrete structures. Prerequisite: BCN 2402C (S).

BCN 4465 Temporary Structures in Construction (3). The course will present the theory and practice of the planning, erection, procedures, and maintenance of temporary structures that are used in the performance of construction operations. Prerequisites: BCN 4461, BCN 3730, and BCN 4462 (F).

BCN 4561C Environmental Control in Buildings I (4). A study of concepts and systems for providing optimum thermal, lighting, plumbing, and acoustical conditions in both commercial and residential buildings. Prerequisites: Physics (F).

BCN 4564 Environmental Control in Buildings II (3). Concepts and practices of electrical systems in the construction of residential and commercial buildings including code provisions and cost estimates. Prerequisites: MAC 2112 (G).

BCN 4612 Construction Cost Estimating II (3). Quantity take-offs and pricing, marketing, and the application of microcomputer in construction estimating. Prerequisites: BCN 2440, BCN 3611, and BCN 3727 (F).

BCN 4724 Construction Scheduling II (3). The application of advanced computerized planning and scheduling and information technology in construction. Prerequisite: BCN 4200 and BCN 4100.

BCN 4910 Directed Independent Studies (VAR). Specialized intensive study in an area of special interest to the student. Prerequisite: Permission of instructor.

BCN 4910 Senior Project (3). Course requires the student to plan, execute, and report on a project of interest to the student and/or the professional community. The project is to be completed during the student's final year of study at the University.

BCN 4920 Senior Seminar (3). Course requires the student to prepare and deliver an oral presentation and submit a written report on a topic of interest. The/seminar is intended to develop the student's ability to work both independently and collaboratively in a team setting.

Professional Certificate Programs

Department of Mechanical Engineering

Heating, Ventilation, and Air Conditioning Design

Rene Leonard, Associate Professor and Coordinator

This Professional Certificate program produces a learning experience that will enhance the design capabilities of professionals in the field. Emphasis will include engineering science background as well as practical applications of systems design. Interested applicants must contact the department chairperson or the coordinator prior to registering for the program.

The Certificate will be awarded to a student who successfully demonstrates competency in:

- EGN 3343 Thermodynamics I 3
- EIN 3354 Engineering Economy 3
- EML 4601 Refrigeration of Air Conditioning 3
- EML 4601L Refrigeration of Air Conditioning Lab 1
- EML 4603 Air Conditioning Design I 3
- EML 4608C Mechanical Systems in Environmental Control 3
- EML 5606C Advanced Air Conditioning Systems 3
- EML 5615C Computer Aided Design in A/C 3

Undergraduate Catalog

College of Engineering and Design / 285
College of Engineering and Design

Dean
Gordon R. Hopkins

Associate Dean
W. Kinzy Jones

Associate Dean
Iraj E. Majzub

Associate Dean
Gustavo A. Roig

Assistant Dean
Lourdes A. Meneses

Development Officer
Zully Dorr

Acting Director, School of Design
Iraj E. Majzub

Chairperson, Civil and Environmental Engineering
L. David Shen

Chairperson, Construction Management
Jose D. Mitran

Chairperson, Electrical and Computer Engineering
James R. Story

Chairperson, Industrial Systems and Engineering
Shih-Ming Lee

Acting Chairperson, Mechanical Engineering
Kuang-Hsi Wu

Director, Lehman Center for Transportation Research
L. David Shen

Director, Hemispheric Center for Environmental Technology
M. Ali Ebadian

Faculty

Adouiadi, Malek, Ph.D. (University of Florida), Associate Professor, Electrical and Computer Engineering

Ahmad, Irlishad, Ph.D., P.E. (University of Cincinnati), Associate Professor, Construction Management

Andrian, Jean, Ph.D. (University of Florida), Associate Professor, Electrical and Computer Engineering

Attoh-Okine, Nii O. (University of Kansas, Lawrence), Assistant Professor, Civil and Environmental Engineering

Babij, Tadeusz, Ph.D. (Technical University, Wroclaw, Poland), Professor, Electrical and Computer Engineering

Baker, Edward T., MLA, MDes, ASLA (Harvard University), Assistant Professor, Landscape Architecture, School of Design

Barreto, Armando B., Ph.D. (University of Florida), Assistant Professor, Electrical and Computer Engineering

Bueno, J. A., MLA, ASLA, P.E. (Harvard University), Associate Professor, Program Coordinator, Landscape Architecture/School of Design

Busch, Claudia, M.S. (Columbia University), Assistant Professor, School of Design

Caballero, Amorey, Ph.D. (Energy Institute of Moscow), Science and Technology Coordinator

Canaves, Jaime, M.A., R.A. (University of Florida), Associate Professor, School of Design

Cao, Yiding, Ph.D. (University of Dayton), Assistant Professor, Mechanical Engineering

Carpenter, Kenneth H., Ed.D. (West Virginia University), Associate Professor, Construction Management

Centeno, Martha, Ph.D. (Texas A&M University), Assistant Professor, Industrial and Systems Engineering

Cereijo, Manuel R., D.Sc., P.E. (Universidad Central, Cuba), MSEE (Georgia Institute of Technology), Professor, Electrical and Computer Engineering

Chaudhari, Bhaskar S., Ph.D., P.E. (University of Pennsylvania), Professor, Construction Management

Chen, Chin Sheng, Ph.D. (Virginia Polytechnic Institute and State University), Professor, Industrial and Systems Engineering

Chen, F. Frank, Ph.D. (University of Missouri - Columbia), Associate Professor, Industrial and Systems Engineering

Cherapanov, Genady, Ph.D. (Moscow State University), Professor, Mechanical Engineering

Chow, Joe, Ph.D. (Carnegie Mellon University), Associate Professor, Industrial and Systems Engineering

Ciccone, William, Ph.D. (University of Miami), Research Professor, Drinking Water Research Center, Associate Professor, Chemistry

Dorr, Zully, B.S. (University of Miami), Development Officer

Dye, John M., S.M. C.E. (Massachusetts Institute of Technology), Instructor, Construction Management (Broward)

Ebadian, M. Ali, Ph.D. (Louisiana State University), Professor, Mechanical Engineering, Director of HCFET

Epstein, William C., Ph.D. (University of Florida), Assistant Professor, Construction Management

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Gilbar, Thomas, M.S. (Florida International University), Instructor/Counselor/Advisor, Electrical and Computer Engineering

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Heimer, Malcolm L., Ph.D. (Penn State University), Associate Chairperson, Associate Professor, Electrical and Computer Engineering

Hopkins, Gordon R., Ph.D. (University of Alabama), Dean, College of Engineering and Design and Professor, Mechanical Engineering

Huang, Dongzhou, Ph.D. (Tongji University), Visiting Research Associate, Civil and Environmental Engineering

Jacko, Julie, Ph.D. (Purdue University), Assistant Professor, Industrial and Systems Engineering

Jaffe, Rudolf, Ph.D. (Indiana University), Associate Professor, Drinking Water Research/Chemistry

Jolibois, Sylvan C., Jr., Ph.D. (University of California at Berkeley), Assistant Professor, Civil and Environmental Engineering

Jones, W. Kinzy, Ph.D. (Massachusetts Institute of Technology), Associate Dean and Professor, Mechanical Engineering/ Electrical and Computer Engineering
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Perl, Mordechai, D.Sc. (Technion Institute of Technology) Courtesy Professor, Mechanical Engineering

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Resnick, Marc, Ph.D. (University of Michigan), Assistant Professor, Industrial and Systems Engineering

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Rogge, Wolfgang E., Ph.D. (California Institute of Technology), Assistant Professor, Civil and Environmental Engineering

Roig, Gustavo, A., Ph.D. (University of Florida), Associate Dean, College of Engineering and Design and Associate Professor of Electrical and Computer Engineering

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Schmidt, Pierre, E., Ph.D. (Pennsylvania State University), Professor, Electrical and Computer Engineering

Schoepfhoester, Richard, Ph.D. (University of Iowa), Associate Professor, Mechanical Engineering

Shen, Lan-Li. David, Ph.D., P.E. (Clemson University), Chairperson and Professor, Civil and Environmental Engineering, Director, LCTR

Story, James R., Ph.D. (University of Alabama), Chairperson and Professor, Electrical and Computer Engineering

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Tang, Walter Z., Ph.D., P.E. (University of Delaware), Assistant Professor, Civil and Environmental Engineering

Tansel, Berrin, Ph.D., P.E. (University of Wisconsin-Madison), Associate Professor, Civil and Environmental Engineering

Tansel, Ibrahim, Ph.D. (University of Wisconsin-Madison), Associate Professor, Mechanical Engineering

Thompson, LeRoy E., Ph.D., P.E. (Rice University), Professor, Civil and Environmental Engineering

Tosunoglu, Sabri, Ph.D., (University of Florida), Assistant Professor, Mechanical Engineering

Tsirhintzis, Vassilios A., Ph.D., P.E., P.H. (University of Illinois, Urbana-Champaign), Assistant Professor, Civil and Environmental Engineering, Drinking Water Research Center

Ural, Oklay, Ph.D., P.E. (North Carolina State University), Professor, Civil and Environmental Engineering

Urban, Frank K., Ph.D., (University of Florida), Associate Professor, Electrical and Computer Engineering

Van Viel, Carolyne, Ph.D. (Free University of Amsterdam), Professor, Electrical and Computer Engineering

Wang, Ton-Lo, Ph.D., P.E. (Illinois Institute of Technology), Professor, Civil and Environmental Engineering

Wang, Gian (Jane), Ph.D. (Northwestern University), Assistant Professor, Mechanical Engineering

Wu, Kuang-Hsi, Ph.D. P.E. (University of Illinois), Acting Chairperson, Professor, Mechanical Engineering

Wunna, Subbarao V., Ph.D., P.E. (Andhra University), Professor, Electrical and Computer Engineering
Yen, Kang K., Ph.D. (Vanderbilt University), Associate Professor, Electrical and Computer Engineering

Yih, Tachung, Ph.D. (Catholic University of America) Associate Professor, Mechanical Engineering

Zhao, Fang, Ph.D. (Carnegie Mellon University), Assistant Professor, Civil and Environmental Engineering
College of Health
College of Health

Judith A. Blucker, Acting Dean
Evelyn B. Enrione, Associate Dean
Anthony Cruz, Assistant Dean

The College of Health offers programs of professional study in select health professions. The academic departments of the College offer courses of study leading to a baccalaureate degree in Dietetics and Nutrition, Health Information Management, Medical Laboratory Sciences, Occupational Therapy, and Physical Therapy. Master's degrees are offered in Dietetics and Nutrition, Medical Laboratory Science, Occupational Therapy, Physical Therapy, and Public Health. A Doctor of Philosophy is offered by Dietetics and Nutrition. All degree programs are appropriately accredited by their respective professional accrediting body.

Applicants to the College must submit an Application for Admission to the University and must follow regular University procedures. Applicants must be eligible for admission to the University before being admitted to any degree program. Because several of the college's programs have been classified as limited access programs, students interested in admission to any department or program in the College should contact the department for specific prerequisites and admission requirements. Specialized admission procedures are required for the Dietetics Programs, Medical Laboratory Science, Occupational Therapy, and Physical Therapy.

The goals of the College of Health are to:

1. Prepare health professionals at the undergraduate and graduate levels.
2. Promote close articulation between the appropriate programs and the community clinical sites for the experimental learning of our students.
3. Increase the knowledge base of the health disciplines through research.
4. Provide service to the health professions at the local, regional, national and/or international levels.

Academic Support Services

For the College of Health, the Undergraduate Student Support Services are coordinated by Assistant Dean Anthony Cruz. Academic support services are responsible for the coordination of academic advising and student service activities of the College. Student Support Services keeps students informed about educational opportunities such as scholarships, tuition waivers, and campus resources; serves as a liaison between the academic departments and the student support services university wide; facilitates the registration and graduation process in order to make sure that the students adhere to the college's guidelines. The Assistant Dean also coordinates the Health Sciences Recruitment and Retention Program. This federal grant is designed to recruit and retain minorities into the allied health professions.

A student who has been accepted to a degree program in the College must consult an advisor prior to the first class enrollment. An advisor may be assigned by contacting the Chairperson of the Department in which an academic major is desired. Continued contact (at least once per semester) with the advisor is urged to review progress and select courses for each succeeding semester.

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

Interdisciplinary Courses

The College of Health offers interdisciplinary courses open to all students in the university. The current courses being offered are:

HSC 3103 Healthy Lifestyles through Wellness (3). A survey of wellness issues including preventive health care, substance abuse prevention, stress management, sexually transmitted diseases, psychological illness, nutrition and exercise.

HSC 3579 Wellness of Women (3). Concepts relating to women's health, including sexuality, preventative health care, nutrition, exercise, reproductive diseases and the social/political health care of women.
Dietetics and Nutrition

Susan P. Himburg, Professor, Chairperson, and Director, Coordinated Program
Katharine R. Curry, Professor Emeritus
Zisca Dixon, Assistant Professor
Penelope S. Easton, Professor Emeritus
Evelyn B. Enrione, Associate Professor and Associate Dean
Victoria A. Hammer, Assistant Professor
Fatma Huffman, Professor, Director of Graduate Programs
Amy Jaffe, Clinical Instructor
Michele W. Keane, Associate Professor
Marcia Magnus, Associate Professor
Kimberlee Michals Malalon, Associate Professor
Dian Weddle, Associate Professor
Nancy S. Wellman, Professor

The Department offers a major leading to a baccalaureate degree in dietetics and nutrition, and courses in nutrition for interested students. The Department offers a Master of Science degree in dietetics and nutrition with areas of concentration in clinical and community dietetics or dietetic management. The undergraduate programs are designed to assist the student to gain basic practitioner knowledge and skills.

Bachelor of Science in Dietetics and Nutrition

Degree Program Hours: 120

Coordinated Program

The Coordinated Program (CP) is currently granted accredited status by the Commission on Accreditation/Approval for Dietetics Education of The American Dietetic Association a specialized accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the United States Department of Education. The program combines didactic requirements with supervised practicum experience. Graduates from the CP are eligible to sit for the National Registration Examination for Dietitians.

The student must make formal application to the program by March 1 before Fall admission. This special application form can be obtained from the department. Criteria for admission includes grades in prerequisite coursework, work experience and letter of application. Students must enroll in the summer prior to Fall admission. Practicum courses are sequential and require two years to complete. Practicum experiences are available in several hospitals and other health agencies. Students must satisfactorily complete a written comprehensive exam to graduate from the program.

Costs of the program to students in addition to tuition and fees include providing transportation to practicum sites, lab costs and professional attire, annual laboratory tests at the student health services.

Students must receive a grade of 'C-' or higher in all courses in the department.

Lower Division Preparation

Students desiring to major in general dietetics and nutrition need the following FIU course equivalents in addition to completing the general education requirements:

- APB 2170 Introductory Microbiology 3
- APB 2170L Introductory Microbiology Lab 1
- BSC 1010 General Biology 3
- CHM 1045 General Chemistry I 4
- CHM 1045L General Chemistry I Lab 1
- CHM 1046 General Chemistry II 3
- CHM 1046L General Chemistry II Lab 1
- CHM 2210 Organic Chemistry I 4
- CHM 2210L Organic Chemistry I Lab 1
- CHM 2211 Organic Chemistry II 3
- CHM 2211L Organic Chemistry II Lab 1
- or CHM 2200 may substitute for CHM 2210 and 2211
- CHM 2200 Survey of Organic Chemistry 3
- CHM 2200L Survey of Organic Chemistry Lab 1
- FOS 3021 Fundamentals of Food 3
- FOS 3021L Fundamentals of Food Lab 1
- HUN 2201 Principles of Nutrition 3
- HUN 3191 World Nutrition 3
- HUN 4403 Life Cycle Nutrition 3
- PSY 2020 Introduction to Psychology 3
- SYG 2000 Introduction to Sociology 3
- PCB 3702 Intermediate Physiology 3

1Prerequisites for the Coordinated Program. Didactic students may complete during program.

FIU undergraduates must have met all lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Basic computer literacy is expected.

Upper Division Program

Required Courses

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Summer Semester: (9)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DIE 3005 Orientation to Dietetics</td>
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<tr>
<td></td>
<td>BCH 3033 General Biochemistry</td>
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<tr>
<td></td>
<td>DIE 3434 Nutrition Education</td>
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<tr>
<td></td>
<td>DIE 3434L Nutrition Education Lab</td>
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<tr>
<td>Fall Semester: (13)</td>
<td></td>
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<tr>
<td>DIE 3244 Medical Nutrition Therapy</td>
<td>2</td>
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<tr>
<td>DIE 3244L Medical Nutrition Therapy Lab</td>
<td>1</td>
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<tr>
<td>DIE 3317 Dietetics in Community Health</td>
<td>3</td>
</tr>
<tr>
<td>DIE 3355 Dietetics in Community Health Practicum</td>
<td>4</td>
</tr>
<tr>
<td>HUN 4241 Advanced Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>Spring Semester: (18)</td>
<td></td>
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<tr>
<td>DIE 4246 Clinical Nutrition</td>
<td>4</td>
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<tr>
<td>DIE 4277 Clinical Nutrition Practicum</td>
<td>6</td>
</tr>
<tr>
<td>DIE 4435 Nutrition Counseling</td>
<td>3</td>
</tr>
<tr>
<td>DIE 4435L Nutrition Counseling Lab</td>
<td>1</td>
</tr>
<tr>
<td>FOS 4041 Food Science</td>
<td>3</td>
</tr>
<tr>
<td>FOS 4041L Food Science Lab</td>
<td>1</td>
</tr>
<tr>
<td>Summer Semester: (6)</td>
<td></td>
</tr>
<tr>
<td>FSS 3316 Food Science for Institutions or equivalent</td>
<td>3</td>
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<tr>
<td>DIE 3125 Management of Dietary Systems</td>
<td>3</td>
</tr>
<tr>
<td>Senior Year</td>
<td>Fall Semester: (15)</td>
</tr>
<tr>
<td>DIE 3175 Dietetic Management Practicum</td>
<td>6</td>
</tr>
<tr>
<td>DIE 4365 Dietetic Management of Nutrition Programs</td>
<td>3</td>
</tr>
<tr>
<td>DIE 4564 Independent Senior Research Dietetics</td>
<td>3</td>
</tr>
<tr>
<td>DIE 3126 Dietetic Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>
Spring Semester: (15)
DIE 4536 Advanced Practicum in Dietetics 12
DIE 4506 Seminar in Dietetics 3
DIE 4963 Comprehensive Dietetic Examination 0

1These courses are open only to students in the Coordinated Program, must be taken concurrently with the related dietetic courses, and must be taken in the order listed. Clinical experiences are supervised by the course instructors and are located in hospitals, health agencies, and school food service programs.

Didactic Program
The Didactic Program in Dietetics is currently granted approval status by the Commission on Accreditation/Approval for Dietetics Education of The American Dietetic Association, a specialized accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the United States Department of Education.

Upon completion of this program, students may apply to an accredited dietetic internship program or an approved Preprofessional Practice Program to obtain the professional experience required to become eligible to sit for the National Registration Examination for Dietitians.

To be admitted into the program, undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable to the program.

Students must receive a grade of 'C-' or higher in all courses in the department.

General Emphasis
Upper Division Program
Required Courses (58)
DIE 3005 Orientation to Dietetics 2
DIE 3125 Management of Dietary Systems 3
DIE 3434 Nutrition Education 2
DIE 3434L Nutrition Education Lab 1
DIE 3244 Medical Nutrition Therapy 2
DIE 3244L Medical Nutrition Therapy Lab 1
DIE 3317 Dietetics in Community Health 3
DIE 4246 Clinical Nutrition 4
DIE 4246L Clinical Nutrition Lab 2
DIE 4365 Management of Nutrition Programs 3
DIE 4377 Applied Dietetic Management of Nutrition Programs 1 2
DIE 3126 Dietetic Information Systems 3
DIE 4435 Nutrition Counseling 3
DIE 4435L Nutrition Counseling Lab 1
DIE 4506 Senior Seminar 3
DIE 4564 Independent Senior Research Dietetics 3
DIE 4963 Comprehensive Dietetic Examination 0
FOS 3316 Food Science for Institutions or equivalent 3
FOS 4041 Food Science 3
FOS 4041L Food Science Lab 1
HUN 3191 World Nutrition 3
HUN 4241 Advanced Nutrition 3
HUN 4403 Life Cycle Nutrition 3
BCH 3033 General Biochemistry 4

1Not required for students enrolled in the Coordinated Program in Dietetics. These selected students enroll in practicum courses in lieu of the starred courses.

Recommended Electives
Selected courses in areas: computer science, education, statistics, social work, health science, adult education, business, anthropology, sociology.

Minor in Nutrition
A twelve-credit minor course sequence at the undergraduate level affords students the opportunity to study food and nutrients, their physiological functions, normal nutritional requirements, socioeconomic influences on food choices and other aspects of food technology. The required science foundation courses provide the necessary background of chemistry and biological sciences to understand the physiological and biochemical basis of nutrition, as a multi-disciplinary science with relevance to health. Students majoring in nutrition learn to interpret nutrition research and contemporary claims and theories as a basis for improving food habits. Students interested in entering health professional fields of physical or occupational therapy, schools of medicine, dentistry or veterinary medicine find the nutrition minor relevant to their future careers because of diet and health relationships.

This nutrition minor will not meet licensure requirements for qualifications as a nutritionist in the State of Florida. A license is required to provide nutritional counseling to individuals.

Minor Requirements
HUN 2201 Principles of Nutrition 3
HUN 4403 Life Cycle Nutrition 3
HUN 4241 Advanced Nutrition 1 3
1Prerequisite: Human Physiology; Organic Chemistry; Corequisite: Biochemistry.

In addition, one of the following courses:
HUN 3191 World Prospects and Issues: Nutrition 3
FOS 3021 Fundamentals of Food and 3
FOS 3021L Fundamentals of Food Lab 1
FOS 3004 Food and the Consumer 3
FOS 4041 Food Science 3
FOS 4041L Food Science Lab 1
1Prerequisite: FOS 3021, FOS 3021L, and HUN 2201

Note: The following science courses are required to fulfill the prerequisites in the nutrition minor:
CHM 1045 General Chemistry I
CHM 1046 General Chemistry II
CHM 2210 Organic Chemistry I
CHM 2211 Organic Chemistry II
(Co-CHM 2200 for CHM 2210 and CHM 2211)
CHM 2200 Survey of Organic Chemistry
BCH 3033 General Biochemistry
PCB 3702 Intermediate Physiology or
PCB 3703, 3704 Human Physiology I, II

Course Descriptions
Definition of Prefixes
DIE-Dietetics; FOS-Food Science; FSS-Food Service Systems; HUN-Human Nutrition
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.
DIE 3005 Orientation to Dietetics (2).
Survey of role and responsibilities of
the dietitian. Legal and ethical considerations necessary for the student dietitian in clinical experiences. Educational and personal qualifications for specialization in dietetics. Prerequisite: Application to the Coordinated Program or Didactic Program. (SS)

DIE 3125 Management of Dietary Systems (3). Survey of various types of institutional food service systems; management concepts in planning, implementing, and evaluating food service systems. Prerequisites: Basic Management, Nutrition Education Lab. (SS)

DIE 3126 Dietetic Information Systems (3). The study of information systems as they relate to dietetic practice. Majors only. Junior standing. (F)

DIE 3175 Dietetic Management Practicum (6). Developing skills for DIE 3125 and DIE 4355. Clinical assignments in several food service institutions in this area. Clinical component: open only to students in the Coordinated Program. Prerequisite: DIE 3355. (F)

DIE 3244 Medical Nutrition Therapy (2). Techniques of assessment of nutritional status and adjusting nutrient/energy intake to accommodate medical treatment. Corequisite: DIE 3244L. (F)

DIE 3244L Medical Nutrition Therapy Lab (1). Application of nutritional assessment and dietary prescriptions to accommodate medical treatment. Corequisite: DIE 3244. (F)

DIE 3317 Dietetics in Community Health (3). Study of community agencies providing nutrition guidance for differing age groups. Emphasis on nutritional and educational needs of clients. Prerequisites: HUN 2201, DIE 3005. Prerequisite or Corequisite: HUN 4403. (F)

DIE 3355 Dietetics in Community Health Practicum (4). Observation and participation in activities of community agencies. Nutrition education and counseling experiences. Clinical component: Open only to students in the Coordinated Program. Corequisite: DIE 3317 (F)

DIE 3434 Nutrition Education (2). Planning for groups/individual basic nutrition and clinical nutrition education, and working with the instructional media. Prerequisites: Basic Nutrition, Corequisites: Medical Nutrition, Nutrition Education Lab. (SS)

DIE 4345L Nutrition Education Laboratory (1). Students plan and practice various forms of nutrition education, individual groups and institutional media. (SS)

DIE 4195 Special Problems in Dietetic Administration (1-3). In-depth study of a problem in dietetic administration chosen to coincide with a student's interest and career goals. Student will develop objectives stated in behavioral terms and demonstrate skills in information gathering, analysis, and technical writing. Prerequisite: Permission of instructor.

DIE 4246 Clinical Nutrition (4). Study of the complex dietetic problems accompanying metabolic disorders. Determination of nutrient requirements based on pathophysiological conditions. (S)

DIE 4246L Clinical Nutrition Laboratory (2). Application of nutrient requirements for the treatment of complex pathophysiological conditions. Prerequisites: DIE 3244 and DIE 3244L. Corequisite: DIE 4246. (S)

DIE 4277 Clinical Nutrition Practicum (6). Participation in activities in clinical affiliations focusing on nutritional assessment, planning, treatment, and follow-up of patients. Clinical component: open only to students in the Coordinated Program. Corequisite: DIE 4246. (S)

DIE 4279 Special Problems in General Dietetics (1-3). In-depth study of a problem chosen to coincide with student's interest and career goals. Student develops behavioral objectives and demonstrates skills in information gathering, analysis, and technical writing. Prerequisite: Permission of instructor. (F,S,SS)

DIE 4365 Dietetic Management of Nutrition Programs (3). Advanced concepts of management functions as an institutional consultant, a member of a community nutrition program, a private therapeutic consultant, full time institutional food service administrator. Advanced standing required. Prerequisites: DIE 3125 or permission of instructor, basic competency in management principles. (F)

DIE 4377 Applied Dietetic Management of Nutrition Programs (2). Observation and participation in community agencies, institutions, and simulated setting the development of entry level competencies in the management of nutrition and food service programs. Corequisite: DIE 4355. (F)

DIE 4435 Nutrition Counseling (3). Motivational methods and instructional techniques for development of entry level competencies. Advanced standing in dietetics required. Pre or corequisite: DIE 4246. Corequisite: DIE 4435L. (S)

DIE 4435L Nutrition Counseling Lab (1). Small group video recorded practice in dietetic instruction and counseling. Prerequisite: Advanced standing in dietetics. Corequisite: DIE 4435. (S)

DIE 4506 Seminar in Dietetics and Nutrition (3). Professional skills development for career effectiveness in today's world; emphasis on speaking and writing related to contemporary nutrition issues. Majors only, senior standing. (F,S)

DIE 4536 Advanced Practicum in Dietetics (12). In-depth study combining theoretical concepts and clinical experience. Learning experience planned cooperatively by the student, campus instructor, and clinical instructor to meet student needs and goals. Prerequisites: DIE 4246, DIE 4277C, and permission of Director of the Coordinated Program. Clinical component: Open only to students in the Coordinated Program. (S)

DIE 4537 Specialized Dietetic Practicum (3). Practice in a specialized area such as Pediatrics, Diabes, etc. Prerequisites: Nutrition II, and Clinical Nutrition. (SS)

DIE 4564 Independent Senior Research in Dietetics (3). Research methodology for planning, conducting, and analyzing a study in applied dietetics. Students will design a protocol, collect data, analyze and present results/conclusions. (F)

DIE 4963 Comprehensive Dietetic Examination (6). A comprehensive examination of the dietetic and nutrition curriculum. Prerequisite: Senior standing. (F,S)

FOS 3004 Food and the Consumer (3). Study of purchasing, storage, and preparation of food. Consideration of lifestyle influences on food choices. Designed to develop skills in purchasing and preparing foods to meet personal, social, and physi-
FOS 3021 Fundamentals of Food (3). Study of selection, processing, and preparation of food with attention to quality and nutrient retention. Corequisite: FOS 3021L (F.SS)

FOS 3021L Fundamentals of Food Laboratory (1). Techniques of food preparation to maintain nutrients and food quality. Corequisite: FOS 3021. (F.SS)

FOS 4041 Food Science (3). Physical and chemical changes in food occurring as a result of various methods of processing, preparation, and storage. Prerequisites: Organic Chemistry, HUN 3122 or HUN 2201, FOS 3021, or equivalents. Corequisite: FOS 4041L. (S)

FOS 4041L Food Science Laboratory (1). Experimental laboratory in the physical and chemical characteristics of food. Corequisite: FOS 4041. (S)

FSS 3316 Food Science For Institutions (3). Proper food handling in institutional settings with use of sound management principles closely coordinated with food science advances and government regulations. Laboratory and field trips to strengthen theoretical concepts. Prerequisite: FOS 3021.

HUN 2201 Principles of Nutrition (3). Nutrients and their interrelationships; requirements of individuals, and food sources. Investigates current controversies, fads/fallacies, and health-related issues. Recommended for non-majors. (F.S,SS)


HUN 3122 Nutrition and Culture (3). Study of the scientific principles of nutrition and impact of culture on nutrition and health. Recommended for Junior-Senior non-majors. (F.S,SS)

HUN 3191 World Prospects/Issues: Nutrition (3). Exploration of food production, distribution, and consumption patterns of selected nations, Analysis of variables affecting nutritional intake and change, and hunger. (F.S,SS)

HUN 3294 Women’s Nutrition Issues (3). Focus in on women, health and nutrition. Covers nutrition throughout women’s life cycle, principles of absorption, digestion, metabolism, food composition, local to international issues. New labeling laws, current nutrition research. (F)

HUN 3414 Nutrition for the Athlete (3). The role of nutrition in the enhancement of health and athletic performance will be examined. Nutrition claims targeted to the exercising population will be evaluated. Prerequisite: HUN 2201.

HUN 4241 Advanced Nutrition (3). Roles of nutrients in metabolic processes. Effects of excesses and deficiencies. Prerequisites: Organic Chemistry, Physiology, and HUN 2201 or equivalent. BCH 3033 pre- or corequisite. (F)

HUN 4403 Life Cycle Nutrition (3). Nutrient requirements, dietary adequacy, food habits, special nutritional concerns during pregnancy, infancy, childhood, adolescence, and adulthood including aging. Prerequisite: HUN 2201 or HUN 3122. (F.S)
Health Information Management

Moha Yunis, MSHS, RRA, Assistant Professor and Director

The major in Health Information Management prepares the student for the variety of responsibilities and functions involved in the management of a health information department. Health Information Managers design and supervise systems relating to the collection, analysis, retention, retrieval and evaluation of health information. The priorities of the position include maintaining complete, accurate and timely medical records, assisting the medical staff, and developing and implementing policies, procedures and systems which adhere to the ethical, financial, and legal requirements and meet the accreditation standards established for the health care facility.

The Health Information Management Program is accredited by the Commission on the Accreditation of Allied Health Educational Programs (CAAHEP) in cooperation with the American Health Information Management Association’s Council on Accreditation. Graduates are eligible to take the National Certification Examination and become a credentialed Registered Record Administrator (RRA) upon the successful completion of this exam.

Bachelor of Science in Health Information Management

Degree Program Hours: 120

Prerequisite Courses

Anatomy and Physiology, Statistics, and Introduction to Microcomputers are prerequisites to enroll in certain courses of the required curriculum.

To qualify for admission to the program, FIU undergraduates must have met all of the lower division requirements including CLAST, completed 60 semester hours with a minimum 2.0 cumulative GPA, and must be otherwise acceptable into the program.

Upper Division Program: (60)

Required Courses: (60)

<table>
<thead>
<tr>
<th>Semester I (14)</th>
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<tbody>
<tr>
<td>HSC 3531</td>
<td>Medical Terminology</td>
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<tr>
<td>MRE 3110</td>
<td>Medical Record Administration I</td>
<td>3</td>
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<tr>
<td>MRE 3800</td>
<td>Directed Practice I</td>
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<tr>
<td>MRE 3431</td>
<td>Fundamentals of Medical Science I</td>
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<tr>
<td>MRE 3202</td>
<td>Basic Coding</td>
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<th>Semester II (12)</th>
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<tr>
<td>MRE 3205</td>
<td>Medical Record Administration II</td>
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<tr>
<td>MRE 3432</td>
<td>Fundamentals of Medical Science II</td>
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<tr>
<td>MRE 4202</td>
<td>Basic Coding Procedures</td>
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</tr>
<tr>
<td>MRE 3810</td>
<td>Directed Practice II</td>
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<th>Semester III (9)</th>
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<tbody>
<tr>
<td>MRE 4932</td>
<td>Special Topics</td>
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<td>MRE 3312</td>
<td>Medical Record Management I</td>
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<td>One support course for HIM</td>
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<tr>
<td>Total credits for Semester III</td>
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<tr>
<th>Semester IV (12)</th>
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<tr>
<td>MRE 4415</td>
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<td>MRE 4831</td>
<td>Directed Practice III</td>
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<td>MRE 4344</td>
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<td>One support course for HIM</td>
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<tr>
<th>Semester V (13)</th>
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<tbody>
<tr>
<td>MRE 4304</td>
<td>Problems in Medical Record Administration</td>
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<tr>
<td>MRE 4400</td>
<td>Health Care Records: Multi-Institutional</td>
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<tr>
<td>MRE 4835</td>
<td>Internship in Medical Record Management</td>
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<tr>
<td>MRE 4211</td>
<td>Medical Record Information Systems</td>
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Support Courses for HIM

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<tr>
<th>URS 4643</th>
<th>Introduction to Management of Public Non-Profit</th>
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<tr>
<td>HSA 4170</td>
<td>Health Care Financial Management</td>
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<tr>
<td>HSA 4192</td>
<td>Health Management Systems Engineering</td>
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<tr>
<td>HSA 4420</td>
<td>Legal Aspects and Legislation in Health Care</td>
<td>3</td>
</tr>
</tbody>
</table>

Must earn a minimum grade of ‘C’ (2.0) in each course. Courses in which a grade of ‘C’ or below must be repeated.

Course Descriptions

Definition of Prefix

MRE-Medical Record Administration;
HSA - Health Services Administration;
HSC - Health Science Concentration.

F-Fail semester offering; S-Spring semester offering; SS-Summer semester offering.

HSC 3531 Medical Terminology (3). Provides the student with basic medical language skills including, pronunciation, spelling, and definitions as a foundation for developing the degree of competency required to read and understand medical reports and communicate with physicians and other medical professionals. (F,SS)

HSC 3642 Legal Aspects of Medical Records (3). Provides a fundamental knowledge of the principles of law and their application to the health industry in general and the health information departments specifically. Release of information, consents, risk management and current legal issues are addressed and analyzed so appropriate legal decisions and responses can be made by health information managers.

MRE 3110 Medical Record Administration I (3). Introduces the student to the historical development of health information management and focuses on the work and responsibilities of health information professionals and their relationship with other health care providers. The student will acquire a full understanding of the medical record, including its development, purpose, content, format analysis, value and uses along with the methods used to file and track records. (F)

MRE 3202 Basic Coding Procedures (3). Concepts and principles of nomenclatures and classification systems used to record and compare health data. Development of ICD-9-CM coding skills and applications for research. Prerequisites: Anatomy and physiology and medical terminology. (F)

MRE 3205 Medical Record Administration II (4). Study of research methodology. Definitions, collection and reporting of data by Health Information Departments. Concepts and principles of data presentation defined and applied. (S)

MRE 3312 Medical Record Management I (3). General principles of management of a health information system in any type of health
MRE 3431 Fundamentals of Medical Science I (3). Beginning with the cell and progressing through the various organ systems, the conceptual patterns of disease are explored and defined by etiology and the immune and repair responses generated by the body. The diagnostic and treatment modalities for each are studied and identified in the medical record for correlation with coding procedures. Pre and co-requisites: Anatomy and physiology and medical terminology. (F)

MRE 3432 Fundamentals of Medical Science II (3). A review of body systems to explore the various disease processes and pathological conditions with affect the organs involved. Includes detailed explanations of how the diagnostic work-ups are recorded in the medical record and how to recognize and interpret the significant findings and make intelligent coding decisions. Pre and Co-requisites: Anatomy and physiology and medical terminology. (S)

MRE 3800 Directed Practice I (2). Orientation of the student to the hospital health information department and adjacent diagnostic or therapeutic units; including the outpatient department, emergency room, admitting office, x-ray, pharmacy, physical therapy, laboratory, and pathology department. (F)

MRE 3810 Directed Practice II (2). Orientation of the student to the health information department functions. Rotation of the student through technical functions of the department, following the flow of the patient's record after discharge. Includes the discharge procedure, analysis, coding and indexing systems; statistical reporting; correspondence; control of the incomplete medical record; and processing of the completed record. (S)

MRE 4204 Advanced Coding Procedures (3). Introduction to coding as it relates to DRG system. Record analysis and data quality addressed. CPT, DSM III and current coding issues and regulations presented and discussed. Encoder experience included. Prerequisite: MRE 3202. (S)

MRE 4211 Medical Record Information Systems (3). Development of health information systems and applications for evaluation and management of a health information department. Emphasis is on computerization and "hands-on" experience. Prerequisite: MRE 3110. (S)

MRE 4304 Problems in Medical Record Administration (3). Through illustrative case reports, group discussions, role playing, oral reports, lectures, buzz sessions, and review of the literature; students explore effective methods for identifying and arriving at satisfactory solutions to specific types of problems they may expect to encounter in the administration of health information services. (S)

MRE 4344 Medical Record Management II (4). Application of management principles to health information systems, including: development of manuals, job descriptions, interviewing and evaluation techniques, forms design, environmental planning, etc. External activities assigned. Prerequisites: MRE 3312 or HSA 3180. (F)

MRE 4400 Health Care Records: Multi-Institutional (3). Standards and procedures for long-term, ambulatory care, home health, rehabilitation, psychiatric, dental, hospice, and other health care services are investigated and compared. (S)

MRE 4415 Medical Record Administration III (3). Quality improvement for health care institutions including risk management and utilization review. JCAHO, AOA, PRO, Medicare and Medicaid requirements emphasized. (F)

MRE 4831 Directed Practice III (2). Experience in quality improvement, risk management, and utilization review areas. Clinical experience in acute care and non-acute care facilities. (F)

MRE 4835 Internship in Medical Record Management (4). Management experience in a health information department under the supervision of a credentialed medical record director. Emphasis on administrative and medical staff relationships. (S)

MRE 4905 Directed Independent Study (1-3). Individual conferences, assigned readings, and reports on investigations related to the Medical Record profession. (F,S,SS)

MRE 4932 Special Topics (3). Designed to address topics not otherwise offered in the curriculum but specific to or required for health information management. Topics to be announced yearly. (F,S,SS)
Medical Laboratory Sciences

Beverly A. Warden, Associate Professor and Chairperson
Barbara V. Anderson, Assistant Professor and Director, Medical Technology Program
Jerry A. Bash, Associate Professor
Manoucher Dezfuiian, Associate Professor
Janel A. Lineback, Professor
Patrick F. Shen, Associate Professor
Sylvia L. Smith, Professor and Coordinator, Graduate Program

Medical technologists perform complex biological and chemical analyses on blood and other specimens to enable the physician to diagnose and treat disease. Individuals wishing to pursue a career in medical technology should have a strong science background with emphasis on laboratory analytical skills. They must be reliable, conscientious, interested in helping others, and recognize their responsibility for human lives in the practice of modern medicine. Students receive intensive didactic and laboratory training in the areas of clinical chemistry, hematology, immunohematology, and microbiology. Opportunities for employment exist in hospital, government, and industrial clinical laboratories, academic and industrial research laboratories, and in sales and technical services in clinical diagnostic products industries.

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). A graduate of the program is eligible to apply for examination and certification by the American Society of Clinical Pathologists’ Board of Registry as a Medical Technologist, MT (ASCP); by the National Certification Agency for Medical Laboratory Personnel as a Clinical Laboratory Scientist, CLS (NCA); and for licensure as a Medical Technologist by the State of Florida. Clinical practice is conducted at Baptist, Cedars, Jackson Memorial, Mercy, and South Miami Hospitals in Dade, and Memorial Hospital in Broward.

Bachelor of Science in Medical Technology

Degree Program Hours: 126

Lower Division Preparation
The student seeking admission to professional MLS courses should have: (1) completed a minimum of 60 semester hours in an accredited two or four-year institution, (2) completed all of the general education requirements, (3) earned a minimum cumulative GPA average of 2.5, (4) earned a minimum cumulative GPA of 2.0 in required science courses, (5) completed the following preparatory courses: two semesters of general biology with laboratory, two semesters of general chemistry with laboratory, two semesters of organic chemistry with laboratory, one semester of general microbiology with laboratory, one semester of college algebra, one semester of statistics, and one semester of human physiology with laboratory. (Survey or introductory courses in science and mathematics are not acceptable. Two semesters of anatomy and physiology with laboratories may substitute for biology II with laboratory and human physiology with laboratory.) Credits in general microbiology, biochemistry, or immunology which are more than seven years old must be updated (see department for details).

Biology majors must have completed all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program
The University-integrated “2+2” program has limited enrollment. Students are usually admitted to the program in Summer Semester, but may be admitted on a space-available basis in any semester providing prerequisite courses have been completed. It is recommended that applications for Summer Semester be received by March 1 but applications will be processed throughout Spring Semester on a space-available basis. An interview may be required. The medical technology professional courses and hospital clinical practice are open only to majors in the program (or by permission of instructor). Entrance to clinical practice depends upon satisfactory evaluation of the student's record by the faculty. Students must satisfactorily complete a written comprehensive examination to graduate from the program.

Required Courses

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<tr>
<th>Required Courses</th>
<th>Freshman Year</th>
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<tr>
<td><strong>Fall Semester:</strong> (19)</td>
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<tr>
<td>BSC 1010  General Biology I</td>
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<tr>
<td>BSC 1010L General Biology I Lab</td>
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<tr>
<td>CHM 1045  General Chemistry</td>
<td>4</td>
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<tr>
<td>CHM 1045L General Chemistry Lab</td>
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<tr>
<td>College Algebra</td>
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<tr>
<td>ENC 1101  English Composition</td>
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<tr>
<td>Humanities Elective</td>
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<td><strong>Spring Semester:</strong> (18)</td>
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<tr>
<td>BSC 1011  General Biology II</td>
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<td>BSC 1011L General Biology II Lab</td>
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<td>CHM 1046  General Chemistry II</td>
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<tr>
<td>STA 3122  Statistics</td>
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<td>ENC 1102  Literary Analysis</td>
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<td>Social Science Elective</td>
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<td><strong>Sophomore Year</strong></td>
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<tr>
<td>Fall Semester: (20)</td>
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<tr>
<td>PCB 3702  Intermediate Human Physiology</td>
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<td>PCB 3703L Intermediate Human Physiology Lab</td>
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<td>CHM 2210  Organic Chemistry I</td>
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<td>CHM 2210L Organic Chemistry I Lab</td>
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<td>English Composition - Technical Report Writing Elective</td>
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<td>Humanities Elective</td>
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<td><strong>Spring Semester:</strong> (14)</td>
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<tr>
<td>MCB 3023  General Microbiology</td>
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<td>CHM 2211  Organic Chemistry II</td>
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<td>English Composition - Technical Report Writing Elective</td>
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<tr>
<td>Social Sciences Elective</td>
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<td><strong>Summer Semester:</strong> (3)</td>
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<tr>
<td>MLS 3038  Basic Techniques in MLS</td>
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<td><strong>Junior Year</strong></td>
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<td>Fall Semester: (14)</td>
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<td>CHM 4305  Biological Chemistry</td>
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<tr>
<td>MLS 3605  Clinical Instrumentation</td>
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<tr>
<td>MLS 3605L Clinical Instrumentation Laboratory</td>
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<tr>
<td>MLS 4405  Clinical Microbiology</td>
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</table>
Minor Eligibility Requirements
Completion of all prerequisite sciences with a cumulative GPA of 2.0 or better.

Microbiology
Prerequisites:
One year general chemistry with lab
One year organic chemistry with lab
One year general biology with lab
One year general microbiology with lab
One semester biochemistry or
One semester immunology

Required Courses: (17)
MLS 2030 Introduction to a Medical Laboratory 1
MLS 4405 Clinical Microbiology 4
MLS 4405L Clinical Microbiology Lab 2
MLS 4461 Advanced Microbiology 3
MLS 3430 Medical Parasitology 1
MLS 3430L Medical Parasitology Lab 1
MLS 4821L Clinical Practice/ Microbiology 3

Immunohematology
Prerequisites:
One year general biology with lab
One year general chemistry with lab
One semester immunology (must be taken within past 5 years)

Required Courses: (16)
MLS 2030 Introduction to a Medical Laboratory 1
MLS 4505 Clinical Immunology 1
MLS 4505L Clinical Immunology Lab 1
MLS 4334 Clinical Coagulation 1
MLS 4334L Clinical Coagulation Lab 1
MLS 4535 Immunohematology 4
MLS 4535L Immunohematology Lab 3
MLS 4823L Clinical Practice/Blood Bank 3

Hematology
Prerequisites:
One year general chemistry with lab
One year organic chemistry with lab
One year general biology with lab
One semester biochemistry

Required Courses: (15)
MLS 3038 Basic Techniques in MLS 3
MLS 4306 Clinical Hematology 4
MLS 4306L Clinical Hematology Lab 3
MLS 4334 Clinical Coagulation 1
MLS 4334L Clinical Coagulation Lab 1
MLS 4822L Clinical Practice/Hematology 3

Clinical Chemistry
Prerequisites:
One year general chemistry with lab
One year organic chemistry with lab
One semester biochemistry

Required Courses: (18)
MLS 2030 Introduction to a Medical Laboratory 1
MLS 3605 Clinical Instrumentation 2
MLS 3605L Clinical Instrumentation Lab 1
MLS 4625 Clinical Chemistry Methods 4
MLS 4625L Clinical Chemistry Methods Lab 2
MLS 4630 Advanced Clinical Chemistry 3
MLS 4820L Clinical Practice/ Clinical Chemistry 3

Course Descriptions
Definition of Prefixes
MLS - Medical Laboratory Sciences
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

MLS 1920 Clinical Chemistry - Review and Update (1). Review and update in clinical chemistry including carbohydrates, proteins, lipids, enzymes, electrolytes, and drugs. Intended for individuals sitting for licensure or certification examinations. Prerequisites: High school diploma and clinical laboratory training.

MLS 2030 Introduction to Medical Laboratory (1). An introduction to the structure and functions of a medical laboratory including test procedures, terminology, safety, and laboratory tours. Not for MLS majors. (S)

MLS 3038 Basic Techniques in Medical Laboratory Sciences (3). Lecture and laboratory introducing the profession of medical laboratory sciences and basic laboratory skills including venipuncture, laboratory calculations, terminology and medical laboratory safety. Prerequisite: Permission of the instructor. (SS)

MLS 3220 Clinical Microscopy (1). Introduction to the structure and physiology of the kidney, CSF and other biological fluids. The clinical significance of various findings in the urine, semen, CSF, and other biological fluids are discussed. Prerequisite: MLS 4306 or permission of the instructor. Corequisite: MLS 3220L.

MLS 3220L Clinical Microscopy Laboratory (2). Laboratory to accompany MLS 3220, dealing with routine procedures for urinalysis, microscopic examination of urine, semen, CSF, and other biological fluids. Corequisite: MLS 3220.

MLS 3430 Medical Parasitology (1). Classification, morphology, and life cycles of medically significant parasites. Emphasis is on microscopic identification, specimen processing/examination, and infection control. Prerequisite: General Biology with Laboratory. (S or SS)

MLS 3430L Medical Parasitology Laboratory (1). Laboratory to accompany MLS 3430. (S or SS)

MLS 3605 Clinical Instrumentation (3). Fundamentals of clinical laboratory instrumentation including basics of electricity and electronics, preventive maintenance, and quality control procedures will be emphasized. Prerequisites: CHM 3120 and CHM 3120L or equivalent (F).

MLS 3605L Clinical Instrumentation Lab (1). Laboratory to accompany MLS 3605. Introduction to the operation, applications, and preventive maintenance of clinical laboratory instruments. Quality control procedures. Corequisite: MLS 3605 (F).

MLS 3700 Management Procedures for Laboratory Employees (1). Job descriptions, salary schedules, equipment and reagent purchasing, quality assurance programs, workload recording methods. Individualized projects adapted to meet the needs of facility where student is employed. Prerequisite: One year of clinical laboratory experience.

MLS 3750 Laboratory Quality Control, Safety, and Instrument Maintenance (3). Course designed for the working technologist who wishes to protect himself, his coworkers, and others in his environment from the hazards inherent in laboratory operations, and who wishes to present better evidence of compliance with the various inspection and accreditation organizations which now inspect laboratories. Prerequisite: One year of clinical laboratory experience.

MLS 4032C Orientation to Clinical Rotation (1). Introduction to hospital environment and patient care. Medical ethics. Clinical facilities tour. Seniors only. (F)

MLS 4306 Clinical Hematology (4). A basic course in the origin of erythrocytes and leucocytes, their morphology and function. Mechanisms, manifestations, and abnormal laboratory findings of hematologic diseases and urinalysis. Prerequisite: BCH 3033 or permission of instructor. (F or SS)

MLS 4306L Clinical Hematology Laboratory (1-3). Laboratory to accompany MLS 4306, dealing with manual and automated procedures for determining complete blood and platelet counts. Urinalysis and clinical microscopy. (F or SS)

MLS 4307L Advanced Lab Skills in Clinical Hematology (1). A laboratory course covering advanced skills in hematologic testing. Prerequisites: MLS 4306 and BCH 3033 or permission of instructor. (F or SS)

MLS 4334 Clinical Coagulation (1). A basic course in the study of coagulation factors, platelets, the fibrinolytic system, platelet aggregation. Prerequisite: MLS 4306 or permission of instructor. (F)

MLS 4334L Clinical Coagulation Laboratory (1). Laboratory to accompany MLS 4334, dealing with manual and automated procedures for determining coagulation factor deficiencies and platelet function. (F)


MLS 4405L Clinical Microbiology Laboratory (1-3). Laboratory to accompany MLS 4405. Isolation and identification of normal and pathogenic flora from genuine and simulated clinical specimens. Identification of clinically significant fungi. (Variable)

MLS 4406L Advanced Laboratory Skills in Clinical Microbiology (1). A laboratory course covering advanced skills in clinical microbiology including isolation and identification of important pathogenic bacteria and fungi. Prerequisite: Admission to MLS Articulation Program.

MLS 4441 Advanced Microbiology (3). Lectures and laboratory. Identification of rare pathogens including Chlamydia and Rickettsia. Virology and tissue culture techniques. Mode of action of bacterial resistance to antibiotics. Prerequisites: MLS 4405 and BCH 3033 or permission of instructor. (F or SS)

MLS 4445 Selected Topics in Microbiology (3). Current topics in Microbiology of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

MLS 4505 Clinical Immunology (1). Study of immunological procedures employed by the clinical laboratory for the diagnosis of diseases such as rheumatoid arthritis, infectious mononucleosis, syphilis. Pre or Corequisite: PCB 3233. (S or SS)

MLS 4505L Clinical Immunology Laboratory (1). Diagnostic procedures and techniques performed in a clinical immunology laboratory such as precipitation, agglutination, syphilis serology and other immunoassays. Laboratory to accompany MLS 4505. (S or SS)

MLS 4535 Immunohematology (4). Fundamentals of blood banking including blood group systems, pretransfusion testing methods, hemolytic disease of the newborn, HLA, blood component therapy, and adverse effects of transfusion.
Prerequisites: PCB 3233, MLS 4505, and MLS 4506L. (F)

MLS 4535L Immunohematology Laboratory (1-3). Laboratory to accompany MLS 4535. (F)

MLS 4536L Advanced Laboratory Skills in Immunohematology (1). A laboratory course covering advanced skills in immunohematology including a review of pretransfusion tests, elutions, absorptions, ABO discrepancies and identification of multiple antibodies. Prerequisite: Admission to MLS articulation program.


MLS 4550C Advanced Immunohematology (1). In depth study of Transfusion Therapy, the use and preparation of blood components, and special problems in blood banking. Lectures and laboratory. Prerequisite: MLS 4555.

MLS 4555 Selected Topics in Immunohematology (3). Current topics in Blood Banking of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

MLS 4625 Clinical Chemistry Methods (4). Procedures for analysis of carbohydrates, proteins, lipids, enzymes, electrolytes and drugs. Interpretation of biochemical tests used in the diagnosis and treatment of disease. Renal, liver, and cardiac function profiles. Prerequisites: MLS 3605, MLS 3606L, and BCH 3033. (S or SS)

MLS 4625L Clinical Chemistry Laboratory (1-3). Laboratory to accompany MLS 4625. (S or SS)

MLS 4626L Advanced Laboratory Skills in Clinical Chemistry (1). A laboratory course covering advanced skills in clinical chemistry including DNA techniques, kinetic enzymes, automation, drug testing, and quality control. Prerequisites: Admission to MLS Articulation Program; organic and biological/biochemistry. Corequisite: MLS 4625.

MLS 4630 Advanced Chemistry (3). Analysis of thyroid hormones, estrogens, adrenal hormones and metabolites, immunosassay, radiolotope measurement, amniotic fluid analysis, toxicology, multichannel analyzers, and chromatographic methods. Prerequisite: MLS 4625.

MLS 4630L Advanced Chemistry Laboratory (2). Elective topics in laboratory to accompany MLS 4630. (F or SS)

MLS 4635 Selected Topics in Clinical Chemistry (3). Current topics in Clinical Chemistry of particular clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the Instructor.

MLS 4705 Laboratory Management (1). Personnel handling, laboratory records, equipment and reagent purchasing, laboratory computerization, quality assurance programs, workload recording programs, scheduling and methods of laboratory self-evaluation. Seniors only. (F)

MLS 4755C Laboratory Statistics and Quality Control (2). Lecture topics to be covered include basic laboratory statistics, linear regression and correlation analysis, quality control charts, techniques, new method evaluation, problem solving using computer programs. Seniors only. (S)

MLS 4820L Clinical Practice Chemistry (1-3). Practical experience in a hospital chemistry laboratory. All MLS courses must be completed before students will be permitted to register for clinical practice. (F.S.SS)

MLS 4821L Clinical Practice Microbiology (1-3). Practical experience in a hospital microbiology laboratory. (F.S.SS)

MLS 4822L Clinical Practice Hematology (1-3). Practical experience in a hospital hematology laboratory. (F.S.SS)

MLS 4823L Clinical Practice Blood Bank and Immunology (1-3). Practical experience in a hospital blood bank and immunology laboratory. (F.S.SS)

MLS 4905 Independent Study (1-3). Special work, directed readings, lecture and/or laboratory assignment, determined by advisor in accord with student's interests. Prerequisite: Permission of advisor.

MLS 4910 Directed Independent Research (1-6). Investigation of a problem in hematology, clinical microbiology, immunohematology and clinical chemistry requiring independent research directed and supervised by the instructor. Prerequisite: Permission of instructor.

MLS 4934 Senior Seminar (1). Preparation and presentation of literature review and individualized projects. Instructional methods. (F)
Occupational Therapy

Susan Kaplan, Associate Professor and Chairperson
Alma Abdel-Mohy, Instructor
Elise Bloch, Instructor
Susanne D’Agati, Assistant Professor
Gail Hills, Professor and Graduate Coordinator
James Mills, Assistant Professor
Patricia Scott, Associate Professor
Pamela Shaftey, Assistant Professor

Occupational therapy is a health profession concerned with promoting the quality of life of individuals. Therapeutic techniques are directed toward restoration, reinforcement, and enhancement of participation in life. Occupational therapy may be indicated for persons whose life has been interrupted by disease or injury, or those who suffer from developmental delays or problems associated with aging.

The occupational therapist assesses the client’s abilities to carry out tasks and activities necessary for productive living. Working collaboratively with the client and considering his/her personal goals, lifestyle and environment, the therapist develops an intervention program designed to help restore the greatest possible functional capacity. During the treatment or rehabilitation process, the client actively engages in a directed program of purposeful, meaningful activities designed to increase his or her level of functioning. The occupational therapist works collaboratively with the client, other health professionals on the health care team, and community agency personnel. Occupational therapists serve a wide variety of individuals in all age ranges and work in settings such as community agencies, sheltered workshops, hospitals, schools, extended care facilities, and rehabilitation centers. There is an increasing demand for occupational therapists and excellent opportunities exist for career advancement.

Qualities that are necessary to be a successful therapist include the ability to work with others, look at the totality of human performance, think creatively, problem solve, and direct the actions of others.

Bachelor of Science in Occupational Therapy

Degree Program Hours: 128

In order to be admitted to the program in occupational therapy, applicants must meet the requirements for admission to the University, have a cumulative GPA of 2.8 or higher, and have completed required prerequisites and 60 semester hours of acceptable academic credit. Applicants must apply to both the Office of Admissions and the Department of Occupational Therapy. Applicants who are already registered at FIU as degree seeking students should send an application to the Occupational Therapy Department. First evaluation of completed applications is January 15. Applications received after January 15 will be reviewed as space permits. Enrollment is limited and one class is selected each academic year to begin Fall semester. The average admitting grade point for admission is over 3.3. Students are selected based on GPA and the strength of their academic record, including a strong liberal arts preparation and the required prerequisites.

The Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA’s phone number is (301) 652-AOTA. Graduates of the program will be able to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination.

Students who already hold a bachelor’s degree in a field other than occupational therapy may be eligible for the master’s degree program (see graduate catalog).

Lower Division Preparation

Required Courses
1. Biology and Lab
2. Physics and Lab or Chemistry and Lab
3. General Psychology
4. Human Growth and Development
5. One additional Psychology course (not personal adjustment)
6. Statistics
7. Sociology or Anthropology
8. Physiology (3 credits) or Human Anatomy and Physiology (6 credits)

To be admitted into the program, FIU undergraduates must have met all the lower division requirements including CLAST; and completed 60 semester hours.

Upper Division Program

All courses in the upper division are required including fieldwork. Fieldwork does not follow the traditional academic calendar and may extend beyond the semester’s end. Level II fieldwork must be completed within 24 months of the didactic coursework.

Required Courses

<table>
<thead>
<tr>
<th>Semester</th>
<th>Junior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester: (13)</td>
<td></td>
</tr>
<tr>
<td>OTH 3004</td>
<td>Professional Development</td>
</tr>
<tr>
<td>OTH 3160</td>
<td>Adaptive Living Skills</td>
</tr>
<tr>
<td>OTH 3160L</td>
<td>Adaptive Living Skills</td>
</tr>
<tr>
<td>OTH 3520</td>
<td>Developmental Theory</td>
</tr>
<tr>
<td>OTH 3520L</td>
<td>Developmental Theory</td>
</tr>
<tr>
<td>ZOO 3731</td>
<td>Human Anatomy</td>
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<tr>
<td>ZOO 3731L</td>
<td>Human Anatomy</td>
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</tbody>
</table>

| Spring Semester: (14) |       |
| OTH 3327 | Issues in Psychosocial Dysfunction for Occupational Therapists | 3 |
| OTH 3351 | Treatment Techniques in Psychiatric OT | 1 |
| OTH 3351L | Treatment Techniques in Psychiatric OT | 2 |
| OTH 3413 | Applied Kinesiology | 3 |
| OTH 3413L | Applied Kinesiology Laboratory | 1 |
| ZOO 4743 | Neuroscience | 4 |

| Summer Semester: (2) |       |
| OTH 3815 | Field Work Experience Level | 2 |
Senior Year

Fall Semester: (15)
OTH 4210 Developmental Theory II 3
OTH 4315 Theory and Dysfunction in Psychiatric OT 2
OTH 4411 Pathology and Medical-Surgical Disorders 3
OTH 4421 Biomechanics in Rehabilitation 2

Spring Semester: (12)
OTH 4112L Therapeutic Media Lab 2
OTH 4170L Therapeutic Techniques in Physical Disabilities 1
OTH 4325 Evaluation and Treatment in Psychiatric OT 2
OTH 4325L Evaluation and Treatment in Psychiatric OT Lab 1

Summer Semester: (6)
OTH 4850 or OTH 4851 Field Work Experience 6

Fall Semester: (6)
OTH 4850 or OTH 4851 Field Work Experience 6

Course Descriptions

Definition of Prefixes
OTH - Occupational Therapy, Majors Only
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

OTH 3004 Professional Development (3). History and theory of the discipline of occupational therapy; includes an introduction to clinical and community practice environments. (F)

OTH 3007 Medical Terminology (1). A self-instructional program of medical terminology. (SS)

OTH 3012 Therapeutic Communication (2). Major focus of this course is on several modes of facilitating communication and opportunities for self-knowledge. Interpersonal Process Recall format is followed. (F)

OTH 3160 Adaptive Living Skills (2). Evaluation and adaptation of environments within which typical occupational therapy clients interact; specific limiting factors of general disabilities; variety of techniques and aids which compensate or adapt for loss. Corequisite: OTH 3160L. (F)

OTH 3160L Adaptive Living Skills Lab (1). Laboratory to accompany OTH 3160. (F)

OTH 3327 Issues in Psychosocial Dysfunction for Occupational Therapists (3). The analysis and identification of patterns of behavior and functional performance pertinent to occupational therapy practice in psychiatry. (S)

OTH 3351 Treatment Techniques in Psychiatric Occupational Therapy (1). The study of the use of purposeful activity for individual and group treatment in psychiatric occupational therapy. (S)

OTH 3351L Treatment Techniques in Psychiatric Occupational Therapy Lab (2). The application of the modalities of minor crafts and group processes in psychiatric occupational therapy. (S)

OTH 3413 Applied Kinesiology (3). A study of the anatomical, physiological and biomechanical principles of human motion with an emphasis on clinical application. (S)

OTH 3413L Applied Kinesiology Lab (1). Laboratory to accompany OTH 3413. (S)

OTH 3520 Developmental Theory I (2). Occupational therapy evaluation, treatment and management of developmental disabilities from birth through adolescence. (S)

OTH 3520L Developmental Theory I Lab (1). Laboratory to accompany OTH 3520. (F)

OTH 3815 Field Work Experience Level I (2). Pre-clinical experience in an approved training center. (SS)

OTH 4019 Medical Terminology (1). A self-instructional program of medical terminology. (SS)

OTH 4109L Technological Applications in Occupational Therapy (1). Laboratory experience with various technological applications used in occupational therapy practice. (S)

OTH 4112L Therapeutic Media (2). The study of the use of age appropriate activities as therapeutic modalities. (S)

OTH 4170L Therapeutic Techniques in Physical Disabilities (1). Upper extremity prosthetic and orthotic devices are investigated. Presentation includes the biomechanics, anatomy, materials, and appliances necessary for fabrication, pre-and post-prosthetic and orthotic evaluation, checkout procedures and training methods. (S)

OTH 4210 Developmental Theory I (3). The application of developmental theory to the occupational therapists' evaluation, treatment and management of adults and the aged. (F)

OTH 4315 Theory and Dysfunction in Psychiatric Occupational Therapy (2). Presentation of the major psychiatric occupational therapy theories as they relate to developmental disorders, psychiatric disorders, role dysfunction and human performance. Prerequisites: Abnormal Psychology, Theories of Personality, or equivalents. (F)

OTH 4325 Evaluation and Treatment in Psychiatric Occupational Therapy (2). An in-depth study of the evaluations and treatment techniques currently utilized in psychiatric occupational therapy. (S)

OTH 4325L Evaluation and Treatment in Psychiatric Occupational Therapy Lab (1). Laboratory to accompany OTH 4325. (S)

OTH 4411 Pathology and Medical-Surgical Disorders (3). Brief review of organ systems and primary diseases that affect each system, with specific emphasis on the disabilities that would result from such diseases. (F)

OTH 4421 Biomechanics in Rehabilitation (2). The analysis and application of biological and physical principles to the evaluation and
treatment of patients with physical disabilities. (F)

OTH 4421L Biomechanics in Rehabilitation Lab (1). Laboratory to accompany OTH 4421. (F)

OTH 4422 Evaluation and Treatment of Central Nervous System Dysfunction (3). Occupational therapy evaluation and treatment of central nervous system dysfunction for clients of all ages. (F)

OTH 4422L Evaluation and Treatment of Central Nervous System Dysfunction Lab (1). Laboratory to accompany OTH 4422. (F)


OTH 4714 Treatment Planning and Patient Management in Pediatrics (3). By means of case studies, students will have an opportunity to develop in-depth treatment planning and consider issues in patient management. (S)

OTH 4750 Rehabilitation Seminar (3). Study of current practices in rehabilitation applicable to the occupational therapist. (S)

OTH 4761 Professional Issues in Occupational Therapy (3). Professional issues facing occupational therapists including the role of research, organizational systems, and advocacy. (S)

OTH 4804C Service Learning in Health (3). Combines seminars on interpersonal skills with the design and implementation of a service learning project in the community on a health related issue. (S)

OTH 4813 Clinical Work Experience (1-6). Pre-clinical experience in an approved training center.

OTH 4815 Field Work Experience (6). Three months internship in a clinical setting. (F,S,S)

OTH 4851 Field Work Experience (6). Three months internship in a clinical setting. (F,S,S)

OTH 4852 Field Work Experience (VAR). Internship in a specialized treatment area. (F,S,S)

OTH 4904 Independent Study (VAR). To be arranged with instructor according to the student's specialty. (F,S,S)

OTH 4930 Mental Health Seminar (3). Course combines literature review and site visits to develop student's capability for critical analysis of occupational therapy program development in mental health. (S)

OTH 4931 Work Evaluation Seminar (3). The measurement and analysis of client abilities and work requirements applicable to the practice of occupational therapy. (S)

OTH 4932 Pediatric Seminar (3). Review of current research in advanced pediatric practice. Coordinated clinical experiences offer opportunities for application of theoretical approaches to evaluation and treatment. (S)

OTH 4938 Non Traditional Occupational Therapy (3). Examination of the factors that alter the nature of practice in settings outside acute care hospitals. Course includes experiential component, field trips to practice sites. (S)
Undergraduate Catalog

Physical Therapy

Awilda R. Haskins, Associate Professor and Chairperson
Jacques Augustin, Assistant Professor
Steven Bernstein, Assistant Professor
Helen Z. Comely, Assistant Professor
Burton J. Dunevitz, Associate Professor
Leonard Elbaum, Associate Professor
Edith Einspruch, Assistant Professor
and Clinical Coordinator

Physical Therapy is a health profession whose primary purpose is the promotion of optimal human health and function through the application of scientific principles to prevent, identify, assess, correct or alleviate acute or prolonged movement dysfunction. Physical therapists examine, treat and instruct individuals with physical disability, movement dysfunctions, bodily malfunctions, and pain from injury, disease and any other physical or mental conditions. Physical therapists administer, interpret and evaluate tests and measurements of body functions and structures; plan, administer, evaluate, and modify treatment and instruction, including the use of physical measures, activities, and devices for preventive and therapeutic purposes; and provide consultative, educational and other advisory services for the purpose of reducing the incidence and severity of physical disability, movement dysfunction, bodily malfunction and pain.

The Department of Physical Therapy offers two programs: an undergraduate program and a graduate program. The undergraduate program leads to a Bachelor of Science degree and is an entry level program into the profession. The graduate program leads to a Master of Science in Physical Therapy and is designed for physical therapists wishing to pursue an advanced degree.

Bachelor of Science in Physical Therapy

Degree Program Hours: 135

The undergraduate program is accredited by the Commission on Recognition of Post-Secondary Accreditation and the United States Department of Education. The emphasis is placed upon a student-centered approach whereby individuals progress through a variety of learning experiences designed to develop and apply therapeutic skills in the treatment of musculoskeletal, neurologic, cardiovascular, and pulmonary disorders.

The undergraduate students receive experiential and didactic instruction from clinical physical therapists, physicians, and other medical professionals. Clinical education is conducted in accredited centers throughout the United States.

Graduates of the entry level program are prepared to assume employment in general hospitals, rehabilitation centers, private clinics, home health care facilities, school systems, sports medicine units, and in the self-employed sector.

Students who apply for admission to the undergraduate program must meet the physical therapy prerequisites and the general education requirements of the University. Acceptance must be determined both by the University and the Physical Therapy Department. Enrollment is limited and admission is selective.

Note: Students must contact the Physical Therapy Department directly for all applications and information materials before December 15. Deadline for receiving P.T. applications is February 15. Deadline for applying to FIU is January 15. Classes are selected in April to commence coursework in June.

Lower Division Preparation

At least 60 semester hours of an acceptable level of college credit work; one semester of statistics, one semester of human physiology and two semesters of chemistry plus labs and the following prerequisite courses: at least one academic year of science coursework (including laboratory) in each of the areas of biology/zoolgy (Human or Vertebrate Anatomy is recommended) and physics. Human Growth and Development and one psychology or one sociology (a course on aging is recommended); a minimal GPA average of 2.75 in the prerequisite courses and a minimal overall GPA of 2.75 by December 31 of the year prior to the anticipated admission, or attainment of an overall GPA of less than 2.75, but with a prerequisite GPA of 3.3 or higher; completion of at least 200 clock hours of work in, observation of, or interviews with personnel in physical therapy clinics. The wider the variety of experience, the better qualified the candidates become.

To be admitted into the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

At least 20 hours of prerequisites must be completed before December 31. All general education and prerequisites must be completed no later than the Spring semester.

Upper Division Program

Required Courses

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<thead>
<tr>
<th>Summer Semester: (7)</th>
<th>Junior Year</th>
</tr>
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<tbody>
<tr>
<td>PHT 3</td>
<td>Foundations of Physical Therapy 3</td>
</tr>
<tr>
<td>ZOO 3733</td>
<td>Gross Anatomy I 3</td>
</tr>
<tr>
<td>ZOO 3733L</td>
<td>Gross Anatomy Lab I 1</td>
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<th>Fall Semester: (12)</th>
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<tbody>
<tr>
<td>PHT 3122</td>
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<tr>
<td>PHT 3258L</td>
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<tr>
<td>ZOO 3734</td>
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<tr>
<td>ZOO 3734L</td>
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<th>Spring Semester: (14)</th>
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<tbody>
<tr>
<td>PHT 3133</td>
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<tr>
<td>PHT 3133L</td>
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<tr>
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</tr>
<tr>
<td>PHT 3310</td>
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<tr>
<td>PHT 3123</td>
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<table>
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<tr>
<th>Summer Semester: (8)</th>
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<tbody>
<tr>
<td>PHT 3134</td>
</tr>
<tr>
<td>PHT 3216</td>
</tr>
<tr>
<td>PHT 3216L</td>
</tr>
<tr>
<td>PHT 3813</td>
</tr>
</tbody>
</table>
Fall Semester (14)

PHT 4160  Clinical Neuroscience 3
PHT 4234  Neurorehabilitation 3
PHT 4234L  Neurorehabilitation Lab 1
PHT 4300  Physical Therapy and Human Disorders 3
PHT 4710  Rehabilitation I 3
PHT 4710L  Rehabilitation Lab I 1

Spring Semester (13)

PHT 4711  Rehabilitation II 3
PHT 4711L  Rehabilitation Lab II 1
PHT 4233  Neurorehabilitation 3
PHT 4233L  Neurorehabilitation Lab 1
PHT 4313  Clinical Neurology 3
PHT 4601  Independent Research in PT 1
PHT 4  Problem Solving II 1

Summer Semester (6)

PHT 4826  Senior Clinical Internship I 3
PHT 4827  Senior Clinical Internship II 3

Fall Semester (4)

PHT 4828  Senior Clinical Internship III 4

Course Descriptions

Definition of Prefixes

PCB and ZOO - Biological Sciences; PHT - Physical Therapy
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering

PHT 3 Foundations of Physical Therapy (3).  Ethical, legal, and practice issues of physical therapy, management of physical therapy delivery systems, current health trends, and an introduction to research techniques will be covered.  Prerequisite: Admission to Physical Therapy program.

PHT 3122 Clinical Kinesiology I (3).  An introduction to clinical kinesiology with an emphasis on normal movement.  Topics include human biomechanics, individual muscles and joints, analysis of whole body movements, and gait.  Prerequisites: Full-time PT majors or by permission of instructor (F).

PHT 3122L Clinical Kinesiology Lab (1).  Laboratory experiences in identifying and palpating the various components of the human musculoskeletal system while the body is at rest and in motion.  (F)

PHT 3123 Clinical Kinesiology II (3).  Presentation of clinical kinesiology with emphasis on abnormal movement.  Topics include orthopedic, neurological and developmental movement disorders; techniques of movement analysis used in the clinic and research lab.  Prerequisites: PHT 3122 and PHT 3122L.  (S)

PHT 3133 Musculoskeletal Evaluation (3).  Theory and fundamentals of goniometry, joint mobilization, muscle testing, x-ray identification, and posture and gait evaluation.  Prerequisites: PHT 3122, PHT 3122L, and a course in Human Dissection Anatomy.  Corequisite: PHT 3133L.  (S)

PHT 3133L Musculoskeletal Evaluation Lab (1).  Laboratory practice in applied goniometry, joint mobilization, muscle testing, x-ray identification and posture and gait evaluation.  (S)

PHT 3134 Problem Solving in Musculoskeletal Disorders (1).  A seminar class wherein students are assigned a clinical orthopedic problem and evaluate, goal set, treatment plan and role play the treatment application.  Prerequisites: PHT 3122, PHT 3122L, PHT 3133, PHT 3133L, PHT 3122L, PHT 3216L.  (SS)

PHT 3216 Treatment of Pain (3).  Application of current theories of the causes and management of acute and chronic pain.  The use of electrotherapeutic modalities in physical therapy.  Prerequisites: PHT 3258, PHT 3258L, and PHT 3222.  Corequisite: PHT 3216L.  (SS)

PHT 3216L Electrotherapy Lab (1).  Laboratory experience in developing competency with electrotherapeutic modalities in the treatment of pain. Includes low volt and high volt current, TENS, ultrasound, diathermy, iontophoresis, biofeedback.  Corequisite: PHT 3216.  (SS)

PHT 3222 Therapeutic Exercise (3).  The principles and rationale for basic therapeutic exercise procedures are presented in lecture format.  Prerequisites: PHT 3122, PHT 3258, Corequisite: PHT 3133.  (S)

PHT 3222L Therapeutic Exercise Lab (1).  Laboratory experiences provide practice and evaluation of techniques of applying the principles of therapeutic exercise.  Corequisite: PHT 3222.  (S)

PHT 3258 Basic Procedures (3).  A lecture format is used to study the scientific rationale for basic physical therapy procedures including vital signs measurement, massage, and superficial heat.  Prerequisite: Physical Therapy majors only.  (F)

PHT 3258L Procedures Lab (1).  Laboratory experience and evaluation of skills in basic physical therapy procedures including vital signs measurement, massage, and superficial heat.  Corequisite: PHT 3258.  (F)

PHT 3310 Orthopedics (3).  Multimedia lectures and patient case studies presented on the evaluation and management (surgical and nonsurgical) of the orthopedic patient, correlated with laboratory practice in evaluative and treatment skills.  Prerequisites: ZOO 3734, ZOO 3734L, ZOO 3733, ZOO 3733L, PHT 3122, PHT 3122L.  (S)

PHT 3813 Clinical Internship (3).  Supervised full-time clinical experience, designed to offer the student experience in patient care, particularly musculoskeletal evaluation, application of basic physical techniques, and orthopedic planning and implementation.  Prerequisite: Junior standing in P.T. program.  (SS)

PHT 3941 Orientation to Clinical Internship (1).  Supervised full-time clinical experience for physical therapy majors on an extended programs of study.  Designed to orient the student to physical therapy clinical practice.  Prerequisite: Junior standing in the PT program.

PHT 4 Case Management of Physical Therapy Diagnoses (1).  Seminar class: students, given a problem in physical therapy diagnosis, will evaluate, determine physical dysfunction, and design a comprehensive plan of care.  Prerequisite: PHT 3134.

PHT 4160 Structural and Functional Aspects of Neurology (3).  Study of the structure and functions of those components of the central and peripheral nervous systems as they govern normalcy and evidence pathology.  Prerequisites: ZOO 3733, ZOO 3733L, ZOO 3734, ZOO 3734L, or two semesters gross anatomy with dissection.  (F)

PHT 4233 Neurorehabilitation (3).  Application of various exercise techniques to the treatment of individuals with neurodevelopmental defi-
Laboratory and field experiences will be utilized for practice of neurorehabilitation techniques. Corequisite: PHT 4233. (S)

PHT 4234 Neuromuscular Rehabilitation (3). A lecture/discussion format is used to study various neurophysiological theories and principles which are applied in rehabilitation. Prerequisite: Majors only. Corequisite: PHT 4234L. (F)

PHT 4234L Neuromuscular Rehabilitation Lab (1). Laboratory experiences in application of the neuromuscular rehabilitation lecture material from PHT 4234. Corequisite: PHT 4234. (F)

PHT 4300 Physical Therapy and Human Disorders (3). Study of systemic and organ-specific disease and the related medical terminology as they relate to the practice of physical therapy; explores the current literature in selected disease topics. Prerequisite: Course in medical terminology. (F)

PHT 4313 Clinical Neurology (3). Emphasizes evaluation differential diagnosis, goal setting, and treatment planning for patients with neurologic disability. Presented by neurologists and by physical therapists who provide clinical experience in neurologic evaluation. Prerequisites: PHT 4160 and a course in Human Dissection Anatomy. (S)

PHT 4600 Physical Therapy Research Seminar (1). Course content includes a review of research-related concepts including experimental design and statistical analysis, an introduction to techniques used in physical therapy research, and a survey of current research in physical therapy. Prerequisite: Senior standing in Physical Therapy. (F)

PHT 4710 Rehabilitation I (3). Explores evaluation and treatment planning for patients with spinal cord injuries and amputations. Prerequisite: Senior standing PT majors only. Corequisite: PHT 4710L. (F)

PHT 4710L Rehabilitation I Lab (1). Lab practice in evaluation and treatment of patients requiring orthosis/prosthesis and spinal cord injured patients as well as training in w/c fitting and use. Prerequisite: Majors only. Corequisite: PHT 4710. (F)

PHT 4711 Rehabilitation II (3). This course addresses functional evaluation and treatment planning in the following areas: cardiac and pulmonary rehab, burns, oncology, work hardening, biofeed back, and home assessments. Prerequisites: PHT 4710, PHT 4710L. Corequisite: PHT 4711. (S)

PHT 4711L Rehabilitation II Laboratory (1). Provides student with lab practice in cardiac and pulmonary rehabilitation, sub-maximal stress testing, burn care, oncology, and work hardening. Prerequisites: PHT 4710, PHT 4710L. Corequisite: PHT 4711L. (S)

PHT 4826 Senior Clinical Internship I (3). Supervised full-time clinical experience, designed to afford the student the opportunity to practice total patient care, as well as administration and supervision in physical therapy. Prerequisite: Senior student standing in Physical Therapy program. (SS)

PHT 4827 Senior Clinical Internship II (3). Continuation of PHT 4826. Corequisite: PHT 4826. (SS)

PHT 4828 Senior Clinical Internship III (4). Continuation of PHT 4826 and PHT 4827. Pre- or Corequisite: PHT 4826. (F)

PHT 4905 Independent Study (1-3). The student will select a particular aspect of physical therapy or closely related subject for in-depth independent study with a faculty preceptor. Prerequisite: Junior or senior standing in PT program.

Case Management of Physical Therapy Diagnoses (1). Seminar class: students, given a problem in physical therapy diagnosis, will evaluate, determine physical dysfunction, and design a comprehensive plan of care. Prerequisite: PHT 3134.

PHT 4936 Current Topics in Physical Therapy (3). Study of a current topic or limited number of topics not otherwise presented in the curriculum. May be repeated with different subject content. Prerequisite: Senior standing. Prerequisite: Senior standing in PT program. (S)

PHT 4942 Orientation to Senior Clinical Internship I (0). Supervised full-time clinical experience for physical therapy majors on extended programs of study. Designed to offer the student experience in patient care in the physical therapy clinical setting. Prerequisites: Junior standing in the PT program and PHT 3813.

Prosthetics and Orthotics

The Academic Affairs Administration of both the College and the University decided to suspend admission into the Prosthetics and Orthotics program.

The Undergraduate Catalog
Certificates

Medical Laboratory Sciences

The certificate programs in Medical Laboratory Sciences will be offered to students holding a bachelor's degree in the sciences and will provide the clinical courses required for categorical certification by State and National agencies.

Eligibility Requirements

Completion of all prerequisite sciences with a cumulative GPA of 2.0 or better.

Clinical Chemistry Certificate

Pre/Corequisite Courses

Bachelor's Degree in the Sciences (including 30 semester hours of biology and chemistry)
One year General Chemistry with Lab
One year Organic Chemistry with Lab
One semester Biochemistry

Required Courses: (18)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLS 2030</td>
<td>Introduction to a Medical Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MLS 3605</td>
<td>Clinical Instrumentation</td>
<td>2</td>
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<tr>
<td>MLS 3605L</td>
<td>Clinical Instrumentation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MLS 4625</td>
<td>Clinical Chemistry Methods</td>
<td>4</td>
</tr>
<tr>
<td>MLS 4625L</td>
<td>Clinical Chemistry Methods Lab</td>
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</tr>
<tr>
<td>MLS 4630</td>
<td>Advanced Clinical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>MLS 4820L</td>
<td>Clinical Practice/Chemistry</td>
<td>3</td>
</tr>
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</table>

Clinical and Medical Microbiology Certificate

Pre/Corequisite Courses

Bachelor's Degree in the Sciences
One year General Biology with Lab
One year General Chemistry with Lab
One year Organic Chemistry with Lab
One semester Biochemistry or One semester Microbiology
One semester General Microbiology with Lab

Required Courses: (16)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MLS 2030</td>
<td>Introduction to a Medical Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MLS 4505</td>
<td>Clinical Microbiology</td>
<td>4</td>
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<tr>
<td>MLS 4505L</td>
<td>Clinical Microbiology Laboratory</td>
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<tr>
<td>MLS 4611</td>
<td>Advanced Microbiology</td>
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</tr>
<tr>
<td>MLS 3430</td>
<td>Medical Parasitology</td>
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<td>Medical Parasitology Laboratory</td>
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</tr>
<tr>
<td>MLS 4821L</td>
<td>Clinical Practice/Microbiology</td>
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</tbody>
</table>

Hematology Certificate

Pre/Corequisite Courses

Bachelor's Degree in the Sciences (including 30 semester hours of biology and chemistry)
One year General Biology with Lab
One year General Chemistry with Lab
One semester Biochemistry

Required Courses: (16)

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<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MLS 3038</td>
<td>Basic Techniques in MLS</td>
<td>3</td>
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<tr>
<td>MLS 4306</td>
<td>Clinical Hematology</td>
<td>4</td>
</tr>
<tr>
<td>MLS 4306L</td>
<td>Clinical Hematology Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>MLS 4334</td>
<td>Clinical Coagulation</td>
<td>1</td>
</tr>
<tr>
<td>MLS 4334L</td>
<td>Clinical Coagulation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MLS 4822L</td>
<td>Clinical Practice/Hematology</td>
<td>3</td>
</tr>
</tbody>
</table>

Immunohematology Certificate

Pre/Corequisite Courses

Bachelor's Degree in the Sciences (including 30 semester hours of biology or chemistry)
One year General Biology with Lab
One year General Chemistry with Lab
One semester Immunology

Required Courses: (16)

<table>
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<tr>
<th>Course</th>
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<th>Hours</th>
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<td>MLS 2030</td>
<td>Introduction to a Medical Laboratory</td>
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Health Information Management

The purpose of the certificate is to offer an ICD-9-CM Coding program for health care personnel within the community. Study shall include basic concepts of terminology, disease processes, and patient classification systems with a major emphasis on ICD-9-CM. CPT is included also.

Medical Record Coding Certificate

Required Courses

Prerequisites: Anatomy and Physiology with Laboratory

<table>
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<td>MRE 3202</td>
<td>Basic Coding Procedures</td>
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<td>MRE 3431</td>
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<td>Advanced Coding</td>
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<td>Fundamentals of Medical Science II</td>
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<td>MRE 4932</td>
<td>CPT-4 Coding</td>
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</table>

Students must complete their program of study within three years from the date of admission to the certificate program and receive a 'C' or higher in each course.
College of Health

Dean, (Acting) Judith A. Blucker
Associate Dean Evelyn B. Emiline
Assistant Dean Anthony Cruz

Chairpersons and Directors:

Dietetics and Nutrition Susan P. Himburg
Health Information Management Maha Yunis
Medical Laboratory Sciences Beverly A. Warden
Occupational Therapy Susan H. Kaplan
Physical Therapy Awilda R. Haskins
Public Health Virginia McCoy

Faculty

Abdel-Moly, Alma, M.S., O.T.R. (Florida International University), Instructor, Occupational Therapy
Anderson, Barbara V., M.S., M.T. (ASCP), S.B.B., (Ohio State University), Assistant Professor, Medical Laboratory Sciences
Augustin, Jacques, M.S., P.T. (Hunter College), Assistant Professor, Physical Therapy
Bash, Jerry A., Ph.D., M.T. (ASCP), (State University of New York at Buffalo), Associate Professor, Medical Laboratory Sciences
Bernstein, Steven, M.S., P.T. (Florida International University), Assistant Professor, Physical Therapy
Bloch, Elise, M.Ed., O.T.R. (Queens College), Instructor, Occupational Therapy
Brenner, Mary, M.S., R.D. (Florida International University), Clinical Instructor, Dietetics and Nutrition
Cornely, Helen Z., M.S., P.T. (Nova University), Assistant Professor, Physical Therapy
Curry, Katharine R., Ph.D., R.D., L.D. (Southern Illinois University), Professor Emeritus, Dietetics and Nutrition
D'Agati, Suzanne, Ed.D., O.T.R. (Florida International University), Assistant Professor, Occupational Therapy
Darrow, William, Ph.D. (Emory University), Professor, Public Health
Dezfulian, Manoucher, Ph.D. M.T. (ASCP) (University of California), Associate Professor, Medical Laboratory Sciences
Dixon, Ziska, Ph.D. (Texas A&M University) Assistant Professor, Dietetics and Nutrition

Dunevitz, Burton J., Ed.D., P.T. (Nova University), Associate Professor, Physical Therapy
Easton, Penelope S., Ph.D., R.D. (Southern Illinois University), Professor Emeritus, Dietetics and Nutrition
Einspruch, Edith, M.B.A., P.T. (University of Miami), Assistant Professor, Physical Therapy
Elbaum, Leonard, Ed.D., P.T. (University of Miami), Associate Professor, Physical Therapy
Enriane, Evelyn B., Ph.D., R.D. (Purdue University), Associate Professor, Dietetics and Nutrition, and Associate Dean
Gasana, Janvier, M.D., Ph.D. (University of Illinois), Assistant Professor, Public Health
Gusman, Lori, M.S., P.T. (Florida International University), Clinical Assistant Professor, Physical Therapy
Hammer, Victoria, Ph.D., R.D. (University of California, Davis), Assistant Professor, Dietetics and Nutrition
Haskins, Awilda R., Ed.D., P.T. (Florida International University), Associate Professor and Chairperson, Physical Therapy
Hills, Gail H., Ph.D., O.T.R., F.A.O.T.A. (University of Maryland), Professor, Occupational Therapy
Himburg, Susan P., Ph.D., R.D., FADA (University of Miami), Professor and Chairperson, Dietetics and Nutrition
Huffman, Fatma, Ph.D., R.D. (Auburn University), Professor, Dietetics and Nutrition
Jaffe, Amy, M.S., R.D. (Florida International University), Clinical Instructor, Dietetics and Nutrition
Kaplan, Susan H., Ph.D., O.T.R. (University of Miami), Associate Professor and Chairperson, Occupational Therapy
Keane, Michele W., Ph.D., R.D. (Florida State University), Associate Professor, Dietetics and Nutrition
Kepler, William J., Ph.D. (University of Illinois), Professor, Public Health
Lineback, Janet A., Ph.D., M.T. (ASCP) (University of Miami), Professor, Medical Laboratory Sciences
Magnus, Marcia H., Ph.D. (Cornell University) Associate Professor, Dietetics and Nutrition
Martinez, Odalys, B.S., R.R.A. (Florida International University), Instructor, Health Information Management

Matalon, Kimberlee Michals, Ph.D., R.D. (University of Illinois, Chicago), Associate Professor, Dietetics and Nutrition
McCoy, Virginia, Ph.D. (University of Cincinnati), Associate Professor and Chairperson, Public Health
Mills, James L., M.H.A., M.S.E.D., O.T.R. (University of Southern California), Assistant Professor, Occupational Therapy
Scott, Patricia, M.P.H., O.T.R. (University of Oklahoma), Associate Professor, Occupational Therapy
Patterson, Joseph, Dr. P.H. (University of California at Los Angeles), Professor Emeritus, Public Health
Patton, Richard, M.P.H., R.D. (University of North Carolina), Instructor, Public Health
Rose, Patti R., Ed.D. (Columbia University), Assistant Professor, Physical Therapy
Rose-Str. Prix, Colleen, MHSA, P.T. (Florida International University), Assistant Professor, Physical Therapy
Shaffner, Pamela, M.S., O.T.R. (Nova SE), Assistant Professor, Occupational Therapy
Shen, Patrick F., Ph.D., M.T. (ASCP) (University of Arkansas), Associate Professor, Medical Laboratory Sciences
Smith, Sylvia L., Ph.D., S.M. (AAM, ASCP) (University of Miami), Professor, Medical Laboratory Sciences
Stempel, Robert, Dr. P.H. (University of California, Berkeley), Associate Professor, Public Health
Warden, Beverly A., Ph.D., MT (ASCP) (Northeastern University) Associate Professor and Chairperson, Medical Laboratory Sciences
Weddle, Dian O., Ph.D., R.D., FADA (University of Illinois), Associate Professor, Dietetics and Nutrition
Wellman, Nancy S., Ph.D., R.D., FADA (University of Miami), Professor, Dietetics and Nutrition
Yunis, Maha, M.S.H.S., R.R.A. (University of Central Florida), Assistant Professor, Health Information Management
School of Hospitality Management
School of Hospitality Management

Anthony G. Marshall, Dean and Professor
Lee C. Dickson, Associate Dean and Associate Professor
Rocco M. Angelo, Associate Dean and Associate Professor
Adele E. Smith, Assistant Dean and Associate Professor
Elio Bellucci, Professor, Law
M. Chase Burrill, Adjunct Instructor
Cheryl Carter, Visiting Instructor
Patrick J. Cassidy, Instructor
Percival Darby, Assistant Professor
Richard B. Donnelly, Associate Professor
Marcel Escoffier, Assistant Professor
Peter Goffe, Associate Professor
Joseph B. Gregg, Associate Professor
Fritz G. Hagemeyer, Professor
Albert J. Halebian, Instructor and Director, Broward Program
T. Michael Hampton, Assistant Professor
William M. Hansen, Instructor
William Hebrank, Adjunct Instructor
Michael E. Hurst, Professor
Charles L. Ilvento, Associate Professor
Lendal H. Kotschevar, Professor Emeritus
Gerald W. Lattin, Professor Emeritus
Steven Y. Moll, Associate Professor
Elisa Manzara, Professor
Michael J. Moran, Instructor
William J. Morgan, Jr., Professor Emeritus
William O'Brien, Associate Professor
Alan J. Parker, Professor
Nestor Portacarrero, Associate Professor
Roger Probst, Instructor
Edward A. Remington, Visiting Assistant Professor
Joon S. Remington, Assistant Professor
J. Kevin Robson, Associate Professor
Deborah L. Smith, Assistant Professor
William Stanford, Instructor
David M. Talley, Instructor
Mary L. Tanke, Associate Professor
Andrew N. Vladimir, Associate Professor
Jeffrey M. Wachtel, Associate Professor

The School of Hospitality Management offers Bachelor’s and Master’s degrees and certificate programs that combine practical experience with classroom theory to assist the student to gain the understanding, skills, and techniques needed to qualify for job opportunities, or to achieve his or her career goals in the hospitality industry.

With the cooperation of industry executives, the School has created an internship program which literally utilizes the hotels, resorts, restaurants, clubs, airlines, travel agencies, and cruise lines as practice labs for students. The advanced phase of the internship program provides each student a structured management training experience normally not available to a student until he or she has entered the industry after graduation.

An Industry Advisory Board - which includes outstanding executives in the hotel, food and travel industries - works regularly with the faculty, staff, and students of the School to formulate and update a curriculum that is current, flexible, and related to the needs of the hospitality industry.

The School has been designated a Program of Distinction by the Florida Board of Regents.

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

Locations
The School is located on scenic Biscayne Bay at the FIU North Campus at Biscayne Boulevard (U.S. 1) and Northeast 151st Street, North Miami, Florida.

The complete FIU undergraduate degree program in Hospitality Management is also available at the FIU Broward Center located in Fort Lauderdale, 2912 College Avenue, on the Central Campus of Broward Community College, Davie.

The FIU undergraduate degree program in Hospitality Management with a track in Travel and Tourism Management is available at the Miami Dade Community College North Campus located at 11380 Northwest 27 Avenue, Miami.

Admission
Applicants to the School must submit an Application for Admission to the University and must follow the regular University procedures. Applicants must be eligible for admission to the University before admission to the School. A minimum TOEFL score of 500 is required for international applicants.

Undergraduate Study
Any student who has completed two years of college (60 semester hours) may apply for admission. Full credit will be granted for both Associate in Arts and Associate in Science degrees. One may enroll on either a full-time or a part-time basis. Students with less than 60 transfer credits must meet freshman admission criteria.

It is not necessary to have been previously enrolled in a hotel or restaurant program. The curriculum will provide the specialized professional education to equip the student for a career in hospitality management. Students with training in liberal arts, business, technology, for example, are qualified to enroll in the program.

The School operates on a single major concept with a core of 51 semester credits required of all students and an additional 9 semester credits of hospitality management electives. Under this system, the student enjoys maximum flexibility in choosing areas of emphasis while being assured of comprehensive coverage of all areas of hospitality management.

A maximum of 60 lower division undergraduate semester credits may be transferred from a junior or community college program. More credits may be transferred from a related upper-division program at a four-year institution.

There is a requirement that all students work at least 1000 hours in the Hospitality Industry, in addition to the Advanced Internship of 300 hours. A minimum of 800 hours of the total 1300 hours must be completed while enrolled at FIU.
Bachelor of Science in Hospitality Management

Degree Program Hours: 120

Lower Division Preparation (60)

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Transfer students should complete a minimum of 60 semester hours including general education requirements. General education requirements must be completed prior to graduation from the University.

Upper Division Course Requirements: (60)

Management, Accounting, Finance, and Information Systems: (15)

HFT 3403 Management Accounting for the Hospitality Industry 3
HFT 3 Hospitality Information Systems 3
HFT 3453 Operations Control 3
HFT 4464 Interpretation of Hospitality Financial Statements 3
HFT 4474 Profit Planning and Decision Making in the Hospitality Industry 3

Food and Beverage Management: (15)

FSS 3212C Introduction to Commercial Food Production 3
FSS 3232C Intermediate Quantity Food Production 3
FSS 4234C Volume Feeding Management 3
FOS 4201 Food Service Sanitation 3
HFT 3263 Restaurant Management 3

Administration: (21)

HFT 3 Hospitality Facilities Management 3
HFT 3503 Hospitality Marketing Strategy 3
HFT Marketing Elective 3
HFT 300 Law for the Hospitality Industry 3
HFT 3700 Fundamentals of Tourism 3
HFT 3460 Tourism Elective 3
HFT 3495 Advanced Internship 3

HFT 3 Human Resources Development and Training for Hospitality Industry Managers 3
or
HFT 4224 Human Relations in Hospitality Industry 3
or
HFT 4225 Human Resources Management 3

Electives 9

Travel and Tourism Track

Administration (9)

HFT 3 Introduction to Hospitality Management 3
HFT 3603 Law as Related to the Hospitality Industry 3
HFT 4224 Human Relations 3

Marketing (9)

HFT 3503 Hospitality Marketing Management 3
HFT 4524 Hospitality Sales Management 3
HFT 4512 Hospitality Promotion Strategy 3

Operations (9)

HFT 3403 Management Accounting for the Hospitality Industry 3
HFT 3 Hospitality Information Systems 3
HFT 3760 Transportation in the Tourism Industry 3

Tourism (24)

HFT 4701 Introduction to Eco Tourism 3
HFT 3713 International Travel Tourism 3
HFT 3722 Retail Travel Agency Management 3
HFT 3733 Creative Tour Packaging 3
HFT 3770 Introduction to Cruise Line Industry 3
HFT 4945 Advanced Internship 3
HFT 4714 Implementation and Management of Tourism Projects 3
HFT 4735 Geography of World Tourism 3

Electives 9

† Taught at MDCC - North only. Evening courses taught once a year. See advisor.
1000 hospitality related work hours required & 300 hours for Advanced Internship for a total of 1300 hours. Minimum of 600 hours must be completed while enrolled in degree program at FIU. Advanced Internship must be in a Travel/Tourism position.

Minor in Hotel/Lodging Management (18)

Required Courses

HFT 3313 Hospitality Property Management 3
HFT 3453 Operations Control 3
HFT 4524 Sales Management for the Hospitality Industry 3
HFT 3603 Low for the Hospitality Industry 3
HFT 4413 Lodging Systems and Procedures 3
Elective 3

Suggested Electives

HFT 3263 Restaurant Management 3
HFT 4323 Hospitality Facilities Management 3
HFT 3403 Management Accounting for the Hospitality Industry 3
HFT 3503 Hospitality Marketing Strategy 3
HFT 3505 Buyer Behavior 3
HFT 4445 Hotel Computer Systems 3
HFT 4512 Hospitality Promotion Strategy 3
HFT 4464 Interpretation of Hospitality Industry Financial Statements 3
HFT 4474 Profit Planning and Decision-Making in the Hospitality Industry 3
HFT 4476 Resort Development 3
HFT 4604 Hospitality Legislation 3
HFT 4694 Financial and Legal Aspects of Real Estate Development 3

†Prerequisite required

Minor in Restaurant/Food Service Management (18)

Required Courses

FSS 4201 Sanitation in Food Service Operations 3
FSS 3221 Introductory Commercial Food Production 3
FSS 3232 Intermediate Quantity Food Production 3
FSS 4105 Purchasing and Menu Planning 3
HFT 3263 Restaurant Management 3
Elective 3

†Prerequisite required
### Suggested Electives

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<tr>
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<th>Hours</th>
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<td>FSS 3243</td>
<td>Basic Meat Science</td>
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<tr>
<td>HFT 3344</td>
<td>Fast Food Systems Management</td>
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<tr>
<td>HFT 3</td>
<td>Management Accounting for the Hospitality Industry</td>
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<td>HFT 3</td>
<td>Club Operation Management</td>
<td>3</td>
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<tr>
<td>HFT 3</td>
<td>Food and Beverage Cost Control</td>
<td>3</td>
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<tr>
<td>HFT 3</td>
<td>Beverage Management</td>
<td>3</td>
</tr>
<tr>
<td>HFT 3872</td>
<td>Wine Technology, Merchandising, and Marketing</td>
<td>3</td>
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<tr>
<td>HFT 4295</td>
<td>Catering Management</td>
<td>3</td>
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<tr>
<td>HFT 4404</td>
<td>Noncommercial and Contract Foodservice Management</td>
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<td>HFT 4405</td>
<td>Recreational Food Service Management</td>
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<td>HFT 4531</td>
<td>Food and Beverage Merchandising</td>
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<td>HFT 4493</td>
<td>Food Service Computer Systems</td>
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1Prerequisite required

### Minor in Travel and Tourism Management (18)

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<th>Required Courses</th>
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<tr>
<td>HFT 3700 Fundamentals of Tourism</td>
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<td>HFT 3713 International Tourism</td>
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<td>HFT 3733 Creative Tour Packaging</td>
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<td>HFT 3753 Convention and Trade Show Management</td>
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<td>HFT 3770 Introduction to the Cruise Line Industry</td>
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### Electives (6)

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<td>HFT 3203</td>
<td>Fundamentals of Management for Hospitality Industry</td>
<td>3</td>
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<tr>
<td>HFT 3344</td>
<td>Fast Food Systems Management</td>
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<td>HFT 3</td>
<td>Club Operations Management</td>
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<td>HFT 3</td>
<td>Food and Beverage Cost Control</td>
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<td>HFT 3</td>
<td>Beverage Management</td>
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<tr>
<td>HFT 3872</td>
<td>Wine Technology, Merchandising, and Marketing</td>
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<td>HFT 3</td>
<td>Human Resources Development and Training</td>
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<td>HFT 4224</td>
<td>Human Relations</td>
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<td>HFT 4225</td>
<td>Human Resources Management</td>
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<td>HFT 4295</td>
<td>Catering Management</td>
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<tr>
<td>HFT 4493</td>
<td>Food Service Computer Systems</td>
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1Prerequisite required

### Certificate Program

The School has Certificate Programs in Hotel/Lodging Management, Restaurant/Food Service Management, and Travel and Tourism Management. Each program consists of 12 courses (36 credit hours) and has a core requirement and electives to meet the specific needs of each candidate. The programs are open to all students with a high school education and experience in the industry. The international student candidate must submit a minimum score of 500 on the TOEFL exam or its equivalent and a Declaration and Certification of Finances document.

### Restaurant/Food Service Management Certificate (36)

Note: Curriculum may be adjusted to meet the needs of students with extensive related industry experience.

<table>
<thead>
<tr>
<th>Core (30)</th>
<th>Hours</th>
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<tr>
<td>FOS 4201 Sanitation in Food-service operations</td>
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<tr>
<td>HFT 3221 Introductory Commercial Food Production</td>
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<td>HFT 3232 Intermediate Quantity Food Production</td>
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<td>HFT 4234 Volume Feeding Management</td>
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<td>HFT 4105 Purchasing and Menu Planning</td>
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<td>HFT 3263 Restaurant Management</td>
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<td>HFT 3 Management Accounting for the Hospitality Industry</td>
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<td>HFT 3503 Hospitality Marketing Strategy</td>
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<tr>
<td>HFT 3603 Law for the Hospitality Industry</td>
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<tr>
<td>HFT 4531 Food and Beverage Merchandising</td>
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</table>

### Hotel/Lodging Certificate (36)

Note: Curriculum may be adjusted to meet the needs of students with extensive related industry experience.

<table>
<thead>
<tr>
<th>Core (30)</th>
<th>Hours</th>
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<tbody>
<tr>
<td>HFT 3313 Hospitality Property Management</td>
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<td>HFT 3 Management Accounting for the Hospitality Industry</td>
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<td>HFT 3 Introduction to Hospitality Information Systems</td>
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<tr>
<td>HFT 3453 Operations Control</td>
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<td>HFT 3503 Hospitality Marketing Strategy</td>
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<td>HFT 3603 Law for the Hospitality Industry</td>
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<td>HFT 3753 Convention and Trade Show Management</td>
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<td>HFT 4413 Lodging Systems and Procedures</td>
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<tr>
<td>HFT 4476 Resort Development</td>
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<tr>
<td>HFT 4524 Sales Management for the Hospitality Industry</td>
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1Prerequisite required
Undergraduate Catalog

School of Hospitality Management / 313

Electives (6)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>HFT 3203</td>
<td>Fundamentals of Management in the Hospitality Industry</td>
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<tr>
<td>HFT 3263</td>
<td>Restaurant Management</td>
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<td>HFT 4223</td>
<td>Physical Plant Hospitality Facilities Management</td>
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<td>HFT 3</td>
<td>Human Resources Development and Training</td>
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<td>HFT 4445</td>
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<td>HFT 4464</td>
<td>Interpretation of Hospitality Industry Financial Statements</td>
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<td>Profit Planning and Decision-Making in the Hospitality Industry</td>
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<td>HFT 4512</td>
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<tr>
<td>HFT 4654</td>
<td>Financial and Legal Aspects of Real Estate Development</td>
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</table>

Prerequisite required.

Travel and Tourism Management Certificate (36)

Note: Curriculum may be adjusted to meet the needs of students with extensive related industry experience.

Core (30)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HFT 3</td>
<td>Hospitality Information Systems</td>
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<tr>
<td>HFT 3503</td>
<td>Hospitality Marketing Strategy</td>
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</tr>
<tr>
<td>HFT 3603</td>
<td>Law for the Hospitality Industry</td>
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<tr>
<td>HFT 3700</td>
<td>Fundamentals of Tourism</td>
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<td>HFT 3713</td>
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<td>HFT 3722</td>
<td>Retail Travel Agency Management</td>
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<td>HFT 3733</td>
<td>Creative Tour Packaging</td>
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<td>HFT 4701</td>
<td>Eco-Tourism?</td>
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<td>HFT 4714</td>
<td>Implementation and Management of Tourism Projects</td>
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<tr>
<td>HFT 4735</td>
<td>Geography for the Visitor Industry</td>
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Electives (6)

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<tr>
<th>Course Code</th>
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<tr>
<td>HFT 3</td>
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<td>HFT 3</td>
<td>Management Accounting for the Hospitality Industry</td>
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<td>HFT 3753</td>
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<td>HFT 3770</td>
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<td>HFT 3760</td>
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<td>HFT 3793</td>
<td>Sociology of Leisure</td>
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<td>HFT 4295</td>
<td>Catering Management</td>
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<td>Recreational Foodservice Management</td>
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<tr>
<td>HFT 4594</td>
<td>Role of Market Research in Visitor Industry</td>
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1Prerequisite required.

2Taught at Miami Dade Community College - North only. Evenings.

Non-Degree Seeking Students

A number of persons currently employed in the hospitality field may not have the educational requirements to meet degree admission standards, but may be interested in enrolling in certain specific courses to improve their skills and to enhance their chances for promotion. Individuals in the field may register as a Non-Degree Seeking Student for a total of 15 semester hours.

Course Descriptions

Definition of Prefixes and Suffixes

FOS - Food Science; FSS - Foodservice Systems; HFT - Hotel, Food, Tourism;

F-Fall semester offering; S-Spring semester offering, SS-Summer semester offering.

FOS 4201 Sanitation in Foodservice Operations (3). The causes and prevention of foodborne illness are stressed. Emphasis is placed on the current problems confronting the industry, with recent food developments as they relate to sanitation. The Hazard Analysis Critical Control Point system (HACCP) is included (F,S,SS)

FSS 3233C Institutional Foodservice Production (3). Theory and application of commercial and institutional foodservice in an industrial environment, including large scale purchasing procedure, training in large production equipment, on-the-job training. Prerequisites: FOS 3021 or FOS 4041. (S)

FSS 3221C Introductory Commercial Food Production (3). An introduction to commercial food production, nutrition, standard product identification, and supervisory techniques in the area of food preparation. Includes classroom instruction, demonstrations, and actual cooking and baking of breads, pastries and desserts. (F,S,SS)

FSS 3232C Intermediate Quantity Food Production Techniques (3). An advanced commercial food production course which provides the student with the opportunity to achieve competence and to develop techniques in soups, salads, sauces, entrees, and convenience foods. Prerequisite: FSS 3221C or equivalent. (F,S,SS)

FSS 3242C International Cuisine (3). An opportunity for food aficionados to explore modern interpretations of international classic cuisine. Includes lecture, demonstration and preparation of favorite international dishes from restaurant menus around the world. Open to non-majors.

FSS 3243 Basic Meal Science (3). Fundamentals of meat, poultry and seafood: quality yield, utilization of cuts, availability, costing, buying, inventorying, packaging, labor, and trends.

FSS 4105 Purchasing and Menu Planning (3). Basic information on sources, grades and standards, criteria for selection, purchasing, and storage for the major foods, including the development of specifications. Consideration of the menu pattern with particular emphasis on costing, pricing, and the work load placed on the production staff. Item analysis and merchandising features are emphasized. (F,S,SS)

FSS 4234C Volume Feeding Management (3). A course in advanced food production and service techniques to provide the student with realistic production, service and managerial experience. Students will be rotated through production and service stations and, as managers, will be required to plan menus,
supervise preparation and service, handle customer relations, and keep accurate accounting records on the profit and loss phases of the operation. Staffing, merchandising, and cost control procedures are integral parts of the course. Prerequisites: FSS 3221C and FSS 3232C. (F.S.SS)

FSS 4241C Classical Cuisine (3). Provides an opportunity for students to expand their knowledge of food preparation into the area of world-respected traditional dishes. The course includes lecture, demonstration, and actual preparation of classical dishes. Students will use conventional methods of preparation as well as convenience foods. Open to non-majors.

FSS 4245C Advanced Meat Science (3). An advanced course which considers the variable factors of meat, poultry, and fish utilization. Emphasis is placed upon newer techniques in purchasing, maximizing yields, and providing products in unique form. The use of TVP and other analogues is considered, as are the functions of the specialized commissary-type of meat processing plants. Guest speakers will be utilized and field trips to protein processing plants will be made to emphasize major points. Prerequisite: FSS 3243.

FSS 4431 Food Facility Layout and Design (3). Defines and explains concepts, principles, and procedures in evaluating and/or developing varied commercial foodservice facilities that will increase profit by reducing investment and operating cost and/or by increasing capacity. Actual installations are intensively reviewed. Current trends in foodservice methodology and technology are studied in detail, and foodservice equipment manufacturing processes and distribution economics are observed and evaluated. Prerequisite: HFT 4333.

HFT Introduction to Hospitality Management (3). A survey course providing an overview of the industry, its history, problems, and general operating procedures. Operating executives from the fields of hotel, restaurant, foodservice, travel, and tourism will be featured periodically. (F.S)

HFT Management Accounting for the Hospitality Industry (3). Introduction and practice in accounting processes, and the principles of hospitality management accounting. Prepares the student for work in advanced accounting and financial management. Required for students who have not completed an introductory accounting course. (F.S.SS)

HFT Club Operations Management (3). Lecture, discussion, case studies, and field trips specifically designed to expose the future club manager, golf professional, and turf manager to club operations. Introduction to the uniform system of accounts for clubs, annual club studies for operating results, control systems, taxation, budgeting, and management reports. (F.S)

HFT Beverage Management (3). An introduction to the identification, use, and service of wines and other alcoholic beverages, with an in-depth analysis of the various elements of beverage operations including purchasing, control, merchandising, and bar management. (F.S)

HFT Human Resources Development and Training for Hospitality Industry Managers (3). A course designed to provide specific applications of proven training systems and methods for managers in the hospitality industry. The case study method will be used. (F.S)

HFT Hospitality Information Systems (3). An introduction to the general concepts and equipment that support information management by computer within the Hospitality Industry. Data field handling and other information management techniques are stressed. Students are first required to write application programs, then to complete a series of assignments utilizing application programs relating to guest cycle management on the school's computerized property management system. (F.S.SS)

HFT Operations Control (3). Study of the management tools available to control sales and expenses within hospitality operations. Detailed analysis of the responsibility centers using a cost management approach. Case problems provide the students the opportunity to develop control systems for food and lodging organizations. Prerequisite: HFT 3403. (F.S.SS)

HFT Food and Beverage Cost Control (3). Fundamentals of food and beverage cost controls for hotel and restaurant operations. (F.S.SS)

HFT 3203 Fundamentals of Management in the Hospitality Industry (3). A basic course in general management to acquaint the student with theories and principles of organization, the tools of managerial decision-making, and the management process, with particular reference to the hospitality industry.

HFT 3263 Restaurant Management (3). An analysis of the principal operating problems in the restaurant field. Procedures, approaches, and techniques of management are explored and developed as they relate to the various categories of restaurants ranging from fast food to fine dining. Industry leaders will present successful concepts of restaurant operation. (F.S)

HFT 3313 Hospitality Property Management (3). The problems of cost and operation of pest control, security, parking, general cleaning and upkeep, laundry, fire prevention, pools, tennis courts, and care of guest rooms and public space, with emphasis on equipment, personnel, and modern innovations, the housekeeping department of the hotel. (F.S.SS)

HFT 3344 Fast Food Systems Management (3). A study of management systems in a wide range of fast food and quick serve food restaurants, including site criteria, design and layout, operations, marketing techniques and cost controls. (F.S.SS)

HFT 3503 Hospitality Marketing Strategy (3). Examines the use of management principles and techniques of analysis, planning, implementation and control to maximize marketing effectiveness in hospitality organizations. (F.S.SS)

HFT 3505 Hospitality Buyer Behavior (3). An analysis of influences on buyer and the process involved in their purchase of hospitality services and the implications for marketing/strategy design and execution. Prerequisite: HFT 3503. or equivalent. (F.S)

HFT 3525 Hospitality Sales and Marketing Techniques (1). An experiential course that gives students the opportunity to practice and develop personal-selling skills by doing field sales projects for industry partners (may be repeated for up to 3 credits. Prerequisite: Permission of instructor.

HFT 3603 Law as Related to the Hospitality Industry (3). A basic course in hotel, motel, and restaurant law emphasizing risk management and security. The student is introduced
to the fundamental laws, rules, and regulations applicable to the hospitality industry. Case study approach is used to develop an awareness and understanding of the legal problems confronting the manager and executive in policy and decision making. (F.S)

HFT 3700 Fundamentals of Tourism (3). An introduction to the broad fields of travel and tourism. Among the topics covered are cultural tourism, eco-tourism, sociology of tourism, tourism components and supply, tourism development, the economic role of tourism demand, and the marketing of tourism. (F.S)

HFT 3713 International Travel and Tourism (3). An introduction to the complete international scope of travel and tourism. A brief analysis of regional framework and specific regions of the world, the interrelationship between human society and the physical environment. Tourism as a factor in economic development and its cultural and sociological factors are explored. An analysis of the international organizations of tourism and the facilitation procedures required for its successful implementations are highlighted. (F.S)

HFT 3733 Creative Tour Packaging (3). A comprehensive study of the functions of the wholesale tour operation. Includes tour operation and development, sales methods used in selling group business, costing and contracting of group business, and in-depth study of the promotional aspects of tour packaging. (F.S, S.S)

HFT 3753 Convention and Trade Show Management (3). A course concentrating on organizing, arranging and operating conventions, trade shows, and expositions. Emphasis will be placed on the modes and methods of sales used in booking conventions and trade shows, as well as the division of administrative responsibility in their operation. (F.S)

HFT 3760 Transportation in the Tourism Industry (3). Explore relationship between tourists and modern transport providers, the impact of societal and environmental issues, the intense services nature and resulting challenges of operations and management.

HFT 3770 Introduction to the Cruise Industry (3). Overview of cruise industry's history and evolution, operating and marketing procedures, career opportunities, ship profiles, itineraries, and ports of call. Guest speakers and optional field trip included. (F.S)

HFT 3793 Sociology of Leisure (3). An introduction to the fundamental psychological and sociological concepts and theories as they relate to the motivation behind travel and tourism.

HFT 3872 Wine Technology, Merchandising, and Marketing (3). A course in oenology and the fundamentals of wine technology (viticulture and vinification methods). The major types of wine and the factors influencing their quality; principles of sensory evaluation, wine merchandising, and marketing. (F.S, S.S)

HFT 3900-3905 Independent Studies (VAR). With permission from the Associate Dean, students may engage in independent research projects and other approved phases of independent study. Prerequisite: 3.0 GPA. (F.S, S.S)

HFT 3941 Internship in Hospitality Management (3). Practical training and experience in all the major phases of hospitality operations. Reports are required. Prerequisite: Permission of instructor. (F.S, S.S)

HFT 4224 Human Relations in the Hospitality Industry (3). A skill based course designed to improve students' ability to manage effective relationships with hospitality employees and guests. Focuses on improving customer service and guest satisfaction. (F.S, S.S)

HFT 4225 Human Resources Management for Hospitality Industry (3). A study of human resources management in hospitality industry designed to assist students in improving human skills through understanding hourly and management human resource policies, practices and procedures. (F.S)

HFT 4234 Union Management Relations in the Hospitality Industry (3). A comprehensive course covering labor legislation, union history, and the day-to-day administration of the labor contract. Emphasis is placed on collective bargaining and the business relationships between union and management.

HFT 4293 Restaurant Management Seminar (3). A senior course reviewing current problems and practices, developing policies, procedures, and implementing them. Prerequisite: Permission of instructor.

HFT 4295 Catering Management (3). A study of the techniques, logistics, and responsibilities involved in the management of on- and off-premise catering companies. Prerequisite: FSS 3221C and HFT 3263. (F.S)

HFT 4296 Senior Seminar in Hospitality Management (3). Student groups identify and research a major problem of a hospitality enterprise. Discussions will focus on problems and solutions. Final report required. Seniors only.

HFT 4323 Hospitality Facilities Management (3). A comprehensive survey of engineering, maintenance and efficiency control in hotels, restaurants, and institutions. Prerequisite: HFT 3403, HFT 3453. (F.S, S.S)

HFT 4343 Hotel and Restaurant Planning and Design (3). Considers analysis, evaluation, and scheduling of the economic, technical, aesthetic, and merchandising factors involved in the planning, programming and design stages of hotels and restaurants. Actual hotel and restaurant projects will serve as the basis for discussion and student project work. Prerequisite: HFT 4323.

HFT 4404 Non-Commercial and Contract Foodservice Management (3). Management of foodservice operations in noncommercial facilities, self operated and contract managed. Includes business and industry, health care, campus dining, correctional and foodservice vending.

HFT 4405 Recreational Food Service Management (3). Methods and systems of managing foodservice operations in recreational facilities, such as stadiums, coliseums, arenas, convention centers, amusement parks, pari-mutuels, state and national parks, and other recreational areas.


HFT 4445 Hotel Computer Systems (3). A seminar on computer systems within the hotel industry. An intensive study of a computerized property management system. All computer applications are examined from reservations to the back office through a series of assign-
HFT 4464 Interpretation of Hospitality Industry Financial Statements (3). In-depth study of hospitality industry financial statements including consideration of the significant relationships between the various accounts found on financial reports. The statement of changes in financial position is studied, emphasizing funds as a means of payment. Major emphasis is placed upon trend analysis, ratio analysis, and comparison analysis using hospitality industry annual studies. Prerequisite: HFT 3403, HFT 3453. (F,S,SS)

HFT 4474 Profit Planning and Decision-Making in the Hospitality Industry (3). Study of the decision-making process involved in the development of profit plans through analysis of hospitality industry studies. The establishment of short and long term goals and the means to reach these goals through profit plans. Emphasis on pricing decisions, responsibility centers, business units, variance analysis, cost-volume profit analysis, capital budgeting, and tax considerations. Prerequisites: HFT 3403, HFT 3453, HFT 4464. (F,S,SS)

HFT 4476 Resort Development (3). Analysis of management systems and methods for development of full-service resorts. Comparison of specialized requirements for different types of resorts based on location, climate, activities, and lifestyle. Consideration of responsibility analyses, feasibility analysis, project development, construction supervision, pre-opening requirements and operations. (F,S,SS)

HFT 4479 Foodservice Systems Development (3). Course presenting the systems and procedures to develop a foodservice operation from concept to opening. Prerequisites: HFT 3403, HFT 3263 and HFT 3503.

HFT 4493 Food Service Computer Systems (3). Study of computer systems in the restaurant industry. The student is required to implement a simulated restaurant. This simulation includes personnel files, daily management, menu explosion and analysis, and inventory tracking. In addition, a research project will be assigned. Prerequisite: Hospitality Information Systems. (F,S,SS)

HFT 4502 Role of Market Research in Visitor Industry (3). Fundamental research methods for tourism industry: data collection, analysis, write-up, and presentation. Emphasis placed on research implication relevant to management and problem solving. Prerequisite: HFT 3503.

HFT 4504L Hospitality Marketing Management Laboratory (2). An experimental course that allows students within a team to apply ideas, theories and techniques of management to real-world business challenges (may be repeated for up to 6 credits). Prerequisites: HFT 3525.

HFT 4512 Hospitality Promotion Strategy (3). This course deals with the practical aspects of designing and implementing a hospitality advertising, public relations, and promotional program. Planning, budgeting, media, and campaign creation will be studied. Prerequisite: HFT 3503.

HFT 4514 Hospitality Marketing Strategy Case Studies (3). A case-method course in strategic marketing analysis and decision making for the hospitality services industry. Students engage in intensive class discussion and written reports on hospitality cases. Prerequisite: HFT 3503.

HFT 4520 Personal Sales Tactics for the Hospitality Industry (3). An investigation of personal selling approaches and procedures used in hospitality sales environments combined with practical application role-plays and skill rehearsals. Prerequisite: HFT 3503.

HFT 4524 Sales Management for the Hospitality Industry (3). Explores innovative management techniques used in hospitality sales for effective sales development and revenue generation. Practical application, simulations, research and field study used. Prerequisite: HFT 3503. (F,S,SS)

HFT 4531 Food and Beverage Merchandising (3). An application of marketing and advertising principles to the specific area of food and beverage for hotels and restaurants. Prerequisite: HFT 3503.

HFT 4604 Legislation and the Hospitality Industry (3). A study of the legislative requirements imposed upon hospitality industry operators. Special emphasis is placed on the minimum wage law, sales tax, uniform provision and maintenance, tip credit, and the determination of what constitutes hours worked for the various job categories, discrimination, and sexual harassment. Prerequisite: HFT 3603.

HFT 4654 Financial and Legal Aspects of Real Estate Development in the Hospitality Industry (3). A study of the legal implications and financing alternatives for development of new properties and conversions. Prerequisite: HFT 3603 and HFT 4464.

HFT 4701 Eco-Tourism (3). A study of contemporary issues pertaining to tourism based on the natural environment. Explores management strategies suitable for controlling this growing industry.

HFT 4714 Implementation and Management of Tourism Projects (3). Practical development, implementation, and management of tourism projects and programs with emphasis on international and developing nation situations. Prerequisites: HFT 3700 or equivalent.

HFT 4735 Geography for the Visitor Industry (3). Survey of geographical elements of worldwide travel and tourism. Introduces contemporary tourism through historical perspective. Analyzes destinations around the world including cruise.

HFT 4874 Advanced Wine Technology (3). Overview of the wine business including: importers, wholesalers, growing grapes, making wine, retailing in supermarkets, restaurants, and liquor stores, analytical tastings, matching wine and food. Prerequisite: HFT 3872.

HFT 4880 In-Flight Food Service Management (3). An introduction to the concepts and managerial techniques specifically related to the inflight food service segment of the hospitality industry. Students will be exposed to a comprehensive study of contract purchasing, contract negotiations, system menu planning, volume food production, staff scheduling, industry pricing methods, product specification factors, client and employee relations, and security control systems, and familiarized with specific and specialized food service equipment, equipment routing and balance, and transportation methods and procedures.

HFT 4936 Hotel Management Seminar (3). A senior course reviewing current problems and practices, developing policies and procedures, and implementing them. Prerequisite: Permission of instructor.
HFT 4945 Advanced Internship in Hospitality Management (1-3). Structured hospitality practical training work experience involving training program and job rotations not previously performed. 10 week/300 hours minimum. Report and management project required. Prerequisites: Documented completion of 1,000 hospitality related work hours of which at least 500 hours must be completed while enrolled at FIU. Permission of instructor. (F.S.S)
Talty, David M., B.S. (Florida State University), Instructor, Management.
Tanke, Mary L., Ph.D. (Purdue University), Associate Professor, Management
Vladimir, Andrew, M.S. (Florida International University), Associate Professor, Management
Wachtel, Jeffrey M., Ph.D. (Georgia State University), Associate Professor, Management
School of Journalism and Mass Communication
School of Journalism and Mass Communication

J. Arthur Heise, Professor and Dean
Lillian Lodge Kopenhaver, Professor and Associate Dean
William Adams, Associate Professor
Margo Berman, Associate Professor
Sergio Bustos, Visiting Instructor
Humerto Delgado, Associate Professor
Mario Diament, Associate Professor
Francisco Diaz, Director, Student Services
Luis K. Falk, Assistant Professor
Hugh Gladwin, Director, Institute for Public Opinion Research
Hernando Gonzalez, Associate Professor
Charles Green, Director, International Media Center
Kevin Hall, Editor-in-Residence
Michael Huber, Assistant Professor
Laura Kelly, Instructor
David L. Martinson, Professor
Doug McLoughlin, Assistant Director, Institute for Public Opinion Research
Michael McQueen, Visiting Instructor
Debra Miller, Associate Professor
Anne R. Owen, Assistant Professor
Patricia B. Rose, Associate Professor and Chairperson, Department of Advertising and Public Relations
Don Sneed, Professor and Chairperson, Department of Journalism and Broadcasting
Carlos Suris, Director, Student Resource Center
Charles Tuggle, Assistant Professor
Francisco Vasquez, Visiting Director, Latin American Journalism Center, Panama
Lorna Verardi, Associate Professor
Jack Virtue, Deputy Director, International Media Center

Bachelor of Science in Communication

Degree Program Hours: 124

The School of Journalism and Mass Communication is fully accredited by the Accrediting Council on Education in Journalism and Mass Communications.

The aim of the undergraduate communication program at the University is to prepare students who

1. are broadly educated, demonstrated by a grasp of the liberal arts and an appreciation of the value of knowledge and learning, including exploration in some depth

of a specific field of knowledge outside communication;

2. can think clearly and objectively about the complexities of the modern world, formulate concepts and effectively communicate this information to targeted audiences;

3. are proficient in the basic skills necessary to meet professional requirements at the entry level in one of the sequences offered by the school. This shall include the ability to write English to professional standards and to master the mechanics of grammar, spelling, and punctuation;

4. understand the social, ethical, economic, philosophical, and political aspects of the communication profession in a global society.

The school offers majors in advertising, broadcasting, public relations, and journalism. Approximately 25 percent of a student's course work is within the school. The purpose is to provide professional career entry skills as well as a broader understanding of communication processes and techniques and their impact on society.

Emphasis is placed on a broad range of knowledge. In keeping with the standards required of nationally-accredited mass communication programs for graduation, all students must take a minimum of 90 semester hours outside the field of journalism and mass communication; a minimum of 65 of those hours must be in the liberal arts.

Additionally, students will select an area of concentration outside the field of communication to pursue in depth. Each advisor will provide recommendations for students with particular career goals.

Typing ability is required of all students.

Lower Division Requirements

Due to the school's accreditation, lower division students are encouraged to enroll in liberal arts courses beyond their general or core curriculum requirements. A list of suggested courses can be obtained in the Office of Student Services. In order to be admitted into the upper division program, FIU undergraduates and transfer students must complete 60 credits and have a GPA of 2.0 or higher.

In addition to verifying all requirements for admission, the school evaluates all previous course work to ascertain that the admitted student has met the university's general education or core curriculum requirements as well as those of the school and/or sequence. Furthermore, we strongly recommend that students complete any deficiencies within the first two semesters upon entering upper division status.

Writing Proficiency

All students in each track are expected to demonstrate proficiency in writing. Students are required to enroll in Writing Strategies for Reaching a Mass Audience (MMC 3101) and receive a 'C' or higher within the first 12 hours of the program. Admission to MMC 3101 requires the passing of a diagnostic English test. Those who do not pass will be referred to the school's own Writing Lab for tutoring and practice as preparation for retaking the test. MMC 3101 is a prerequisite for ADV 4100, JOU 3113, RTV 2100, or PUR 4100.

Transfer Credit

Transfer students entering the program may receive credit, with school approval, for a maximum of six semester hours of communication courses previously taken at another institution with a grade of 'B' or higher in each course. This does not include MMC 3101, MMC 4200, and skills courses.

Lower Division Students

Freshmen and sophomores planning to enter the school are encouraged to write or visit the school to discuss requirements, career opportunities, and their programs of study.

Acceptable Performance

Only grades of 'C' or higher in school courses, the student's area of concentration, and other courses required by the school shall apply for graduation. A 'C-' is unacceptable. In order to take courses, students must have completed all prerequisites for the course with a grade of 'C' or better. Any student found not to have completed the specific requirements as stated in the catalog and the course outline.
will be given a "WF" grade if the student does not drop the course prior to the end of the drop period.

Courses Outside the School
A minimum of 90 semester hours must be taken outside the field of journalism and mass communication. Sixty-five (65) of these hours must be in the liberal arts. These requirements must be in order to graduate.

Graduation Policy
To be eligible for graduation, a student must have a minimum 2.5 GPA in all SJMC courses required for graduation.

Advertising
School Requirements
MMC 3101  Writing Strategies for Reaching a Mass Audience¹ 3
MMC 4200  Mass Communication Law and Ethics 3
MMC 3602  Mass Media and Society 3
MMC 3003  Mass Communication Orientation¹ 0

Track Requirements
ADV 3000  Principles of Advertising 3
ADV 3200  Creative Concepts¹ 3
PUR 3000  Principles of Public Relations 3
MMC 4410  Integrated Communication Campaigns 3
(Prerequisites: MMC 3101, ADV 4100, ADV 4103 or ADV 3500, ADV 4300)

If concentrating in creative, students will take:
ADV 4100  Advanced Print Concepts 3
(Prerequisites: ADV 3200, MMC 3101)
ADV 4103  Radio/TV Concepts 3
(Prerequisites: ADV 3200, MMC 3101)

If concentrating in account work, students will take:
ADV 3500  Advertising Strategy Research 3
ADV 4300  Media Planning 3

Departmental Elective: (3)
Students must select one of the following courses in addition to the above:
JOU 3003  Principles of Journalism
JOU 4208  Magazine Editing and Production

MMC 4936  Special Topics
MMC 4945  Communication Internship
PUR 4101  Publications Editing and Design
RTV 3000  Principles of Television

These are the track core courses which must be completed within the first 18 hours of the program.

Area of Concentration
In consultation with an advisor, students must elect a coherent series of five upper-division courses (15 semester hours) in a non-communication area related to their career emphasis.

Liberal Arts Requirements
Students must select one course from each of the following subject areas: English, anthropology/sociology, psychology, visual arts/political science/statistics, international relations in order to meet the 12 credit upper division requirement.

Internship
Internships are available for advertising majors who have not yet gained experience in the field. Students who have a 3.0 GPA in school course work and meet the curricular requirements outlined in the internship packet select elect an internship in consultation with their advisors. The internship requires a minimum of 300 hours of work for 3 academic credits.

Minor in Advertising
Students are required to take the following four courses:
MMC 3101  Writing Strategies for Reaching a Mass Audience 3
ADV 3000  Principles of Advertising 3
ADV 3200  Creative Concepts³ 3
MMC 4410  Integrated Communication Campaigns 3

They must also choose either of the following two groups of courses for a total of 18 semester hours.

Group I:
ADV 4100  Advanced Print Concepts 3
ADV 4103  Radio/TV Concepts 3

Group II:
ADV 3500  Advanced Strategy Research 3
ADV 4300  Media Planning 3

Television
School Requirements
Students in the Television Track may choose Production or Management. In addition to the individual track requirements, students must take the following school requirements:
MMC 3101  Writing Strategies for Reaching a Mass Audience¹ 3
MMC 4200  Mass Communication Law and Ethics¹ 3
MMC 3602  Mass Media and Society¹ 3
MMC 3003  Mass Communication Orientation¹ 0

Production Track Requirements
RTV 3000  Principles of Television¹ 3
RTV 2100  Writing for Electronic Media (Prerequisite: MMC 3101) 3
RTV 3200  Video Studio Production 3
RTV 3262  Video Field Production 3
RTV 3263  Video Post Production (Prerequisites: RTV 3262) 3
RTV 3207  Video Directing (Prerequisite: RTV 3200) 3
RTV 4206  Advanced Video Production Workshop (Prerequisites: RTV 4800) 3
RTV 4800  Station Operation (Prerequisites: RTV 3207 and RTV 3263) 3

Management Track Requirements
RTV 3000  Principles of Television¹ 3
RTV 2100  Writing for Electronic Media (Prerequisite: MMC 3101) 3
RTV 3500  Broadcasting Programming Theory (Prerequisite: RTV 3000) 3
MMC 3250  Media Management 3
RTV 3803  Video Studio Management 3
MMC 4262  New Technologies (Prerequisites: RTV 3000) 3
Management Elective
Select one of the following:
- MMC 4945 Communication Internship (Co or prerequisite: RTV 4900 and MMC 3250)
- or any 3 credit course in the School of Journalism and Mass Communication

These are the track core courses which must be completed within the first 18 hours of the program.

Area of Concentration
Students must take at least 12 upper division semester hours in a field outside the school. This field of study will be decided upon with the advisor, with appropriate consideration given to the student's specialized needs.

Liberal Arts Requirements
Students must select a total of 12 semester hours in the following subject areas: art (photography), art history, computer science, English, history, political science, philosophy, sociology or anthropology in order to meet the upper division liberal arts requirements.

Internship or Professional Expansion of Knowledge (PEK)
The internship is important for broadcasting majors who have not yet gained experience in the field. Therefore, students who have a 3.0 GPA in school course work and meet the curricular requirements outlined in the internship packet or PEK packets may select the internship or PEK in consultation with their advisor. Either requires a minimum of 300 hours of work for 3 academic credits.

Minor in Television
Required Courses: (15)
- MMC 3602 Mass Media and Society 3
- RTV 3000 Principles of Television 3
- RTV 2100 Writing for the Electronic Media 3
- RTV 3200 Studio Production 3
- RTV 3500 Programming Theory (Prerequisite: RTV 3000) 3
- MMC 3250 Media Management 3

Journalism
Students may choose the Print Journalism Track (for newspaper, magazine, or wire service careers), or the Broadcast Journalism Track (for television and radio careers). The following are the course requirements for each track.

School Requirements
- MMC 3101 Writing Strategies for Reaching a Mass Audience 3
- MMC 4200 Mass Communication Law and Ethics 3
- MMC 3602 Mass Media and Society 3
- MMC 3003 Mass Communication Orientation 0

Print Journalism Track Requirements
- JOU 3003 Principles of Journalism 3
- JOU 3113L Newsroom (Prerequisites: MMC 3101, JOU 3003) 3
- JOU 3117 Print News Reporting (Prerequisites: JOU 3113L, Corequisite or Prerequisite: RTV 3300) 3
- RTV 3300 Broadcast News Reporting (Prerequisites: JOU 3113L, Corequisite or Prerequisite: JOU 3117) 3
- JOU 3121 Data Base and Public Records Reporting (Prerequisites: JOU 3113L) 3
- JOU 2200 Editing and Makeup (Prerequisites: JOU 3117) 3
- JOU 3300 Feature Writing (Prerequisite: JOU 3117, RTV 3300) 3
- JOU 3320 Reporting in a Multi-Ethnic Community (Corequisite: JOU 3113L) 3
- JOU 4108 In-Depth Reporting (Prerequisite: JOU 3117, RTV 3300) 3

Broadcast Journalism Track Requirements
- JOU 3003 Principles of Journalism 3
- JOU 3113L Newsroom (Prerequisites: MMC 3101, JOU 3003) 3
- JOU 3117 Print News Reporting (Prerequisite: JOU 3117, RTV 3300) 3

RTV 3300 Broadcast News Reporting (Prerequisites: JOU 3113L, Corequisite or Prerequisite: RTV 3300) 3
RTV 4323 Documentary Production (Prerequisites: JOU 3117, RTV 3300, RTV 4466) 3
RTV 4466 Electronic News Gathering (Corequisite or Prerequisite: JOU 3117, RTV 3300) 3
RTV 4324 News and Public Affairs Production (Prerequisites: JOU 3117, RTV 3300, RTV 4466) 3
JOU 3320 Reporting in a Multi-Ethnic Community (Corequisite: JOU 3113L) 3
JOU 4946 Broadcast Journalism Internship 0

These are the track core courses which must be completed within the first 18 hours of the program.

Requirements Outside Journalism
Students must earn a minimum of 65 semester hours in liberal arts courses, which are the core of a required 90 hours outside the School of Journalism and Mass Communication.

The following courses outside SJMC are required for all print and broadcast journalism students:
- POS 2042 American Government
- POS 3153 Urban Politics or a 3000/4000 level course
- Sociology 3000/4000 level course
- ECO 3040 Consumer Economics or ECP 3613 Urban Economics
- AMH American History 3000/4000 level
- Another History Course 3000/4000 level
- Two AML, ENL, LIT Literature 3000/4000 level courses
- PHI 2103 Critical Thinking
Minor in Journalism
The Minor in Journalism requires 16 hours.

MMC 3101 Writing Strategies for Reaching a Mass Audience 3
JOU 3113L Newsroom 3
JOU 3003 Principles of Journalism 3
JOU 3320 Reporting in a Multi-Ethnic Community 1
JOU 3117 Print News Reporting 3
RTV 3300 Broadcast News Reporting 3

Public Relations
School Requirements
MMC 3101 Writing Strategies for Reaching a Mass Audience 3
MMC 4200 Mass Communication Law and Ethics 3
MMC 3602 Mass Media and Society 3
MMC 3003 Mass Communication Orientation 0

Track Requirements
PUR 3000 Principles of Public Relations 3
PUR 4100 Writing for Public Relations (Prerequisites: PUR 3000, MMC 3101) 3
PUR 4101 Publications Editing and Design (Prerequisite: PUR 4100) 3
PUR 4106 Advanced PR Writing (Prerequisite: PUR 4100) 3
MMC 4410 Integrated Communication Campaigns (Prerequisites: PUR 4106, ADV 3000, MMC 4609) 3
MMC 4609 Public Opinion and the Mass Media 3
ADV 3000 Principles of Advertising 3

Electives
Students must select one of the following courses:
PTV 3000 Principles of Television 3
JOU 4203 Magazine Editing and Production 3
MMC 4936 Special Topics 3
MMC 4945 Communication Internship 3

These are the track core courses which must be completed within the first 18 hours of the program.

Area of Concentration
In consultation with an advisor, the student must take 15 upper division semester hours in one area of emphasis outside the school. These courses should relate to the student's career expectations. Several traditional areas of specialization are as follows:

Governmental public communication (public administration, international relations, criminal justice, or political science)

Corporate public relations (marketing or management)

Non-profit public relations (social sciences or marketing)

Public relations for travel and tourism (hospitality management)

These groupings do not preclude other specialized areas of interest, including modern languages and the certificate programs available in the College of Arts and Sciences.

Liberal Arts Requirements
Students must select one course from each of the following subject areas: American/English literature/LIN 3670, economics, psychology, political science/international relations/statistics in order to meet the 12 credit upper division requirement.

Internship
The internship is important for public relations majors who have not yet gained experience in the field. Students who have a 3.0 GPA in school course work and meet the curricular requirements outlined in the internship packet may select an internship in consultation with their advisors. The internship requires a minimum of 100 hours of work for three academic credits.

Elective Course
One three-credit elective course at the 3000 level or higher in the school. (May include one of the two remaining courses above.)

Certificate Programs
Media Management
This 15 credit certificate will provide basic information about the Televison Management field and provide the tools necessary to prepare students for entry level management positions.

Required Courses
RTV 3000 Principles of Television 3
MMC 3250 Media Management 3
RTV 3500 Programming Theory 3
MMC 4262 New Technologies 3
MMC 4200 Mass Communication Law and Ethics 3

Spanish Language
Journalism
The objective of the Professional Certificate in Spanish Language Journalism is to develop skills and techniques that will allow working journalists to be more responsive to the demands of their profession as well as the opportunity to become professional teachers.
more familiar with Spanish-language journalism in general. The focus of the program will be on reading, writing, and thinking. All courses will be taught in Spanish. Some courses may be offered off campus.

All applicants should have successfully completed at least two years of college-level courses, and be practicing journalism for at least two years. Students must be admitted to the program by invitation of the Chairman of the Coordinating Committee of the Certificate Program. The program coordinator will serve as their faculty advisor.

Students who qualify for admission to the master’s degree in mass communication program will be able to transfer up to nine appropriate graduate credits from the certificate program.

Program of Studies: (15)
Required Courses: (6)
Students will select two of the following:
- Print News Reporting 3
- Broadcast News Reporting 3
- Database and Public Records Reporting 3
- JOU 3113L Newsroom 3
or any combination of two courses below
- JOU 6198 Advanced Public Affairs Reporting 3
- JOU 6931 Seminar on Special Topics 3
- JOU 6196 Advanced Writing Techniques 3

In addition to the required courses, the students must take three courses of which a maximum of two may be taken outside the school in an area of concentration. The Coordinating Committee of the program will choose from the following courses or others to be selected with the student’s advisor.

Students must complete their program of study within two years from the date of admission. No grade lower than ‘C’ will be accepted.

JOU 6196 Advanced Writing Techniques 3
JOU 6198 Advanced Public Affairs Reporting 3
MMC 5932 Special Topics Seminar 3

MMC 6402 Theories of Mass Communication 3
MMC 6635 Contemporary Issues in Mass Communication 3
CPO 4333 Central American Politics 3
ECS 3440 Central American Economics 3

Student Media Advising
This professional certificate program is designed primarily for journalism teachers and for student media advisors on all levels and for those aspiring to the profession. This program will satisfy the requirements of the certification, re-certification or incentive credits for current public school teachers in the field.

The Certificate in Student Media Advising requires 15 credits to be taken as follows:

Required Courses:
- JOU 5806 Student Publications Supervision 3
- MMC 5207 Ethical and Legal Foundations of the Student Press 3
- VIC 5205 Trends in Graphics and Design 3

Elective Courses
Students must take two of the following:
- RTV 5936 Seminar in New Communication Technologies 3
- MMC 6402 Theories of Mass Communication 3
- MMC 6635 Contemporary Issues in Mass Communication 3
- JOU 6196 Advanced Writing Techniques 3
- PUR 4101 Publications Editing and Design 3
- JOU 4208 Magazine Editing and Production 3
or other courses upon approval of the faculty advisor.

Television Production
This 15 credit certificate program will provide training in basic television production to interested students, professionals or those who simply want to enter the production field.

Required Courses
- RTV 3000 Principles of Television 3
- RTV 3262 Video Field Production 3
- RTV 3200 Studio Production 3
- RTV 3207 Video Directing (Prerequisite: RTV 3200) 3
- RTV 3263 Video Post Production (Prerequisite: RTV 3262) 3

Course Descriptions

Definition of Prefixes
ADV-Advertising; FIL-Film; JOU-Journalism; MMC-Mass Media Communication; PGY-Photography; PUR-Public Relations; RTV-Radio-Television; VIC-Visual Communication.

ADV 3000 Principles of Advertising (3). Comprehensive survey of basic principles and practices of advertising emphasizing creative/media strategy decision processes and historical, social, economic, and social influences.

ADV 3200 Creative Concepts (3). Introduction to copywriting, graphic design and print production. Emphasis on terminology as well as message construction relative to style, format.

ADV 3500 Advertising Strategy Research (3). Nature and application of research utilized in advertising. Emphasis on gathering and analyzing primary and secondary data to determine situation analyses and advertising strategies. Prerequisites: MMC 3101 and ADV 3000.

ADV 4100 Advanced Print Concepts (3). Advanced copywriting and graphic design. Lab exercises focusing on concept, layout, typesetting, and mechanical preparation of print advertising, including outdoor and direct response. Prerequisite: ADV 3000, ADV 3200, and MMC 3101.

ADV 4103 Radio/TV Concepts (3). Theory and practice of producing advertisements for radio and TV. Includes production of a radio and/or TV commercial. Prerequisites: MMC 3101, ADV 3000, ADV 3200.

ADV 4300 Media Planning (3). Planning, execution, and control of advertising media programs. Emphasis on characteristics of the media, buying and selling processes, and methods and techniques used in campaign planning. Prerequisite: ADV 3000, MMC 3101.

ADV 4930 Advertising Seminar (3). A variable topics seminar dealing with
one selected area of advertising, such as international advertising, media sales, advertising in the service sector. Prerequisites: ADV 3500, and ADV 4300 or ADV 4100 and ADV 4103.

JOU 2200 Editing and Makeup (3). Editing news copy for accuracy, brevity, and clarity, including practice with AP style, copy and proofreading marks. Learning the role and function of the news editor. Design and layout of newspaper pages, including working with art, photographs and headlines, and editing and fitting news copy. Prerequisite: JOU 3117.

JOU 3003 Principles of Journalism (3). Study and discussion of the historical, ethical and legal principles of journalism in America.

JOU 3113L Newsroom (3). Instruction and practice in the fundamentals of news writing, reporting and interviewing. Prerequisites: MMC 3101 and JOU 3003.

JOU 3117 Print News Reporting (3). Advanced instruction and practice in news writing, reporting and interviewing for print media. Prerequisite: JOU 3113L.

JOU 3121 Data Base and Public Records (1). Understanding of database and printed records access and use in reporting. Corequisite: JOU 3113L.

JOU 3300 Feature Writing (3). Writing the feature story: human interest, trends, personality profiles, sidebars, backgrounders, color. Prerequisite: JOU 3113L, JOU 3117, RTV 3300.

JOU 3312 Specialty Journalism (1). Seminars in such topics as investigative, political, business, sports, or minority reporting, and editorials and commentary. Must be taken three times. Prerequisite: JOU 3003.

JOU 3320 Reporting in a Multi-Ethnic Community (1). Learning the political, social and economic backgrounds of ethnic communities in an urban area to improve the reporting of news from those populations and neighborhoods. Corequisite: JOU 3113.

JOU 4004 Perspectives in Mass Media (3). Examination of contemporary issues in journalism, including legal, moral, and ethical questions and the impact of news on society. Must be taken in the senior year.

JOU 4108 In-Depth Reporting (3). Advanced instruction and practice in researching, reporting and writing a variety of complex news stories. Prerequisite: JOU 3113L, JOU 3117, RTV 3300.

JOU 4208 Magazine Editing and Production (3). Develops skill in writing, editing and design, and knowledge of planning, typography and graphics. Attention is given to developing formats, selecting copy, photos, graphics, and type.

JOU 4946 Broadcast Journalism Internship (1). On-the-job learning in news radio or TV newsrooms or wire service and magazines. Prerequisite: RTV 3300. Corequisite: RTV 4323 or RTV 4324.

JOU 5806 Student Media Advising (3). Designed to assist teachers and advisers of journalism at the high school and junior college level, this course emphasizes the technical aspects of producing student newspapers, yearbooks, and magazines, as well as the legal and ethical considerations facing today's adviser. In addition, attention is given to matters pertaining to curriculum and methodology for effective journalistic instruction.

MMC 3000 Mass Communication Orientation (0). A course designed to provide the students with a comprehensive overview of academic policies, procedures and requirements for matriculation and graduation from the School of Journalism and Mass Communication.

MMC 3101 Writing Strategies for Reaching a Mass Audience (3). An advanced writing course that applies creative thinking techniques, especially in the generation of ideas for mass media presentation, as well as the careful and compelling use of language

MMC 3250 Media Management (3). Reviews the organization of radio, TV, magazine, and newspaper enterprises.

MMC 3602 Mass Media and Society (3). Investigation of the role played in the U.S. by the mass communication media as a cultural, social, informational, economic, political, and educational force. The interrelationship of all media and their potential impact on the collective population will be studied.

MMC 4200 Mass Communication Law and Ethics (3). An in-depth examination of legal and ethical issues confronting professional communicators. Focus on the responsibilities and rights of communicators and the implications for a society entering the 21st century.

MMC 4253 Advanced Media Management (3). A senior level course dealing with case studies of media organizations. Prerequisite: MMC 3250.

MMC 4262 New Technologies of Communication (3). The principal emphasis is upon new technologies in the industry. Prerequisite: RTV 3000.

MMC 4302 Comparative Systems of Mass Communication (3). An examination of various national and international mass communication systems and the elements which determine the type of systems currently operating throughout the world. Prerequisite: RTV 3000.

MMC 4410 Integrated Communications Campaigns (3). Advanced course emphasizing all aspects of developing fully integrated advertising. Prerequisites: All sequence requirements except elective and/or seminars.

MMC 4500 Media History (3). Development of American media from beginnings in Europe to present day; freedom of the press and its relationships to economic, political, and social trends in society.

MMC 4609 Public Opinion and the Mass Media (3). Study of the communication process, persuasion, and attitude change. Explores the methods of measuring, analyzing, changing, and/or maintaining the public opinion for socially acceptable causes. Prerequisite: MMC 3101.

MMC 4613 Effects of the Mass Media (3). Reviews the effects of the media, with special attention to children, minorities, terrorism, and Third World countries.

MMC 4661 Race, Multiculturalism and the Mass Media (3). A critical review of the role of the mass media as it relates to ethnic, religious, and social minorities in a pluralistic society.

MMC 4905 Independent Study (1-3). Specialized intensive study in an area of special interest to the student. Consent of instructor is required. (Limit of three credits).
MMC 4936 Special Topics (VAR). Intensive study for groups of students of a particular topic or limited number of topics, not otherwise offered in the curriculum. Consent of instructor or dean is required.

MMC 4940 Media Practicum (3). Structured field-work experience in media environment.

MMC 4945 Communication Internship (3). On-the-job learning in activity at selected and approved organizations. Will include newspapers, magazines, radio and TV stations, agencies, and non-profit organizations. Prerequisite: Consent of advisor.

MMC 5207 Ethical and Legal Foundations of the Student Press (3). Examines ethical and legal foundations underlying the operation of the student press on American campuses, stressing both rights and responsibilities and how to organize publications to protect both.

MMC 5445 Applied Research Methods in the Mass Media (3). An advanced course in the acquisition and use of secondary data, including media data, as well as the design, execution, and utilization of research studies. Students will conduct an original proprietary study. Prerequisite: STA 1013 or equivalent.

MMC 5932 Special Topics Seminar (3). A variable topic seminar dealing with issues of interest to the community. Examples are rights of high school journalists, cable TV, the use of mini-computers in creative communication.


PUR 4100 Writing for Public Relations (3). Introduction to preparation of news releases, public service announcements, backgrounders and newsletter copy. Exposure to media relations and non-profit and corporate advertising. Prerequisites: PUR 3900 and MMC 3101.

PUR 4101 Publications Editing and Design (3). Design, editing, and production of materials in the area of trade, corporate, organizational, and technical press, with special attention given to typography, style and production of tabloid and magazine format publications. Prerequisite: PUR 3000, PUR 4100, or consent of instructor.

PUR 4106 Advanced PR Writing (3). Further development of writing skills including preparation of feature stories, news media kits and materials for special events. Exposure to target audience selection for news media placement. Prerequisite: PUR 4100, MMC 3101, PUR 3000.

PUR 4934 Public Relations Seminar (3). Open to public relations-emphasis students only. A course designed to allow the advanced public relations student to pursue a specially selected, specific area of public relations (i.e., political, medical, financial, government, corporate, educational, etc.) through in-depth study under a tutorial style of instruction and guidance. Prerequisite: All public relations sequence requirements or consent of instructor.

PUR 5406 Multi-Cultural Communications (3). Explores the multi-cultural dimensions of communications with diverse audiences both internationally and within the United States. Prerequisite: Permission of instructor.

PUR 5607 Advertising and Public Relations Management (3). Operations and objectives of integrated advertising and public relations activities and programs utilizing case studies on budgeting, ethics, media planning/relations, promotions and direct marketing. Prerequisite: Permission of instructor.

PUR 5806 Integrated Advertising and Public Relations Planning and Evaluation (3). Advanced study in developing, planning and evaluating strategic integrated communications programs and campaigns. Prerequisite: Permission of instructor.

RTV 2100 Writing for the Electronic Media (3). Emphasis placed on writing for broadcast and full program script preparation. Prerequisite: MMC 3101.

RTV 3000 Principles of Television (3). Review of broadcasting industries, organization, history, and practices.

RTV 3200 Studio Production (3). Use of television studio equipment and techniques in production of programs, newscasts, documentaries, commercials, training and video production. Introduction to basic video directing.

RTV 3207 Video Directing (3). Studio directing/technical directing and related techniques used in television entertainment shows, commercials, newscasts, documentaries, training and corporate video productions. Students are expected to solve media-related problems during actual productions. Prerequisite: RTV 3200.

RTV 3262 Video Field Production (3). Use of ENG/EFP equipment and techniques in production of programs, news, documentaries, music videos, commercials, training and video productions on location. Emphasis on single camera techniques and editing.

RTV 3263 Video Post Production (3). Advanced post production techniques using A & B roll, complex audio mixes and their preparation and execution. Prerequisite: RTV 3201.


RTV 3500 Programming Theory (3). Introductory course in programming, ratings, and audience analysis. Prerequisite: RTV 3000.

RTV 3603 Studio Management (3). Students are introduced to basic studio language and procedures and will do research about duties of the producer, budgets and related topics.

RTV 4206 Advanced Video Production Technique Workshop (3). Advanced course in field video production technique. Emphasis is to develop greater location video skills in narrative construction, including more complex narrative structures, more complex video and audio editing, field camera and sound-recording techniques. Hands-on course. Prerequisite: RTV 3263.

RTV 4323 Documentary Production (3). Advanced laboratory and field work to produce, report, write and edit documentaries for television. Prerequisite: JOU 3117, RTV 3300.

RTV 4324 News and Public Affairs Production (3). Reporting, writing, producing and editing hard and feature news stories and mini-documentaries for television. Prerequisite: JOU 3114, Prerequisite: JOU 3117, RTV 3300.

RTV 4466 Electronic News Gathering (3). The course will introduce you to
School of Journalism and Mass Communication

Dean: J. Arthur Heise
Associate Dean: Lillian Lodge Kopenhaver
Chairperson, Advertising and Public Relations: Patricia Rose
Chairperson, Journalism and Broadcasting: Don Sneed

Faculty
Adams, William, M.A. (University of Wisconsin), Associate Professor, Journalism and Mass Communication
Berman, Margo, M.M. (University of Miami), Associate Professor, Journalism and Mass Communication
Bustos, Sergio, B.S. (Virginia Commonwealth University), Visiting Instructor, Journalism and Mass Communication
Delgado, Humberto, M.A. (Goddard College), Associate Professor, Journalism and Mass Communication
Diament, Mario, M.A. (Antioch College), Associate Professor, Journalism and Mass Communication
Diaz, Francisco, M.A. (William Paterson College), Director, Student Services, Journalism and Mass Communication
Falk, Louis K., Ph.D. (University of Southern Mississippi), Assistant Professor, Journalism and Mass Communication
Gladwin, Hugh, Ph.D. (Stanford University), Director, Institute for Public Opinion Research
Gonzalez, Hernando, Ph.D. (Stanford University), Associate Professor, Journalism & Mass Communication
Green, Charles, B.A. (Christian International University), Director, International Media Center
Hall, Kevin, B.A. (Fordham University), Editor-in-Residence, Journalism and Mass Communication
Heise, J. Arthur, Ph.D. (Syracuse University), Professor and Dean, Journalism and Mass Communication
Huber, Michael, M.A. (Indiana University), Assistant Professor, Journalism and Mass Communication
Kelly, Laura, M.A., (American University), Instructor, Journalism and Mass Communication
Kopenhaver, Lillian Lodge, Ed.D. (Nova Southeastern University), Professor and Associate Dean, Journalism and Mass Communication
Martinson, David L., Ph.D. (University of Minnesota), Professor, Journalism and Mass Communication
McLaughen, Doug, B.A. (Florida International University), Assistant Director, Institute for Public Opinion Research
McQueen, Michael, B.A. (Florida State University), Visiting Instructor, Journalism and Mass Communication
Miller, Debra, Ed.D. (Florida International University), Associate Professor, Journalism and Mass Communication
Owen, Anne R., Ph.D. (University of Florida), Assistant Professor, Journalism and Mass Communication
Rose, Patricia, M.B.A. (University of Miami), Associate Professor, and Chairperson, Department of Advertising and Public Relations, Journalism and Mass Communication
Sneed, Don, Ph.D. (Southern Illinois University), Professor and Chair, Department of Journalism and Broadcasting, Journalism and Mass Communication
Siris, Carlos, M.L.S. (University of South Florida), Director, Student Resource Center, Journalism and Mass Communication
Tuggle, Charles, Ph.D. (University of Alabama), Assistant Professor, Journalism and Mass Communication
Vasquez, Francisco, M.A. (University of Minnesota), Visiting Director, Latin American Journalism Center, Panama
Veraldi, Lorna, J.D. (New York School of Law), Associate Professor, Journalism and Mass Communication
Virtue, Jack, B.A. (Carleton University) Deputy Director, International Media Center

RTV 4800 Station Operation (3). As the last course in the Broadcasting sequence, students learn the operation at a television station. Prerequisite or corequisite: JOU 3117, RTV 3300.

RTV 5806 Telecommunication Management Structures (3). Intensive study of telecommunication management problems, theory of same, solutions of same through practical application and examination of case studies. Prerequisite: Graduate standing.

RTV 5935 Seminar in International Comparative Broadcasting Systems (3). Introduction to international telecommunication systems with special emphasis on broadcasting. Comparison with other countries. Prerequisite: Graduate standing or permission of instructor.

RTV 5936 Seminar in New Mass Communication Technologies (3). Discussion of new communication technologies and their influence on the society. Prerequisite: Graduate standing or permission of instructor.
School of Nursing
School of Nursing

The School of Nursing offers a professional program of study leading to the degree of Bachelor of Science in Nursing (BSN).

The School is accredited by the National League for Nursing and is approved by the Florida State Board of Nursing. It is open to generic and R.N. students. Upon graduation, generic students are eligible to write the State Board examination to become registered nurses.

The School offers also a Master of Science degree in Nursing, as well as selected continuing education courses.

Program Objectives
Upon completion of the BSN, graduates will be able to:
1. Synthesize scientific knowledge from nursing and related disciplines in the provision of care to clients within the health-illness continuum throughout the life span.
2. Analyze research findings from nursing and from other disciplines to improve or change nursing practice.
3. Evaluate nursing theories and concepts from other disciplines as a base for nursing practice.
4. Pro-act to the legal, social, political, and economic forces and ethical considerations which impact on the role of the professional nurse and on clients.
5. Collaborate with members of the health care team in the delivery of individualized, economic and ethical health care services with accountability and responsibility for own practice.
6. Utilize creative leadership to promote quality health care in a rapidly changing multicultural, multi-ethnic, global environment.
7. Value learning as a lifelong process through independent pursuit of personal and professional growth.

Bachelor of Science in Nursing (BSN) - Generic

Degree Program Hours: 124

Admission Requirements
Applicants to the School of Nursing must submit an Application for Admission to the University and must follow the regular University procedures. Applicants must be admitted to the University before admission to the School.

All necessary admission documents must be submitted by April 1 of each year preceding the Fall Term admission or October 15 of each year preceding the Spring Term admission. Students interested in the nursing major should contact the School to make an appointment with an academic advisor as soon as possible. The School of Nursing is located on the North Miami Campus, telephone: (305) 919-5915.

To be admitted to the program, applicants must have an overall GPA of 3.0 or higher, with no repeats in science courses, have met all the lower division requirements including CLAST, completed 60 semester hours, and be recommended for admission by the Nursing Admission Committee. The nursing program is selective.

The School of Nursing is a limited enrollment program and admission is competitive based on previous academic performance. The Florida Board of Nursing and several state and/or private agencies require the disclosure of conviction records for misdemeanors and/or felonies; therefore, this information will be required at the time of application.

The student is expected to exhibit behavior that conforms with the Nurse Practice Act of the state of Florida. The School of Nursing reserves the right to refuse or discontinue enrollment of any student if the student violates the Nurse Practice Act of the state of Florida or in the judgment of the faculty the student does not meet the school’s standards.

Nursing majors are responsible for transportation expenses related to clinical experiences. They are advised to carry the University health and accident insurance. Upon admission to the program, nursing majors are encouraged to obtain professional liability insurance for two years. To safeguard the health of clients, nursing students are required to submit proof of health examination and immunizations upon entry into the nursing program. Students must submit proof of basic cardiopulmonary resuscitation (CPR) certification (American Red Cross) prior to enrollment in the School of Nursing. This CPR certification should cover the period of enrollment in the major.

Lower Division Preparation
The following courses are required for admission to the nursing major:

1. Introduction to Statistics 3
2. Natural Sciences:
   Chemistry 5
   Human Anatomy/Physiology 6-8
   Microbiology 4
3. Social Science:
   Introductory Sociology 3
   Introductory Psychology 3
   Language Elective 8-10
4. Nutrition 3
5. Human Growth and Development 3

Scholastic Requirements
To remain in good academic standing students must:
1. Maintain an overall cumulative GPA of 2.25 or higher.
2. Achieve a grade of ‘C’ or higher in the science and nursing courses. A student who earns less than a ‘C’ in any nursing course will be required to repeat the course in order to progress in the nursing program. A student may repeat a course one time only. No more than two nursing courses can be repeated in order to remain in the program.
3. Required Examinations: In addition to the University requirements (CLAST), the School also requires the following:
   a. RN’s are required to complete selected equivalency examinations. (See RN - BSN Guidelines).
b. Generic students are required to pass specific nursing achievement examinations (To be announced at the beginning of each academic term). In addition, generic students are required to pass a nursing synthesis (exit) exam as a prerequisite to the BSN degree. (This examination is usually given during the last semester of the program in the Senior Seminar course).

c. For educational research purposes, certain standardized examinations may be administered at selected points in the nursing curriculum.

4. The School reserves the right to terminate a student from the nursing program for reasons related to the inability to safely carry out professional responsibilities.

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

Required Nursing Courses

Junior Year

Semester I

- NUR 3115: Approaches to Nursing IA: Foundations of Nursing 4
- NUR 3115L: Approaches to Nursing IA: Foundations of Nursing Clinical 3
- NUR 3065C: Approaches to Nursing IB: Client Assessment 3
- NUR 3825: Professional Nursing I 3

Semester II

- NUR 3259: Approaches to Nursing IA: Adult/Gerontological Physiological Nursing 6
- NUR 3259L: Approaches to Nursing IA: Adult/Gerontological Physiological Nursing Clinical 6
- NUR 3125: Pathophysiological Basis for Nursing Practice 3
- NUR 3148: Pharmacologic Basis of Nursing Practice 3

Semester III

- NUR 3535: Approaches to Nursing IIB: Adult/Gerontological Psychosocial Nursing 3
- NUR 3535L: Approaches to Nursing IIB: Adult/Gerontological Psychosocial Nursing Clinical 3
- NUR 3827: Professional Nursing II 2

Senior Year

- NUR 4457: Approaches to Nursing IIIB: Childbearing Family 3
- NUR 4457L: Approaches to Nursing IIIB: Childbearing Family Clinical Family 3
- NUR 4357: Approaches to Nursing IIIB: Childrearing 3
- NUR 4357L: Approaches to Nursing IIIB: Childrearing Family Clinical 3
- NUR 4165: Professional Nursing III 3

Semester II

- NUR 4635: Approaches to Nursing IV: Community Nursing 2
- NUR 4635L: Approaches to Nursing IV: Community Nursing Clinical 3
- NUR 4945L: Approaches to Nursing V: Leadership Practicum 5

Bachelor of Science in Nursing (BSN) - RN to BSN

Admission Requirements for Undergraduate Transfer:

Degree seeking applicants with fewer than 60 semester hours of transfer credit must satisfy the same admission requirements as beginning freshmen.

For admission to the upper division RN-BSN program a student must be licensed by the State of Florida as a Registered Nurse (RN). Additionally, the applicant must have met the following requirement plus hav-

ing achieved passing scores on the CLAST examination.

1. Completed at least 60 semester hours of academic coursework with a GPA of at least 2.5 from a regionally accredited college or university. International students must submit a minimum score of 500 on the Test of English as a Foreign Language (TOEFL).

Graduates of diploma nursing programs who do not have transferable college credit will be required to complete the lower division credit requirements.

Advanced Placement and Progression of RNS

Each applicant’s educational record is individually evaluated by the School of Nursing. To progress through the curriculum, the RN must successfully complete prerequisites, co-requisite and required courses recommended in the curriculum plan in effect upon admission. Transition to Professional Nursing and Professional Nursing I, II may be taken while completing prerequisites. Advanced placement in both nursing and non-nursing courses is facilitated by earning credits through examination, i.e., challenge or equivalency exams such as CLEP or ACT-PEP. Any RN student may elect to complete a course by matriculation in the nursing course rather than taking the challenge examination. It is possible to complete the nursing sequence in one year of full-time study after all prerequisites and challenge courses have been completed and the RN has been fully admitted to the program.

Advanced Placement and Progression of RNs by Matriculation and/or Equivalency Examination (E.E.)

The BSN degree requires 123 semester hours of credit for completion. In addition to 60 transferable lower division semester hour credits, the degree requirements include a 23 semester-hour core, a 30 semester-hour clinical proficiency evaluation (completed by the ACT-PEP equivalency exams), 3 semester hours of Statistics, 8-10 semester hours of a foreign language and 4 semester hours of electives.

Curriculum

Level I:

- NUR 3055: Transition to Professional Nursing 3
- NUR 3065C: Client Assessment 3
- NUR 3825: Professional Nursing I 3
Level II:

STA 1013  Statistics  3
NUR 3259  Adult/Gerontological (E.E.)  12
NUR 3535  Psychosocial (E.E.)  6
NUR 3827  Leadership  3
NUR 4357  Childrearing (E.E.)  6
NUR 4457  Childrearing (E.E.)  6

Level III:

NUR 4165  Research  3

Level IV:

NUR 4635  Community Health  2
NUR 4635L  Community Health Clinical  3
NUR 4945L  Practicum  5

Total number of credits earned by equivalency examination (E.E.)  30

See University catalog/nursing advisor for pre-and-co-requisite courses.

Course Descriptions

Definition of Prefixes

NSP - Nursing Special Courses; NUR - Nursing Practice and Theory
F - Fall semester offering; S - Spring semester offering; SS - Summer semester offering.

NUR 3055 Transition to Professional Nursing (3). The role of the professional nurse is explored in applying the nursing process in assisting individuals and/or families with adaptation to potential and actual stressors. Prerequisite: Florida RN license. (F.S.SS)

NUR 3065C Approaches to Nursing IIB: Client Assessment (3). The assessment and evaluation of physiological and psychosocial stressors of the individual as client is emphasized. Prerequisite: Admission to major. RNs only. (F.S.SS)

NUR 3115 Approaches to Nursing IIA: Foundations of Nursing (4). Introduction to the nursing process in assisting individuals with adaptation to potential and actual stressors which impact basic needs. Prerequisite: Admission to program. Corequisite: NUR 3115L. (F.S)

NUR 3115L Approaches to Nursing IIA: Foundations of Nursing Clinical (3). In the clinical area, the nursing process is applied in assisting individuals with adaptation to potential and actual stressors which impact basic needs. Prerequisite: Admission to program. Corequisite: NUR 3115. (F.S)

NUR 3125 Pathophysiologic Basis for Nursing Practice (3). The body's adaptive responses to selected physiologic stressors are presented as a basis for assessment, nursing diagnosis, interventions, and evaluations. Prerequisite: NUR 3065C. (F.S)

NUR 3148 Pharmacologic Basis for Nursing Practice (3). The body's adaptive responses to selected pharmacological agents are presented as a basis for assessment, nursing diagnosis, interventions, and evaluations. Prerequisite: NUR 3065C. (F.S)

NUR 3192C Emergency Measures in Selected Health Crises (1). Emergency measures in selected health crises using CPR and preventive techniques. Prerequisite: Permission of instructor. (F.S)

NUR 3259 Approaches to Nursing IIA: Adult/Gerontological Physiologic Nursing (6). The nursing process is applied in assisting adult/gerontological clients with adaptation to potential and actual physiological stressors. Prerequisites: NUR 3115, NUR 3115L. Corequisites: NUR 3259L, NUR 3148. (F.S)

NUR 3259L Approaches to Nursing IIB: Adult/Gerontological Physiologic Nursing Clinical (6). In the clinical area, the nursing process is applied in assisting adult/gerontological clients with adaptation to potential and actual physiological stressors. Prerequisites: NUR 3115, NUR 3115L. Corequisites: NUR 3259, NUR 3148. (F.S)

NUR 3535 Approaches to Nursing IIB: Psychosocial Nursing (3). The nursing process is applied in assisting adult/gerontological clients with adaptation to potential and actual psychosocial stressors. Prerequisites: NUR 3115, NUR 3115L. Corequisites: NUR 3535. (SS)

NUR 3535L Approaches to Nursing IIB: Psychosocial Nursing Clinical (6). In the clinical areas, the nursing process is applied in assisting adult/gerontological clients with adaptation to potential and actual psychosocial stressors. Prerequisites: NUR 3115, NUR 3115L. Corequisites: NUR 3535. (SS)

NUR 3596 Crisis Intervention and Nursing (3). This course examines the crisis state: what it is, when it occurs and how the nurse can aid the individual, family or group in crisis.


NUR 3825 Professional Nursing I: Socialization (3). Socialization into the role of professional nursing is introduced with emphasis on responsibilities as a direct care provider, teacher learner, and collaborator. Prerequisite: Admission to major. RN's only. (F.S.SS)

NUR 3827 Professional Nursing III: Leadership (3). The client advocate, leadership and change agent role of the professional nurse are analyzed in a variety of health care settings. Prerequisite: NUR 3825. (F.S.SS)

NUR 4040 Transcultural Issues and the Nurse (2). The course is designed to guide the student into direct relationships with individuals of ethnic and racial differences, and to facilitate the development of a therapeutic relationship.

NUR 4165 Professional Nursing III: Research (3). Interrelationship of problem solving, decision making, change and the nursing process are explored in identifying the role of the professional nurse as research consumer. Prerequisite: Statistics course. RN’s only. (F.S.SS)

NUR 4357 Approaches to Nursing IIB: Childrearing (3). The nursing process is applied in assisting childrearing families as clients with adaptation to potential and actual stressors. Prerequisites: NUR 3259, NUR 3259L, NUR 3535, NUR 3535L. Corequisite: NUR 4357L. (F.S)

NUR 4357L Approaches to Nursing IIB: Childrearing Family Clinical (3). In the clinical area, the nursing process is applied in assisting childrearing families as clients with adaptation to potential and actual stressors. Prerequisites: NUR 3259, NUR 3259L, NUR 3535, NUR 3535L. Corequisite: NUR 4357. (F.S)

NUR 4457 Approaches to Nursing IIB: Childbearing (3). The nursing process is applied in assisting childbearing families as clients with adaptation to potential and actual stressors. Prerequisites: NUR 3259, NUR 3259L, NUR 3535, NUR 3535L. Corequisite: NUR 4137L. (F.S)
NUR 4457L Approaches to Nursing III: Childbearing Family Clinical (3). In the clinical area, the nursing process is applied in assisting childbearing families as clients with adaptation to potential and actual stressors. Prerequisites: NUR 3259, NUR 3259L, NUR 3535, NUR 3535L. Corequisite: NUR 4457. (F,S)

NUR 4635 Approaches to Nursing IV: Community Nursing (2). The nursing process is applied in assisting individuals, families and communities as clients with adaptation to potential and actual stressors. Prerequisites: NUR 4457, NUR 4457L, NUR 4357, NUR 4357L. Corequisite: NUR 4635L. RN's only. (F,S,SS)

NUR 4635L Approaches to Nursing IV: Community Nursing: Clinical Experience (3). In the clinical area, the nursing process is applied in assisting individuals, families, and communities as clients with adaptation to potential and actual stressors. Prerequisites: NUR 4457, NUR 4457L, NUR 4357, NUR 4357L. Corequisite: NUR 4635. RN's only. (F,S,SS)

NUR 4905 Independent Study in Nursing (1-5). Faculty supervised introduction to problems in nursing in accord with the student's special interest.

NUR 4945L Approaches to Nursing V: Leadership Practicum (5). Transition from student to graduate role is provided through leadership experience which allows synthesis of knowledge, skills, and understanding. Assessment of nursing care modalities is emphasized. RN's only. (F,S,SS)

NUR 4947 Directed Field Experience in Nursing (3). Application and refinement of nursing in a clinical specialty area. Prerequisites: Florida RN and permission of instructor.

School of Nursing

Dean
Linda Agustin Simunek

Associate Dean
Undergraduate Program
Jacquelyn T. Hartley

Faculty
Anderson, Sharon, RN, Ph.D. (University of Colorado), Associate Professor
Blos, Kathleen, RN, Ed.D. (Florida Atlantic University), Associate Professor and Director Broward Program
Burkett, Marjorie, ARNP, Ph.D. (University of Miami), Assistant Professor
Coffin, Douglas, RN, Ph.D. (University of Texas), Assistant Professor
Ellis, Availa, ARNP, MS (Barry University), Instructor
Fletcher, Cynthia, Ph.D. (Hunter College, New York), Visiting Assistant Professor
Frock, Terri, RN, Ed.D. (Florida Atlantic University), Visiting Assistant Professor
Grossman, Divina, ARNP, Ph.D. (University of Pennsylvania) Associate Professor
Hartley, Jacquelyn, RN, Ph.D. (Florida State University), Associate Professor and Associate Dean
Jorda, Marie Louise, ARNP, MPH (University of North Carolina at Chapel Hill), Instructor
Krause, Deirdre, ARNP, Ph.D. (University of Miami), Assistant Professor
Lizardo, Maria Lourdes, ARNP, Ed.D. (Florida International University), Assistant Professor
Lobar, Sandra, ARNP, Ph.D. (University of Miami), Assistant Professor
Lowe, John, RN, MSN (Oral Roberts University), Visiting Instructor
Martinson, Jace, RN, MSN (University of Alaska), Instructor
Parchment, Yvonne, ARNP, MSN (University of Miami) Instructor
Phillips, Suzanne, ARNP, Ed.D. (Florida International University), Associate Professor
Porter, Luz, ARNP, Ph.D. (New York University), Professor
Safian-Rush, Danna, ARNP, Ed.D. (Florida International University) Associate Professor
Sherman, Esther, RN, MSN (George Mason University) Instructor

Simunek, Linda Agustin, ARNP, Ph.D., J.D. (Loyola University of Chicago), Professor and Dean
Thornton, Rosa N., ARNP, MPH (Florida International University), Academic Advisor
Velasco-Whetsell, Martha RN, Ph.D. (University of South Carolina), Associate Professor
Washington, Linda, ARNP, MSN (University of Miami), Assistant Professor
Wortell, Linda, RN, Ph.D. (University of Miami), Assistant Professor
College of Urban and Public Affairs
College of Urban and Public Affairs

The College of Urban and Public Affairs was established by the Florida Board of Regents in 1994. Its mission is to serve the urban public in South Florida, the Latin American and Caribbean area, and other urban settings by enhancing the ability of individuals to lead, manage and deliver services in public, private, nonprofit and health institutions. In support of the University’s mission as a comprehensive, multicampus, urban institution, the College offers degree programs of professional study that focus on critical management and policy issues in urban environments.

The College is composed of two schools: the School of Policy and Management and the School of Social Work. Through the School of Policy and Management, the College awards the Bachelor’s and Master’s degrees in criminal justice, health services administration and public administration, and the Ph.D. in public administration. The School of Social Work offers programs leading to the Bachelor’s and Master’s degree in social work, and the Ph.D. in social welfare.

In addition, the College of Urban and Public Affairs is home to five centers and institutes: The Center for the Administration of Justice; Institute of Government; Institute for Children and Families at Risk; HRS/Children, Youth and Families Professional Development Centre; and the Institute for Public Management and Community Service. Each offers unique forms of research support to students. Some of the institutes and centers also offer credit or non-credit courses for professionals in the local, national and international community. Additional information on these centers and institutes may be found in this catalog (General Information - Centers and Institutes).

Students interested in the academic programs offered by the College of Urban and Public Affairs are urged to contact an advisor prior to enrollment for guidance on curriculum and career planning. Please call the School of Policy and Management at (305) 919-5890 or the School of Social Work at (305) 919-5880. Further information may be obtained from the Dean’s Office of the College of Urban and Public Affairs at North Campus, Academic I, Room 200 or by phone, (305) 919-5840.

Baccalaureate Admission Requirements

Applicants must be eligible for admission to the University before admission to the College and Schools.

Florida freshman and sophomore students may be coded with an intended major in the College upon earning 24 semester hours. They may be fully admitted to the College if they have earned 60 semester hours, have a cumulative grade point average (GPA) of 2.0, have passed the CLAST, and have met the specific degree program admission requirements. Full admission to the College is accomplished by filing the form Request for Acceptance into Upper Division College/School.

Transfer students may be admitted into a program in the College if they have received an Associate of Arts degree from a Florida community college, or if they otherwise meet the minimum requirements. These requirements are 60 semester hours earned at a community college or a four-year institution, and a cumulative minimum grade point average (GPA) of 2.0. In addition, students must have passed the CLAST and must meet specific degree program requirements.

All students are encouraged to seek advising as early as possible in the school/program of their choice, even if they have not yet been fully admitted into that major.

Transfer Credits

The University will generally accept up to 60 lower-division semester hours of transfer credit from other post-secondary academic institutions which are fully accredited by a regional accrediting association. A student who wishes to transfer in semester hours at the upper-division level must request such a transfer during their first semester of enrollment from the program director. The decision to grant transfer credit beyond 60 lower-division semester hours is fully at the discretion of the program director and must be in accordance with the program and university requirements outlined in this catalog. The maximum number of semester hours that a student may transfer will not exceed 90 hours. Students should insure that they fully understand the impact of transfer credits, if granted, on their planned program of study.

Academic Advisement

A student who has been accepted to a degree program in the College will be assigned an academic advisor by the School in which the academic major is desired. Continued contact (at least once a semester) with the academic advisor to review progress and select courses for each succeeding semester is required until an approved program of study is completed.

Degree Requirements

Students who are anticipating graduation must schedule an appointment with their academic advisor for a graduation check at least two semesters before their anticipated graduation date. At this advising session, students should ensure that all documentation has been received and posted to their transcripts and/or student files with respect to transfer credits, general education requirements, foreign language requirements and CLAST exam results.

Candidates to the baccalaureate degree must satisfy both university requirements and individual program requirements as described in the appropriate sections of this catalog. Specifically, the following conditions must be met:

1. Recommendation of the faculty of the School awarding the degree, signifying the completion of all program requirements as described in this catalog.
2. Certification by the Dean of the College of Urban and Public Affairs that all requirements for the degree have been met.
3. A minimum of 120 semester hours of acceptable coursework.
4. A minimum of 60 semester hours of upper-division (3000 or 4000-level) coursework.

5. Completion of the last 30 semester hours of Florida International University. (Exceptions, normally not to exceed six credit hours, may be made in advance by the Dean. Students must request such an exception in writing through their program director and obtain approval prior to commencing coursework at another institution.)

6. Completion of the General Education Requirements or, in the case of students admitted with less than 48 transfer credit hours, the Lower Division Core Curriculum as described in this catalog in General Information - Core Curriculum Requirements. General Education Requirements.

7. A cumulative GPA of 2.0 or higher for courses taken at Florida International University.

8. The grade requirements for major, core courses and course sequences established by the appropriate School.

9. Satisfactory completion of the College Level Academic Skills Test (CLAST) requirement as described in this catalog under General Information - Office of Undergraduate Studies.

10. Completion of the foreign language requirement described in this catalog under General Information - Academic Degree Requirements.

Field Experiences
As an integral part of the program curriculum, the student may be required to participate in supervised learning experiences in community service agencies. The clinical and field work experience is one of orientation, observation, and practice in the particular program specialties of the College and it is structured concurrently with relevant classroom experiences. In programs where the clinical or field experience is not required, students are urged to explore the possibility of engaging in such an experience with their program coordinator. Numerous community organizations provide opportunities for student internships and field practicums.

University Outreach and Special Programs
The College of Urban and Public Affairs, through its Centers and Institutions and in cooperation with the Division of University Outreach, offers many credit, non-credit, and workshop courses in off-campus locations in Dade, Broward, and Monroe Counties. Courses and locations vary each semester. Further information can be obtained directly from the Division of University Outreach or the relevant centers and institutes of the College.

Changes to Curriculum Requirements
The programs, policies, requirements and regulations listed in this catalog are continually subject to review in order to serve the needs of the University's various publics and to respond to the mandates of the Florida Board of Regents and the Florida Legislature. This is especially true for several programs in the College of Urban and Public Affairs that are subject to national accreditation requirements. According to university policy, changes in the curriculum may be made without advance notice.

Generally, the College of Urban and Public Affairs makes every effort to minimize the impact of curriculum changes on currently-enrolled students by stipulating that students complete the requirements of their degree program in effect at the time of admission to the program. In the event that this is not possible due to accreditation standards or the deletion of courses, students may be required to complete alternative degree requirements in order to graduate.
School of Policy and Management
The School of Policy and Management includes Criminal Justice, Health Services Administration, and Public Administration

David Bergwall, Director
Howard Frank, Associate Director

Admissions
Once students complete 60 semester hours, they may apply for admission into the program. FIU undergraduates who have met the Core or the General Education lower division requirements, who have passed the CLAST, and who have a Grade Point Average (GPA) of above a 2.0 will qualify for admission to the program. (Meeting these requirements will not guarantee admission to the program).

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

Application for Graduation
Students must submit an Application for Graduation form to the Office of the Registrar before the last day of classes of the academic semester prior to graduation. Students turning in the Application for Graduation after the deadline will graduate the following semester. Students who have not met the requirements for graduation must plan to complete them and must re-apply for graduation. It is highly recommended that students see an advisor before they apply for graduation.

Academic Warning, Probation and Dismissal
Warning
An undergraduate student whose cumulative GPA falls below a 2.0 will be placed on warning, indicating academic difficulty. The warning will appear on the student's end-of-term grade report but not on the official transcript. A hold will be placed on registration, and the student must see an advisor before they will be allowed to register for classes.

Probation
An undergraduate student on warning whose cumulative GPA falls below 2.0 will be placed on probation, indicating serious academic difficulty. SPM may indicate the conditions which must be met in order to continue to enroll. A hold will be placed on registration, and the student must see an advisor before they will be allowed to register for classes.

Dismissal
An undergraduate student on Probation whose cumulative and semester GPAs fall below a 2.0 will be automatically dismissed from his or her program and the University. An undergraduate student will not be dismissed prior to attempting a minimum of 20 semester hours of coursework. The student has ten working days to appeal the dismissal decision. This appeal must be made in writing to the Dean of the School. The dismissal from the university is for a minimum of one year. After one year, the student may apply for re-admission (see Re-admission in General Information) to the University in the same or a different program, or register as a non-degree seeking student.

Dismissed students reapplying for admission or registering as non-degree seeking students are automatically placed on academic probation.

Advising
The School of Policy and Management offers advising through the Student Coordinator's Office and Lead Advisor Program. Students are encouraged to make appointments with an advisor when they begin their programs, before they apply for graduation, and at any point in between. It is important that degree-seeking undergraduate students bring a copy of their SASS Report (which can be obtained at the Office of the Registrar) to the appointment or any time they plan to see an advisor.

The School of Policy and Management also offers Social Orientations twice a year, specifically designed to answer questions about our programs. New students are particularly encouraged to attend, but the invitation is extended to all students.

Undergraduate students may also find information through the FACT Sheets and the SPM Newsletter. The newsletter is printed each semester. Each are available at the Dean's Office and the Administrative Office on North Campus, and at the Branch Office at University Park Campus.

Criminal Justice
Ellen G. Cohn, Assistant Professor
Suman Kakar, Assistant Professor
Jose Marques, Associate Professor and Acting Program Coordinator
Luis Salas, Professor
Regina Shear, Associate Professor
Robert Snow, Associate Professor
W. Clinton Terry, Associate Professor
William Wilbanks, Professor

Criminal Justice is an area of study dealing with the formal mechanisms of social control by which society exercises constraint over its members. The study of criminal justice is interdisciplinary. It involves law, the social and behavioral sciences, crime, the reaction of society to the crime problem, and the means utilized in treating it.

A variety of career opportunities are available in criminal justice at all levels of government and the private sector. Due to its interdisciplinary approach, the study of criminal justice fills the needs of students seeking careers in teaching, research, law, and within the various agencies of the criminal justice system.

Bachelor of Science in Criminal Justice

Degree Program Hours: 120
Lower Division Preparation
Students majoring in criminal justice should consult with their academic advisor to ensure that the courses they selected meet program and degree requirements, and are consistent with their long range academic and career objectives.

Recommended Courses
Students intending to enroll in the criminal justice program are urged to complete an Associate in Arts degree at the lower division. Entering students are not required to have been enrolled in a pre-criminal justice program. Students having an Associate in Science degree or 60 semester hours will also be accepted, but must complete general education requirements before the bachelor's degree can be awarded.
Admissions
Once students complete 60 semester hours, they may apply for admission into the program. FLU undergraduates who have met the Core of the General Education, lower division requirements, who have passed the CLAST, and who have a Grade Point Average (GPA) of above a 2.0 will qualify for admission to the program. (Meeting these requirements will not guarantee admission to the program).

Upper Division Program

Core Courses
Seven courses are required of every student in criminal justice. A core course requirement can only be waived by the Director with the recommendation of the student's faculty advisor.

CCJ 3011 Nature and Causes of Crime 3
CCJ 3101 Law Enforcement Systems 3
CCJ 3290 Judicial Policy Making 3
CCJ 3300 Correctional Philosophy, Theory and Practice 3
CCJ 4252 Criminal Justice and the Constitution 3
URS 4112 Computer Applications for Urban Services 3
URS 4152 Research Methods for Urban and Regional Studies 3

Criminal justice majors are advised to complete all core requirements in the early stages of their study in order to ensure completion for graduation.

Area of Interest
Eighteen semester hours at the 3000-level or above in criminal justice are required for criminal justice majors. Only nine semester hours of CCJ 4940 will count toward this requirement.

Coursework from disciplines outside of criminal justice will not be accepted to fulfill requirements in the criminal justice area of interest category.

General Electives
Twenty-one semester hours are required. (No more than nine hours can be criminal justice courses). Relevancy of elective courses will be determined in consultation with the student's advisor or the Director. The faculty retains the prerogative to accept or reject electives taken without approval.

Remarks: Independent study and directed reading courses may not be taken outside of the Criminal Justice Program except with written permission of the Criminal Justice Director.

Internships
Although it is not required, it is highly recommended that students in the Criminal Justice Program who do not have relevant work experience apply for field placement as an Intern. Interested students must speak to the Program Coordinator well in advance to ensure the availability of locations. Students should have the majority of their core courses completed, and must satisfy any other requirements as directed by the Program Coordinator or the sponsoring site. Only nine semester hours may be used in the Area of Interest.

Students are required to maintain a minimum GPA of 2.0 in the criminal justice area of interest and a minimum grade of 'C' in each of the criminal justice core courses. Note: A 'C-' is not acceptable.

Transfer Credit
A student transferring from a four year college may transfer up to 84 semester hours into the criminal justice program; however, the student must still have at least 60 semester hours at the 3000-level or above. All work transferred to FLU is subject to review and approval by the Criminal Justice Director. Criminal justice courses completed with a grade of 'D' will not be transferred.

Double Majors and Degrees
Students must complete the core courses (21 hours) plus 18 additional hours in Criminal Justice in order to:
1. satisfy criminal justice requirements for a double major,
2. obtain a second degree with a major in Criminal Justice,
3. obtain two baccalaureate degrees simultaneously (provided requirements for two majors have been completed as certified by the appropriate academic units, and a minimum of 30 appropriate semester hours beyond the requirements of one degree have been earned).

Minor in Criminal Justice
A five course minor in criminal justice is available to baccalaureate degree-seeking students who are interested in careers in the criminal justice field. The courses that comprise the minor will provide students with the opportunity to relate to the special concerns of law enforcement, corrections, and the judicial systems. The minor is available on both campuses.

Requirements
Fifteen semester hours in criminal justice. The classes are to be selected from the following course list.

CCJ 3011 Nature and Causes of Crime 3
CCJ 3020 An Overview of Criminal Justice 3
CCJ 3101 Law Enforcement Systems 3
CCJ 3271 Criminal Procedure 3
CCJ 3290 Judicial Policy Making 3
CCJ 3291 Judicial Administration - Criminal 3
CCJ 3300 Correctional Philosophy, Theory and Practice 3
CCJ 3302 Correctional Treatment Programs 3
CCJ 3320 Community Based Treatment 3
CCJ 3341 Offender Counseling 3
CCJ 3450 Institutional Organization and Administration 3
CCJ 3460 Human Resources in Criminal Justice 3
CCJ 3461 Developing Interpersonal Communication 3
CCJ 3470 Criminal Justice Planning 3
CCJ 3501 Juvenile Delinquency, Prevention, and Control 3
CCJ 3934 Contemporary Issues in Criminal Justice 3
CCJ 4032 Crime and the Media 3
CCJ 4130 Police and the Community 3
CCJ 4252 Criminal Justice and the Constitution 3
CCJ 4280 Law and Criminal Justice 3
CCJ 4282 Legal Issues in Corrections 3
CCJ 4331 Probation, Parole, and Community Programs 3
CCJ 4440 Administration of Correctional Institutions 3
CCJ 4453 Methods of Institutional Change 3
CCJ 4462 Human Relations Training 3
CCJ 4630 Criminal Justice: The International Perspective 3
CCJ 4661 Terrorism and Violence in Criminal Justice 3
CCJ 4662 Criminal Justice and the Minority Community 3
CCJ 4663 Women, Crime, and the Criminal Justice System 3
URS 4152 Research Methods for Urban and Regional Studies 3

Public Administration and Health Services majors cannot use core courses towards their minor.

It is the student's responsibility to contact the department from which the student wishes to receive the minor when they apply for graduation. This will ensure that the minor will be posted on their degree.

Certificate Programs

Law and Criminal Justice Certificate

The Law and Criminal Justice academic certificate is designed to provide legally-conscious students with concepts and information utilized by law professionals. Study shall include casework, procedures, court processes, research methods, and other introductory coursework designed to enhance careers in the legal profession.

Admissions

Students must be fully admitted to the Bachelor of Science degree in Criminal Justice or another bachelor degree program.

Certificate Award

The Certificate will be awarded upon completion of the required certificate courses and the bachelor degree requirements. The certificate will be posted on the student's transcript at the time the completion of the bachelor degree requirements is posted.

Required Criminal Justice Courses

The student shall complete a minimum of 18 semester hours of the following selected criminal justice courses with a minimum grade of "C" in each course. Core criminal justice courses will not count for Criminal Justice majors.

CCJ 3271 Criminal Procedure 3
CCJ 3290 Judicial Policy Making 3
CCJ 3291 Judicial Administration 3
CCJ 4032 Crime and the Media 3
CCJ 4252 Criminal Justice and the Constitution 3
CCJ 4280 Law and Criminal Justice 3
CCJ 4282 Legal Issues in Corrections 3
CCJ 4752 Legal Research 3
CCJ 5216 Criminal Law 3
CCJ 5235 Criminal Procedure 3
CCJ 5286 Comparative Law 3

Course Descriptions

Definition of Prefixes

CCJ-Criminology and Criminal Justice; URS-Urban and Regional Studies.

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

CCJ 3011 The Nature and Causes of Crime (3). Issues involved in defining, measuring and explaining crime. The course focuses on patterns and trends in crime and the extent to which current theories explain those patterns and trends. (F,S,SS)

CCJ 3020 An Overview of Criminal Justice (3). An in-depth survey/overview of the process of criminal justice focusing on that process as a system and the different models by which the system can be viewed. Focus will be on the role and interrelationship of the various components of the system. (F,SS)

CCJ 3101 Law Enforcement Systems (3). A study of the American police system that examines the origins, functions, and operations of policing modern society. (F,SS)

CCJ 3121 Introduction to Crime Prevention (3). To provide the student with the understanding of the scope and activities involved in crime prevention functions and its relationship to the total protection of the individual in society and the CCJ system. (F,SS)

CCJ 3320 Community Based Treatment (3). An examination of the various pre-trial and post-trial community based treatment and supervision programs. Emphasis will be placed on the impact of these programs on the criminal justice system and the offender. (S,SS)

CCJ 3321 Criminal Procedure (3). An in-depth study of the 4th through 8th Amendments of the Constitution, and their impact on the criminal justice process. (F,S,SS)

CCJ 33290 Judicial Policy Making (3). Analysis of the Federal and State Judicial systems and their impact upon legal, social, and political environments. Emphasis shall be placed upon the roles of the prosecution, defense, and the judiciary in the processing of cases through the court system. (F,S,SS)

CCJ 33291 Judicial Administration-Criminal (3). Historical and contemporary overview of the concepts of court administration, organization, management, and delivery of court services. Primary emphasis shall be upon judicial roles, practices, decision-making and accountability. Within this framework, this course focuses upon an in-depth consideration to both the federal and state court systems. (F,S,SS)

CCJ 3300 Correctional Philosophy, Theory and Practice (3). Critical analysis of contemporary correctional philosophy, theory and practice. Prisons, probation, parole, work-release, halfway house, community based corrections programs, and other practices are examined historically and in their current settings. (F,S,SS)

CCJ 3302 Correctional Treatment Programs (3). Study of the types of treatment programs and services that are provided to offenders in correctional institutions, with an emphasis on operational problems and the overall effectiveness of these programs. (F)

CCJ 3341 Offender Counseling (3). The nature and function of counseling and casework in various correctional settings, including the theoretical basis for various approaches, individual and group methods of counseling, and the effectiveness and limitations of counseling. (S)
CCJ 3450 Institutional Organization and Administration (3). Analysis of internal organizational structure and executive roles and functions in criminal justice agencies. Examines administrative and managerial concepts underlying decision making, policy formulation, operational strategies, and coordination and control procedures.

CCJ 3460 Human Resources in Criminal Justice (3). Concepts, issues, and applications of management styles and strategies within an organizational setting, leadership approaches; goal setting; career development and selection; motivation; communications and change; efficiency and effectiveness in measuring individual and group performance. (S)

CCJ 3461 Developing Interpersonal Communication (3). The emphasis of this course is on the development of interpersonal communication practices that can be effectively utilized in a helping role and on the job, to improve interaction among employees and the public.

CCJ 3470 Criminal Justice Planning (3). Planning methods applicable to criminal justice agencies and crime control on local, state, regional and national levels. Theories, techniques, and applications of planning as a decision making process for criminal justice agencies and entire systems. (SS)

CCJ 3501 Juvenile Delinquency, Prevention and Control (3). Course focuses upon the nature of juvenile delinquency and on patterns of delinquency historically and currently and the theories that attempt to explain delinquency; a description and critique of the juvenile justice system. (F,S)

CCJ 3934 Contemporary Issues in Criminal Justice (3). An extensive examination of selected contemporary issues in criminal justice. May be repeated. (F,S,SS)

CCJ 4032 Crime and the Media (3). An examination of the role of the media in reporting crime and the extent to which media coverage of crime and the criminal justice system impacts the commission of crimes and the operation of the system. (F,S,SS)

CCJ 4071 Computers Application in the Criminal Justice System (3). Use of computers as management tools with emphasis on microcomputer applications in the administration of police, courts, corrections and juvenile agencies and computer related criminal justice issues.

CCJ 4130 Police and the Community (3). Relationships between the police and the community with emphasis upon the police role in managing areas of tension and potential conflict, such as the problems of racial/ethnic minorities or civil disobedience. (F,S)

CCJ 4252 Criminal Justice and the Constitution (3). A case law study of constitutional issues as they relate to the administration of criminal justice; emphasis on the establishment of case precedent and its impact upon the Criminal Justice System. (F,S,SS)

CCJ 4280 Law and Criminal Justice (3). An analysis of historical and contemporary legal dilemmas confronting the criminal justice system. Existing categories of law, sanctions, legal theories, and schools of jurisprudence shall be reviewed to assist practitioners in decision making and problem resolution. (F,S,SS)

CCJ 4282 Legal Issues in Corrections (3). An analysis of contemporary legal decisions regarding the rights and responsibilities of prisoners, correctional administrators, and correctional officers. Emphasis shall be placed upon legal problems involved in pre-sentence investigations, parole, incarceration, and loss and restoration of civil liberties. (S,SS)

CCJ 4331 Probation, Parole and Community Programs (3). History, organization, administration, and effectiveness of probation, parole and community programs for criminal offenders. (F,S)

CCJ 4440 Administration of Correctional Institutions (3). Theories and techniques of administering correctional institutions; planning and decision making; correctional law; security and custody, physical plant, and inmate programs; the social structure of the prison community and inmate social systems. (F,S)

CCJ 4453 Methods of Institutional Change (3). A critical examination and analysis of external factors influencing the administration of justice; discussion of the impacts of public perceptions and attitudes, social values, political climate, legal constraints, and organized social movements upon all levels of criminal justice.

CCJ 4462 Human Relations Training (3). An experience-based course that will prepare selected students to present human relations training programs in criminal justice agencies.

CCJ 4630 Criminal Justice: The International Perspective (3). A comparative analysis of three types of criminal justice: common law systems (e.g., the U.S.); civil law systems (e.g., Germany); and socialist law systems.

CCJ 4640 Organized Crime (3). Historical development of organized crime in the U.S.; defining "organized crime" from U.S. and international perspective; patterns of criminal activity; critique of police and prosecutorial efforts to curb organized crime. (S)

CCJ 4660 Crime and the Schools (3). Nature and extent of crimes committed against students, faculty and schools (arson, vandalism); patterns of drug abuse in the schools; characteristics of offenders and etiology of crime in the schools; description and critique of efforts by schools and juvenile justice system to curb crime in the schools.

CCJ 4661 Terrorism and Violence in Criminal Justice (3). The nature and causes of terrorism within the western world; analysis of particular terrorist groups focusing on their cultural background and objectives; critique of political, military, and law enforcement efforts to curb terrorism. (S)

CCJ 4662 Criminal Justice and the Minority Community (3). Patterns and trends in victimization and offending by different racial/ethnic groups; explanations for racial/ethnic variations in offending and victimization; definitional issues involved in terms "racism," "prejudice," etc.; extent of discrimination/disparity at various points of the criminal justice system. (S)

CCJ 4663 Women, Crime and the Criminal Justice System (3). Women as deviants, criminals, victims, and professionals in the criminal justice system. (S)

CCJ 4752 Introduction to Legal Research (3). This course is designed to introduce students to basic legal research methods for use in a criminal justice agency or private paraprofessional setting. The reporter systems; federal and state, digest, etc., shall be emphasized.
CCJ 4900 Directed Readings in Criminal Justice (1-3). Extensive reading and analysis of selected criminal justice literature under faculty supervision. Permission of instructor and Program Director is required prior to course registration. One credit per semester with a 3 credit cumulative maximum. (F.S.SS)

CCJ 4910 Independent Research (1-3). A course designed to provide qualified students with the opportunity to perform meaningful research in areas of criminal justice under the direction of a faculty member. Permission of instructor required. (6 credits cumulative maximum). (F.S.SS)

CCJ 4940 Field Work and Special Projects (1-12). A course designed to broaden the experiential base, and application of theoretical content to the criminal justice field. Advisor's approval required. (Pass/Fail grading). (F.S.SS)

CCJ 4949 Cooperative Education in Criminal Justice (1-3). Supervised full time work semester for criminal justice academic majors who demonstrate their interest in and potential for developing practical field agencies experience. Limited to students admitted to Co-op Program with consent of advisor. Prerequisite: Senior academic standing. (F.S.SS)

URS 4112 Computer Applications for Urban Services (3). The study of computer applications for administrative analysis of financial and program data with emphasis on design, interface, and data structures. (F.S.SS)

URS 4152 Research Methods for Urban and Regional Studies (3). The intent of this course is to familiarize students with the basic approaches used in contemporary social research with applications in public sector settings. Emphasis will be placed on the survey, interviewing, and quasi-experimentation approaches. These three approaches are most likely to be utilized in management decision making in government. Prerequisites: URS 4112 or equivalent. (F.S.SS)

Health Services Administration

David Bergwall, Associate Professor and Acting Program Coordinator
Glora Deckard, Associate Professor
Thomas Dunaye, Professor
Burton Dunlop, Senior Lecturer
Rosebud Foster, Professor
Frederick Newman, Professor
Martha Pelaez, Senior Lecturer
Max Rothman, Senior Lecturer
Vandon White, Professor

The Program in Health Services Administration offers graduate and undergraduate studies leading to Bachelor’s and Master’s degrees in Health Services Administration.

The Health Services Administration program is fully accredited by the Accrediting Commission on Education in Health Services Administration (ACEHSA). The baccalaureate program provides professional education which prepares mid-level and Program administrators practicing various management functions in community based health care settings.

The management of health services occurs in an environment of organizational and technological change. Administrators charged with executive responsibilities must be grounded in a high degree of formal professional training followed by lifelong learning which fosters their continuous professional growth. Many of the same skills needed for executive management are now also required to provide administrative leadership in staffing, directing, coordinating, and controlling the operational resources of administrative and clinical units in such organizations.

Health Services Administration Programs

The Bachelor of Health Services Administration (BHSA) qualifies students for entry-level management positions in health services delivery organizations. The program provides professional education for administrative occupations in various health care settings. The degree also prepares individuals for further study in health services administration. It is an excellent career development pathway for persons licensed in clinical health and medical care professions but lacking an undergraduate degree.

Nursing Home Administration

The BHSA with the nursing home administration specialization is approved by State of Florida, Department of Professional Regulation, Nursing Home Administration Licensure Board. Students completing the degree with this specialization are eligible to sit for the state nursing home administrator licensure examination.

Bachelor of Health Services Administration

Degree Program Hours: 120

Admissions Requirements

Students seeking admission into the bachelor's program must meet the following minimum requirements:

1. An Associate in Arts degree or its equivalent (e.g., Associate in Science) in lower-division coursework (60 semester hours) completed in the first two years of preparation at an accredited college or university, with a minimum 2.0 cumulative grade point average.

2. The maximum of lower-division transfer credits is 60 semester hours. Upper division credit hours from another institution or department may be transferred up to a maximum of 30 semester hours toward the fulfillment of required or elective courses in the program.

3. Admitted applicants must meet all general educational requirements of the University. Students with one deficiency will be admitted and applicants with two or more deficiencies will only be admitted with Program approval.

4. Any other general admissions requirements of undergraduate programs at the University as found in the catalog of the current academic year.

5. Students who have not completed the admission process may register as Affiliated Students pending admission. A maximum of 15 semester hours taken as an affiliated student can be used toward a degree. Affiliated status does not guarantee admission to the bachelor's program.

Admissions

Once students complete 60 semester hours, they may apply for admission into the program. FIU undergraduates who have met the
Care or the General Education lower division requirements, who have passed the CLAST, and who have a Grade Point Average (GPA) of above a 2.0 will qualify for admission to the program. (Meeting these requirements will not guarantee admission to the program).

Program Requirements
All program students completing the BSA are also subject to undergraduate student regulations and degree requirements governed by the policies of the School of Public Affairs and Services, Florida International University, and the State University System. Undergraduate BSA majors must receive a grade of "C" or higher in all core courses.

Courses are sequenced to enhance the development of competencies as students progress through the curriculum. Students need to pay particular attention to course prerequisites.

Lower Division Preparation
Students desiring to major in health services administration are required to take six hours in accounting and three hours of micro-economics as a part of their lower division preparation.

Students who have not met these prerequisites will be required to take the following upper-division courses at the University:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 3021</td>
<td>Economics and Society-Micro</td>
<td>3</td>
</tr>
<tr>
<td>ACG 3024</td>
<td>Accounting for Managers and Investors</td>
<td>3</td>
</tr>
</tbody>
</table>

These courses must be completed within one year after the student has been admitted into the program.

Core courses required of all students: (36)

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSA 3103</td>
<td>Health and Social Service Delivery Systems</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HSA 4112</td>
<td>Computer Applications for Urban Services</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>URS 3001</td>
<td>Introduction to Urban and Regional Studies</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>URS 4152</td>
<td>Research Methods for Urban and Regional Studies</td>
<td>3</td>
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</tbody>
</table>

Elective Courses (Six or 12 semester hours based on specialization)

<table>
<thead>
<tr>
<th>Group 2</th>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HSA 4110</td>
<td>Health Organizational Behavior</td>
<td>3</td>
<td></td>
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<tr>
<td>HSA 4170</td>
<td>Health Care Financial Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HSA 4184</td>
<td>Human Resource Management</td>
<td>3</td>
<td></td>
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<tr>
<td>HSC 4500</td>
<td>Principles of Applied Epidemiology</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 3</th>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HSA 4140</td>
<td>Program Planning and Evaluation</td>
<td>3</td>
<td></td>
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<tr>
<td>HSA 4150</td>
<td>People, Power, and Politics in Health Affairs</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HSA 4192</td>
<td>Health Management Systems Engineering</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HSA 4420</td>
<td>Legal Aspects and Legislation in Health Care</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Areas of Specialization (one required)

Specialization courses should not be taken until students have completed all courses in Group 1 and Group 2.

Management Specialization: (Nine credits in addition to 12 credits of electives)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HSA 4183</td>
<td>Applied Management in Health Care Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MAR 3023</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>URS 4061</td>
<td>Values, Ethics and Conflict Resolution</td>
<td>3</td>
</tr>
</tbody>
</table>

Nursing Home Administration (15 credits in addition to six credits of electives)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HSA 5177</td>
<td>Finance and Reimbursement for Long Term Care Facilities</td>
<td>3</td>
</tr>
<tr>
<td>HSA 5225</td>
<td>Long Term Care Management I</td>
<td>3</td>
</tr>
<tr>
<td>HSA 5226</td>
<td>Management in Long Term Care Systems</td>
<td>3</td>
</tr>
<tr>
<td>HSA 5227</td>
<td>Long Term Care Management II</td>
<td>3</td>
</tr>
<tr>
<td>HSA 5816</td>
<td>Practicum in Long Term Care Management</td>
<td>3</td>
</tr>
<tr>
<td>HSA 5876L</td>
<td>Administrative Residency in Nursing Home Setting</td>
<td>6</td>
</tr>
</tbody>
</table>

(Plus nine hours of electives)

Elective Courses (Six or 12 semester hours based on specialization)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HSA 4104</td>
<td>Team Approach to Health Services Delivery</td>
<td>3</td>
</tr>
<tr>
<td>HSA 4113</td>
<td>Issues and Trends in Health Care Delivery</td>
<td>3</td>
</tr>
<tr>
<td>HSA 4183</td>
<td>Applied Management in Health Care Organizations</td>
<td>3</td>
</tr>
<tr>
<td>HSA 4905</td>
<td>Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>HSA 5935</td>
<td>Special Topics in Health Services</td>
<td>3</td>
</tr>
<tr>
<td>HSA 4850</td>
<td>Administrative Internship</td>
<td>6</td>
</tr>
<tr>
<td>HSA 5876L</td>
<td>Administrative Residency in Nursing Home Setting</td>
<td>6</td>
</tr>
</tbody>
</table>

Elective courses may include upper-division courses offered by other University departments with the approval of a Health Services Administration Advisor.

Non-Degree Seeking Student
Non-degree seeking students who wish to register for 5000-level courses may do so with the permission of the instructor. University regulations pertaining to non-degree seeking status must be observed.

Internship
Students electing an administrative internship generally begin their internship in the final semester of the degree requirement. If this period of field placement is evaluated by the Program Coordinator as successful, the student will graduate at the end of that semester provided that all other requirements have been met.

All students must achieve a GPA of 2.5 or higher in all upper-division coursework before they are permitted to enroll in the Administrative Internship (HSA 4850). Students must apply for the internship, be approved and placed in an agency by the Program in the semester before the administrative internship begins.

For further information regarding internship placements, reference should be made to the Program Policy and Procedures Statement on the Administrative Internship.

Minor in Health Services Administration
A five course minor in health services administration is available to baccalaureate degree seeking students who are interested in careers in health services administration or who wish to examine the administrative aspects of health services delivery.
Requirements

Fifteen hours in Health Services Administration are to be selected from the following list. HSA 3103 and URS 4643 or equivalent are required for the minor. The other nine hours may be selected from the following.

- **HSA 3103** Health and Social Service Delivery Systems 3
- **HSA 4104** Team Approach to Health Services Delivery 3
- **HSA 4110** Health Care Organizational Behavior 3
- **HSA 4140** Program Planning and Evaluation 3
- **HSA 4150** People, Power and Politics in Health Care 3
- **HSA 4170** Health Care Financial Management 3
- **HSA 4184** Human Resources Management 3
- **HSA 4183** Applied Management in Organizations 3
- **HSA 4192** Health Management Systems Engineering 3
- **HSA 4420** Legal Aspects and Legislation in Health Care 3
- **HSA 5225** Long Term Care Management I 3
- **HSA 5226** Management in Long Term Care Systems 3
- **HSA 5227** Long Term Care Management II 3
- **HSA 5177** Financing and Reimbursement in Long Term Care Facilities 3
- **HSA 5816** Practicum in Long Term Care Management 3
- **HSC 4500** Principles of Applied Epidemiology 3
- **URS 4112** Computer Applications for Urban Services 3
- **URS 4061** Values, Ethics and Conflict Resolution 3
- **URS 4643** Introduction to Management of Public, Non-Profit and Health Organizations 3

...that the student takes the following courses to complete the minor:

- **HSA 3103** Health and Social Service Delivery Systems (required)
- **URS 4643** Intro to Management of Public, Non-Profit, and Health Organizations (required; cannot be used by Public Administration majors as part of the minor)
- **HSA 4170** Health Care Financial Management
- **HSC 4500** Principals of Applied Epidemiology
- **HSA 4183** Applied Management in Health Care Organizations
- **HSA 4150** People, Power and Politics in Health Affairs (recommended for Public Administration majors)

It is the student’s responsibility to contact the department from which the student wishes to receive the minor when they apply for graduation. This will ensure that the minor will be posted on their degree.

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Course Descriptions

Definition of Prefixes

HSA - Health Services Administration; HSC - Health Sciences; URS-Urban and Regional Studies

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

**HSA 3103 Health and Social Service Delivery Systems** (3). Students examine the history and current functions of health and social services delivery systems in the United States. Focus is on the components of their interaction and internal/external controls. (F,S,SS)

**HSA 3123 Mental Health and Mental Retardation** (3). The student will examine the community mental health services and services for the mentally retarded from a historical, policy, legislative, and systems perspective. (SS)

**HSA 3180 Management for the Health Professions** (3). Fundamental theories, principles, and concepts of management are surveyed to prepare the student for a middle-management position in health care.

Case studies are utilized for practical application. (F,S,SS)

**HSA 4104 Team Approach to Health Service Delivery** (3). Team formation, structure, composition, maturity, growth, and the process are identified. Team management in health facilities are discussed. Prerequisite: URS 4643 or permission of instructor. (F,S,SS)

**HSA 4110 Health Care Organizational Behavior** (3). Analysis of organizational behavior and its implications for management in health care systems. Prerequisites: URS 4643. (F,S)

**HSA 4112 Computer Applications for Urban Services** (3). The study of computer applications for administrative analysis of financial and program data with emphasis on design, interface, and data structures. (F,S,SS)

**HSA 4113 Issues and Trends in Health Care Delivery** (3). Issues and trends in policy questions involving health care organizations, financing, quality controls, and delivery of services are addressed. (S,SS)

**HSA 4140 Program Planning and Evaluation** (3). Basic concepts of planning and evaluation as the fundamental tools of program design and development are examined. Prerequisites: HSC 4510, HSA 4194, or permission of instructor. (F,S)

**HSA 4150 People, Power and Politics in Health Affairs** (3). Community power structures are analyzed as to their function in politics and decisions governing health care. The health professional’s role is studied with respect to the political process in health care. Prerequisites: URS 4643, HSA 3103, or permission of instructor. (F,S)

**HSA 4170 Health Care Financial Management** (3). Financial management methods and procedures for health care institutions. Prerequisites: Accounting, microeconomics, URS 4194. (F,S,SS)

**HSA 4183 Applied Management in Health Care Organization** (3). Management theory and principles are examined in their application to the administrative process. Case studies are emphasized to illustrate operational conditions found in health care settings. Prerequisites: HSA 3180, HSA 4110, or permission of instructor. (S,SS)
HSA 4184 Human Resources Management and Supervision (3). The role of health care supervisors is examined with respect to interviewing, performance appraisal, disciplining, counseling, job orientation, in-service education and responsibilities. Prerequisites: HSA 3103 or permission of instructor. (F.S)

HSA 4192 Health Management Systems Engineering (3). Introduction to health systems analysis and application of industrial engineering techniques including work systems, job analysis, space utilization, inventory control, and traffic patterns are studied. Prerequisite: URS 4643, HSA 4110, HSA 4194 or permission of instructor.

HSA 4193 Automated Management and Information Systems (3). The analysis, design, and installation of management information systems in health care organizations is studied. Evaluation of computer systems from several perspectives are examined. Prerequisite: HSA 4192 or permission of instructor.

HSA 4420 Legal Aspects and Legislation in Health Care (3). Corporate structure and legal liabilities of health care institutions and professionals is studied from a local, state, and federal regulatory position. Prerequisites: HSA 4110, HSA 4150, or permission of instructor. (F.S)

HSA 4700 Fundamentals of Health Research Methods (3). Introduction to health research method’s tools including literature research, research report analysis covering research design, and data analysis and reporting writing are examined and practiced. Prerequisites: HSC 4510, HSC 4500, or permission of instructor.

HSA 4850 Administrative Internship (1-6). The student who has completed all required upper division course work is provided an opportunity to observe and engage in administrative practice in a health care setting. Prerequisite: Completion of all curriculum required course work and approval of the coordinator. (F.S,SS)

HSA 4905 Undergraduate Independent Study (1-3). Student's take part in in-depth research or an action-oriented project under the supervision of their faculty advisor. Preparation and approval of the content must be made one semester in advance. Prerequisite: Permission of faculty advisor. (F.S,SS)

HSA 5177 Financing and Reimbursement for Long Term Care Facilities (3). This course introduces the theory and practice of government regulations as they pertain to long term care facilities. The program seeks to identify the critical elements for securing payments for service and study relevant capital investment procedures and policies. Prerequisite: HSA 5225. Corequisite: HSA 5227. (S,SS)

HSA 5225 Long Term Care Management I (3). Long term care facility organization and management are studied. Management implications of the social, economic, financial, and regulatory environment of nursing homes are examined. Prerequisite: URS 4643, HSA 4110. (F)

HSA 5226 Management of Long Term Care Systems (3). Organizational, financial, and policy issues in the management of long term care systems in the U.S. with special emphasis on State of Florida. (S)

HSA 5227 Long Term Care Management II (3). Survey of theories of geriatric care for understanding the aging process. Focus is on the application of knowledge of the aging process to management and care giving in nursing homes. (S)

HSA 5455 Ethical Decisions in Health Services Administration (3). This course will study ethical principles as they apply to areas of management, supervision and clinical practice in the delivery of health care. Emphasis is on managerial decision-making. Prerequisites: HSA 5125, HSA 6185.

HSA 5816 Practicum in Applied Management in Long Term Care (3). Students will spend 180 hours in supervised practice in a nursing home setting. They carry out managerial responsibilities related to the administration of the facility. Corequisite: HSA 5227. (S)

HSA 5876L Administrative Residency in Nursing Home Setting (6). 480 hours of supervised practice in a selected nursing home. To provide experience in organization and management within the nursing environment. Prerequisites: HSA 5816, HSA 5225, HSA 5226, HSA 5227. (F.S,SS)

HSA 5935 Special Topics Seminar in Health Services (3) Students investigate topics of interest in health care services through lectures by the faculty and guest speakers. May be repeated. Prerequisite: Permission of faculty advisor.
Public Administration

Harvey Aversh, Professor
James Carroll, Professor
Milan Dziurz, Professor of Public Administration and Social Work
Howard Frank, Associate Professor and Acting Program Coordinator
Jean-Claude Garcia-Zamar, Professor
Donald Klingner, Professor
Ralph G. Lewis, Associate Professor
Valeeite L. Patterson, Assistant Dean
Allan Rosenbaum, Professor
Barbara Yarnold, Associate Professor

Bachelor of Public Administration

Degree Program Hours: 120
The Bachelor of Public Administration (BPA) degree is offered for students interested in beginning a public service career upon completion of their undergraduate work and for those who wish to continue in public administration at the graduate level.

Admission Requirements
A student must complete an Associate in Arts degree at a Florida public community college or have earned 60 semester hours of college credit at any other accredited institution at an acceptable performance level to be considered for admission.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Lower Division Preparation
It is recommended that applicants complete the Associate of Arts degree (60 semester hours) in the lower division and the General Education course requirements.

It is required that students have completed one course in American Government, one course in Microeconomics, and one course in Statistics. Three credits in History, and three credits in Public Administration are recommended.

Upper Division Program
Students must complete 60 credit hours at the 3000 level or greater.

Students must complete the following requirements:

1. Introduction to Public Administration (PAD 3003).
2. Eleven core courses.
3. Four courses in an administrative area of concentration to be taken within or outside the Program.
4. Three general electives.
5. A three credit internship PAD 4940 or PAD 4934 Integrative Seminar in Public Administration.

Students must earn a grade of 'C' or higher in each of the 11 core courses, PAD 3003, the concentration electives and the internship or integrative seminar. A 'C-' is not acceptable and must be repeated.

Core Courses: (33)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAD 3034</td>
<td>Public Policy and its Administration</td>
</tr>
<tr>
<td>PAD 4034</td>
<td>Public Policy Analysis and Program Evaluation</td>
</tr>
<tr>
<td>PAD 3251C</td>
<td>Introduction to Public Economics</td>
</tr>
<tr>
<td>URS 3001</td>
<td>Introduction to Urban and Regional Studies</td>
</tr>
</tbody>
</table>

Quantitative Skills

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>URS 4152</td>
<td>Research Methods for Urban and Regional Studies</td>
</tr>
<tr>
<td>URS 4112</td>
<td>Computer Applications for Urban Services</td>
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</tbody>
</table>

Public Management

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>URS 4643</td>
<td>Introduction to Management of Public, Nonprofit, and Health Organizations</td>
</tr>
<tr>
<td>PAD 4223</td>
<td>Public Sector Budgeting</td>
</tr>
<tr>
<td>PAD 4414</td>
<td>Personnel Skills for Administrators</td>
</tr>
<tr>
<td>PAD 3438</td>
<td>Communication Skills for Public Administrators</td>
</tr>
<tr>
<td>URS 4061</td>
<td>Values, Ethics, and Conflict Resolution</td>
</tr>
</tbody>
</table>

Concentration Electives: (12)

Four additional courses must be taken but may be completed within or outside the Program. Those courses selected must be approved by the Program Coordinator as being related to the student's program of study. These may be additional courses in or outside the Program including courses that constitute part of a minor or a certificate program in another department. Such a minor or certificate program should be relevant to the chosen administrative area of concentration.

Additional Electives: (9)
Three courses will consist of general coursework to be completed outside the Department. Students choosing a minor or a certificate program for their concentration-related electives may complete those program requirements as general electives for the BPA, if necessary.

Internship or Integrative Seminar: (3)
Students with no relevant employment experience are strongly encouraged to complete an internship in an appropriate public agency. All others must complete PAD 4934 Integrative Seminar in Public Administration.

Minor in Public Administration
A five-course minor in Public Administration is available to baccalaureate degree-seeking students who are interested in careers in public management. The courses that comprise this minor will provide students with the opportunity to develop specialized skills in such areas as urban administration, organizational change, personnel management, and budgeting and financial management. The minor is available on both campuses.

Requirements
Fifteen semester hours in Public Administration. Classes are to be selected from the following course list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>PAD 3033</td>
<td>Administrators and the Legislative Process</td>
</tr>
<tr>
<td>PAD 3034</td>
<td>Public Policy and Its Administration</td>
</tr>
<tr>
<td>PAD 3413</td>
<td>Organizational Group Processes</td>
</tr>
<tr>
<td>PAD 3430</td>
<td>Personal Growth and Administrative Development</td>
</tr>
<tr>
<td>PAD 3804</td>
<td>Government and Administration of Metropolitan Areas</td>
</tr>
<tr>
<td>PAD 3834</td>
<td>International Comparative Administration</td>
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<tr>
<td>Course</td>
<td>Title</td>
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<tr>
<td>PAD 4024</td>
<td>Concepts and Issues in Public Administration</td>
</tr>
<tr>
<td>URS 4051</td>
<td>Values, Ethics, and Conflict Resolution</td>
</tr>
<tr>
<td>PAD 4103</td>
<td>Politics of Administrative Organization</td>
</tr>
<tr>
<td>PAD 4223</td>
<td>Public Sector Budgeting</td>
</tr>
<tr>
<td>PAD 4414</td>
<td>Personnel Skills for Administrators</td>
</tr>
<tr>
<td>PAD 4432</td>
<td>Administrative Leadership and Behavior</td>
</tr>
<tr>
<td>PAD 4603</td>
<td>Administrative Law</td>
</tr>
<tr>
<td>PAD 5041</td>
<td>Values and Technology in Modern Society</td>
</tr>
<tr>
<td>PAD 5256</td>
<td>Public Economics and Cost Benefit Analysis</td>
</tr>
<tr>
<td>PAD 5427</td>
<td>Collective Bargaining in the Public Sector</td>
</tr>
<tr>
<td>PAD 5435</td>
<td>Administrator and the Role of Women</td>
</tr>
<tr>
<td>PAD 5443</td>
<td>Public Administrator and Media Relations</td>
</tr>
</tbody>
</table>

**Course Descriptions**

**Course Definitions**

PAD: Public Administration; URS: Urban and Regional Studies

**PAD 3003 Introduction to Public Administration (3).** The course will provide an overview of the field of public administration by focusing on its development and importance in modern government operations. The course will also review operation of government at local, state, and federal levels. (F.S,SS)

**PAD 3033 Administrators and the Legislative Process (3).** A study of executive-legislative interactions; the impact of legislation and legislative processes on administrative policy decision-making and implementation; the influence of administration on the legislating process. (F)

**PAD 3034 Public Policy and Its Administration (3).** Examines the formulation, implementation, and evaluation of governmental efforts at federal, state, and local levels. (F,SS)

**PAD 3104 Organization and Administrative Theory (3).** Historical survey of theories of public organization and of contemporary and emerging theories and management issues, with special attention to the role of bureaucratic theory and behavior. Case investigation of bureaucratic experience in federal, state and local levels will be conducted. (F,SS)

**PAD 3251C Introduction to Public Economics (3).** This course provides an introduction to the applied economics of the public sector and the microeconomics of public policy making and administration. It also provides an introduction to benefit-cost & cost-effectiveness analysis. (S,SS)

**PAD 3413 Organizational Group Processes (3).** The impact of various organizational climates, tasks, roles, and reward systems, on the behavior of both the individuals and groups of employees in public organizations. Particular attention is given to alienation and motivation in job effectiveness and Public Service. (F,SS)

**PAD 3430 Personal Growth and Administrative Development (3).** The administrator as a person. Development of interpersonal skills. Self-evaluation and career planning. Training and education for the public service sector. (F,S)

**PAD 3438 Communication Skills for Public Administrators (3).** Designed to enable students to develop oral and written skills required to communicate effectively in a public organization setting. (F,S,SS)

**PAD 3804 Government and Administration of Metropolitan Areas (3).** An intensive analysis of administrative problems in large complex urban areas encompassing many political entities. Examines overlapping relations among municipalities with special attention given to Dade County as well as current trends in public management and future directions for change. (F,S)

**PAD 3834 International Comparative Administration (3).** This course is an introduction to a wide range of scholarly and practical "applied" interests. Emphasis is on institution-building and development administration, particularly within the Third World countries. (F)

**PAD 3949 Cooperative Education (3).** Supervised work experience in public or quasi-public organization. Placement is made through the Office of Cooperative Education. Completion of required courses in public administration and consent of Program Director required. (F,S,SS)

**PAD 4024 Concepts and Issues in Public Administration (3).** The function of administrative institutions in society. The growth of administration through the bureaucratic model both as an art and a science. Contemporary and comparative forms and theories of organization. Responsibilities of public servants. (F,S,SS)

**PAD 4034 Public Policy Analysis and Program Evaluation (3).** Provides an introduction to the analysis and evaluation of public policies and programs. The main tools and techniques of policy analysis will be discussed. Students will apply techniques to selected policy problems. (F,S)

**PAD 4103 Politics of Administrative Organization (3).** The role of political processes in relationship to public organizations and the types of intra- and inter-organizational politics which are unique to public organizations. Effects of these political processes upon organizational performance and their role in pro-
mating or thwarting organizational change. (F,S)

PAD 4223 Public Sector Budgeting (3). The theory and practice of various approaches to budgeting, including time-item, performance, PPBS budgeting. Special emphasis on the role of the budget in shaping the program and performance and policy direction of public organizations. (F,S,S)

PAD 4414 Personnel Skills for Administrators (3). The general nature of public personnel administration; the development of the civil service system; concepts and issues currently applicable at the federal, state, and local levels of government. (F,S,S)

PAD 4432 Administrative Leadership and Behavior (3). Designed to expose students to a systematically related set of concepts for diagnosing human behavior in organizations; and to establish a positive value for the analysis of problems involving people, structure, environment, task technology, and situational climate. (F,S)

PAD 4603 Administrative Law (3). Surveys the principles of law from the perspective of the public administrator; administrative procedure; procedural due process; delegation of legislative power; regulatory administration; conflict-of-interest statutes, etc. (F)

PAD 4906 Independent Study in Public Administration (1-6). (Normally 3 credit hours) Individual conferences, supervised readings; reports on personal investigations; and similar undertakings. Prerequisites: Completion of required courses in public administration is expected. Consent of faculty sponsor and Program Director required. (F,S,S)

PAD 4934 Integrative Seminar in Public Administration (3). The terminal course of the program. Students will integrate course-work and theory into the analysis of a public policy or public management problem and produce a final seminar paper. Prerequisites: Completion of and Specialization. (F,S,S)

PAD 4940 Public Administration Internship (3-6). (Normally 3 credit hours) Supervised work experience in a public or quasi-public organization. Involves a variety of professional and technical job duties depending on the agency. Prerequisites: Completion of required courses in public administration is expected. Consent of internship coordinator and Program director required. (F,S,S)

PAD 4949 Cooperative Education (3). Supervised work experience in public or quasi-public organization. Placement is made through the Office of Cooperative Education. Prerequisites: Completion of required courses in public administration. PAD 3949, and consent of Program Director required. (F,S,S)

PAD 5041 Values and Technology in Modern Society (3). Surveys personal and societal value assumptions in the context of the technological society. Examines organizational-societal value structures, and the ways in which technology creates rapid change and new alternatives in values. Also the interrelationship of the past, present and future is explored, through futurism and forecasting techniques. (F)

PAD 5043 Government and Minority Group Relations (3). Explores the pressing contemporary issue of the relationship between government and minorities. Examines the clash between established institutional values and minority group values, and surveys remedial programs aimed at dealing with the problem. Comparative case studies will be used to analyze public agencies' internal relations with minorities (recruiting, selection, etc.), as well as their different responses to the minority groups they serve. (S)

PAD 5256 Public Economics and Cost-Benefit Analysis (3). This course provides the quantitative and qualitative tools and case material to solve allocation problems in the public sector. A rigorous introduction to applied microeconomic theory is provided as well as an introduction to welfare economics. Market and government failure are analyzed as are the public alternatives available. The economics of innovation is contrasted to the benefit-cost analysis, cost effectiveness analysis and systems analysis are presented. The ethics of applied practice are discussed via actual cases and the important skills of communicating with decision makers are taught. (F,S,S)

PAD 5416 Social Equity and Human Resource Management (3). The course deals with the human resource management issues arising from equity and affirmative action requirements in the workplace. (S)

PAD 5427 Collective Bargaining in the Public Sector (3). The course deals with the nature and implications of collective bargaining for managers and employees in public organizations. The course emphasizes similarities and differences between the private and public sectors, as they apply to collective bargaining. (F)

PAD 5435 Administrator and the Role of Women (3). The course is designed for women and men who are interested in moving into management positions, or who want to broaden their understanding of the changing role of women. Classes will allow for experimental as well as academic exploration of the issues. The course will also explore design, implementation, and evaluation of affirmative action programs. (F)

PAD 5443 The Public Administrator and Media Relations (3). Surveys the government-mass communication media relationship, and then concentrates on the ways in which public managers handle media relations. Emphasis throughout is placed on questions of information-handling unique to public organizations, involving, for example, adherence to Florida's Sunshine Law and the Federal Freedom of Information Act. (S)

PAD 5460 Productivity Improvement (3). Provides measures to improve organizational and worker productivity using applied behavioral science. (S)

PAD 5616 Contracting and Managing Third Party Governments (3). Analyzes the legal foundations, administrative and economic characteristics of government instrumentalities as they are used to pursue public policy. Analyzes how and why different combinations of instrumentalities are used in different policy areas. (F,S)

PAD 5660C Applied Legal Context of Public Administrators (3). An overview of constraints and latitude the legal system grants to public administrators and managers. Provides the applied legal information required to make effective decisions in the public sector. (S)

PAD 5661C Management of Court-Agency Relations (3). Examines applied judicial-administrative relations with particular emphasis on administrative policymaking. Covers the legal, environmental, and political
factors that influence administrative strategies of policy and program compliance. Prerequisite: PAD 5838. (S)

PAD 5716 Management Support Systems in Public Organizations (3). The course examines a variety of computer-based management support applications used in public sector organizations. It also explores design and implementation issues endemic to the public sector. (F,S,SS)

PAD 5716L Information Systems for Public Organizations (1). This course will provide an overview of microcomputer and mainframe skills required for substantive coursework in personnel, budgeting, and other core public sector functions. (F,S)

PAD 5934 Contemporary Issues in Public Administration (1-3). An analysis of major conceptual issues currently facing public administrators. May be repeated. (F,S,SS)

URP 5314 Introduction to Urban Planning and Growth Management (3). An historic overview of land use planning and the rise of growth management with emphasis on implementation in complex market and political environments. (F,S)

URP 5426 Emergency Management and Planning (3). This course focuses on the concepts, processes, and techniques associated with developing and implementing emergency management plans in public, nonprofit, and health organizations. (F)

URP 3001 Introduction to Urban and Regional Studies (3). An integrated approach to the problems and prospects of metropolitan areas with emphasis on economic, political, social and administrative facets of the urban setting. (F,S,SS)

URS 4061 Values, Ethics, and Conflict Resolution (3). Theories of value, ethical systems and their influence on administration; behavior and processes; the administrator as an ethical actor; value conflict and resolution; the philosophical basis of American thought. (F,S)

URS 4152 Research Methods for Urban and Regional Studies (3). The intent of this course is to familiarize students with the basic approaches used in contemporary social research with applications in public sector settings. Emphasis will be placed on survey, interviewing, and case experimentation—the three approaches most likely to be utilized in management decision making in government. Prerequisite: URS 4112 or equivalent. (F,S,SS)

URS 4643 Introduction to Management of Public, Nonprofit and Health Organizations (3). Fundamental theories and principles of management in public, nonprofit, and health service organizations. (F,S,SS)

URS 5505 Economic Development and Urban Revitalization (3). This course is an interdisciplinary examination of research and practice in contemporary economic development, with emphasis on successful implementation in a variety of settings. (S)

URS 5645 Strategic Planning in Public and Nonprofit Organizations (3). This course exposes students to the concepts associated with strategic planning of public and nonprofit organizations and provides them with practical experience in their use. (S)

URS 5647 Continuous Quality Improvement (3). This course provides an in-depth exposure to the concepts, principles, and techniques associated with continuous quality improvement (CQI) applied to public, nonprofit, and health organizations. (F)
School of Social Work

Karen Sowers-Hoag, Associate Professor and Director
Velmaire Albertini, Instructor and Student Services Coordinator and Acting MSW Coordinator
L. Yvonne Bacarisse, Associate Professor and Associate Dean for Undergraduate Studies
Stanley L. Bowie, Assistant Professor
Scott Birtar, Professor and Director, Institute for Children and Families at Risk
Arlene Brown, Instructor and Field Coordinator
Andres Gill, Assistant Professor
Paul Gallant, Assistant Professor
Mary Helen Hayden, Assistant Professor and Undergraduate Coordinator
Michael Koivisto, Professor
Jordan Kosberg, Professor and Ph.D. Coordinator
Rosa Jones, Associate Professor and Vice Provost
Montie Koppel, Professor
Roger Miller, Visiting Instructor
Welker Mitchell, Instructor and Director, Professional Development Center
Carol Odell, Instructor and Field Director
Miriam Potocky, Assistant Professor
Magaly Queral, Associate Professor
Rich Renz-Beaulaurier, Assistant Professor
Florence Safford, Associate Professor
Phyllis Singerman, Instructor and Field Coordinator
Betsy Smith, Associate Professor
Marlin Sundel, Professor

The School of Social Work offers graduate and undergraduate studies leading to the Master’s and Bachelor’s degrees in Social Work. The School also offers a Ph.D. in Social Welfare.

This profession requires a high degree of knowledge, skill, and dedication; a desire and ability to work effectively with people and to help solve social problems; a scientific understanding of society and human behavior; skills of social work practice; and identification with values of the profession.

Bachelor of Science in Social Work

Degree Program Hours: 120

The program offers an integrated educational experience that combines the theoretical and the practical. It is designed to prepare the student for generalist practice as a beginning professional social worker, for entrance into a graduate school of social work, and for participation in society as an informed citizen.

The four semester program includes a sequence of academic courses as well as field instruction under qualified supervision in social agencies in South Florida.

The program is accredited by the Council on Social Work Education.

Lower Division Preparation

The student desiring to major in Social Work must have completed the Associate in Arts degree at a Florida public community college, or equivalent work from an accredited institution.

Required Courses

Before admission to the Social Work program, the student must complete college-level courses in biology (including coverage of Human Biology) and statistics, 12 semester hours in the social and behavioral sciences, which must include one course each in sociology, psychology, economics and American government and eight to ten hours in a foreign language.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

For additional information regarding the undergraduate social work program of study and degree program requirements, contact the School directly.

Upper Division Program (60)

Required Courses: (45)

SOW 3113 Social Environment and Human Behavior I 3
SOW 3122 Social Environment and Human Behavior II 3
SOW 3232 Social Welfare Policy and Services I 3

Electives: With approval of the faculty advisor 15

Remarks: Students should be aware that courses in this program are sequenced. Students must check with their advisors for pre- and corequisite courses. A grade of ‘C’ or higher (a grade of ‘C-’ is not acceptable) in all courses required for the major is necessary for graduation. A passing grade in field courses is required for continuation in the program. Field courses cannot be repeated.

Minor in Social Welfare

A five-course minor in social welfare is available to baccalaureate degree-seeking students who are interested in careers in the human services field or who wish to study how common human needs are addressed within social welfare programs. The courses that comprise the minor will provide students with the opportunity to relate to the special concerns of our region, including poverty, crime and delinquency, child abuse and neglect, and family instability. The minor is available at University Park and North Campus.

SOW 3113 The Social Environment and Human Behavior I 3
SOW 3122 The Social Environment and Human Behavior II 3
SOW 3232 Social Welfare Policy and Services I 3
SOW 3233 Social Welfare Policy and Services II 3
SOW 3302 Introduction to Social Work 3
SOW 3350 Techniques of Interviewing 3
SOW 3313  Methods of Social Work Practice I  3
SOW 3801  Self-Awareness and Self-Modification for Practice  3
SOW 4272  Social Welfare: Cross-Culture Comparisons  3
SOW 4361  Behavioral Approaches to Social Work Practice  3
SOW 4654  Child Welfare  3
SOW 4658  Permanency Planning in Child Welfare Services  3
SOW 4684  Professional Values in the Human Services  3
SOW 5109  Crises in the Lives of Women  3
SOW 5605  Medical Social Work  3
SOW 5641  Understanding the Processes of Aging  3
SOW 5665  Animal Assisted Treatment for Social Work  3
SOW 5689  Social Work Practice with Sexual Problems  3
SOW 5710  Chemical Dependency and Social Work  3
SOW 5932  Seminar in Social Work  3

This course is required for the minor in social welfare. The remaining 12 semester hours are to be selected from the social work courses listed above.

Course Descriptions

<table>
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<tr>
<th>Prefixes</th>
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<tbody>
<tr>
<td>SOW - Social Work</td>
<td>F-Fall semester offering; S-Spring semester offering, SS-Summer semester offering</td>
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</table>

SOW 3113 The Social Environment and Human Behavior I (3). Study of the socio-cultural factors (including racial, ethnic, and gender and sexual orientation variables) affecting human development and behavior in families, groups, organizations, and communities. Prerequisites: College level biology (including coverage of human biology). (F)

SOW 3122 The Social Environment and Human Behavior II (3). Study of individual development, personality, and behavior from a bio-psychological and sociocultural perspective, with emphasis on the life cycle, giving attention to racial/ethnic, gender and sexual orientation variables.

SOW 3232 Social Welfare Policy and Services I (3). This course considers the major social welfare programs in the United States; how they emerged and developed, and how they operate today. Analysis of financial resources, decision-making processes, and structure of delivery systems serves as a basis for understanding policy assessment. Corequisite: SOW 3302 or equivalent. (F)

SOW 3233 Social Welfare Policy and Services II (3). This course examines the frameworks and methods used to analyze social welfare policy and programs. Special attention is paid to current policy issues in the Social Welfare system and strategies that can be used to achieve policy change. Prerequisites: SOW 3232 and SOW 3302 or equivalent. (S)

SOW 3302 Introduction to Social Work (3). An overview of the profession of social work within the institution of social welfare. Historical and philosophical development, field of practice, values, and ethics. (F.S.S)

SOW 3313 Methods of Social Work Practice I (3). An overview of social work intervention for beginning generalist practice. Generic values, attitudes, processes, and skills in client-worker relationship-building are discussed and analyzed. Case material is utilized to acquaint students with assessment, modes of intervention, goal setting, and implementation. Prerequisites: SOW 3113, SOW 3232, SOW 3302, or equivalents. Corequisite: SOW 3122. (F.S)

SOW 3350 Techniques of Interviewing (3). A competency-based course designed to provide students with basic interviewing skills. Emphasis is on acquisition of interview behavior rather than theory. Audio and videotaping, role-playing, simulations, and micro-counseling training methods will be utilized. Prerequisites: SOW 3113 or permission of instructor.

SOW 3403 Social Work Research (3). Introduction to the basic language, methods, and skills of scientific research for beginning social work practice. Problem formulation, literature review, definition of variables, sampling, data collection and analysis, and report writing are addressed. Prerequisite: STA 1013 or equivalent (F.S)

SOW 4 Current Topics in Social Work (3). This course presents an extensive examination of current issues and problems in social work. Interventions technology to address these issues will be presented.

SOW 4272 Social Welfare: Cross-Culture Comparisons (3). A combination seminar and lecture course in which students will analyze and compare social welfare policy, problems, and programs in various countries. Prerequisite: SOW 3232 or permission of instructor.

SOW 4322 Methods of Social Work Practice II (3). This generic skills course is designed to provide students with the theories and techniques of social work practice as applied to small groups and families. Prerequisites: SOW 3122, SOW 3233, and SOW 3313, or equivalents. Corequisites: SOW 4511 and SOW 4522. (F.S.S)

SOW 4332 Methods of Social Work Practice III (3). Provides an understanding of planned change at the community level from a social work perspective, as well as strategies and methods utilized in community organization practice. Identification of generalist skills and prevalent models of groups and community organization in social work practice. Prerequisites: SOW 4322, SOW 4511, SOW 4522. Corequisites: SOW 4512 and SOW 4523.

SOW 4361 Behavioral Approaches to Social Work Practice (3). An introduction to the basics of learning theory as applied to social work settings. A review of principles of cognitive and learning theory applied to generalist practice. Prerequisite: SOW 3113 or permission of instructor.

SOW 4511 Field Experience I (8). This is the first 315 clock hour supervised social work practice experience in service to individuals, families, groups, and communities. Placement in an agency or institution is for the purpose of gaining a first-hand awareness of needs and behavioral responses, as well as a knowledge base of expectations, re-
SOW 4512 Field Experience II (8). This second 315 clock hour supervised social work practice experience enables the student to progress toward a higher level of awareness and understanding of needs and behavioral responses. Generic skills are applied more selectively with increasing interest and proficiency in one or more practice areas. This second placement affords the student an opportunity to become a more effective part of the social service delivery system. Majors only. Prerequisites: SOW 4511, SOW 4322, and SOW 4522. Corequisites: SOW 4332 and SOW 4523. (F.S.SS)

SOW 4514 Field Experience III (4 or 8). This third supervised social work practice experience makes it possible for students to sharpen diagnostic skills and to refine planning and implementation of appropriate helping techniques as these relate to individuals, groups, and/or communities. Majors only. Prerequisites: SOW 4511, SOW 4322, and SOW 4522. Corequisites: SOW 4332 and SOW 4523, or their equivalents. (F.S.SS)

SOW 4522 Integrative Field Seminar I (1). This course is a one-hour seminar, to be taken concurrently with SOW 4511 and SOW 4322, designed to analyze the field experience and integrate theory and practice. It provides an arena for students from various settings to come together in order to provide a richer understanding of social services on all levels. Majors only. Prerequisites: SOW 3122, SOW 3233, SOW 3302, SOW 3313, and SOW 3403, or equivalents. Corequisites: SOW 4322 and SOW 4511. (F.S.SS)

SOW 4523 Integrative Field Seminar II (1). This course is a one-hour seminar to be taken concurrently with SOW 4512, designed to analyze the field experience and integrate theory and practice. It provides an arena for students from various settings to come together in order to provide a richer understanding of social services on all levels. Majors only. Prerequisites: SOW 4322, SOW 4511, and SOW 4522, or equivalents.

Corequisites: SOW 4332 and SOW 4512. (F.S.SS)

SOW 4654 Child Welfare (3). Theories and models of intervention with children and adolescents will be examined within the context of the family. The main focus of the course will be on the special diagnostic and treatment skills necessary for the effective intervention with this client population. Prerequisites: SOW 3122 and SOW 3313 or permission of instructor.

SOW 4658 Permanency Planning in Child Welfare Services (3). Emphasis on those practice skills needed for implementing permanent plans for children ‘at-risk’. Included are intervention strategies for developing contractual arrangements insuring a child’s security. Prerequisites: SOW 3122, SOW 3233, SOW 4322, SOW 4554, or permission of instructor.

SOW 4684 Professional Values in the Human Services (3). This course is designed to assist students in identifying, exploring, and experiencing the values inherent in professionalism, as they are manifested in the various human service professions. Material will be presented in a didactic and experiential manner with emphasis upon student involvement in the value clarification process. Prerequisite: Senior standing.

SOW 4905 Individual Study (1-9). Individually selected program of supervised study related to specific social work issues. Prerequisite: Permission of instructor. (F.S.SS)

SOW 5109 Crisis in the Lives of Women (3). An overview of special experiences in the lives of women which might lead women to seek professional assistance. Topics include pregnancy, rape, abortion, childbirth, sex discrimination, climacteric, widowhood. Prerequisite: Senior or graduate standing.

SOW 5354 Crisis Intervention in Social Work Practice (3). This course examines the etiology, structure, theory, and application of crisis intervention in social work practice. It provides assessment criteria for assignment to this form of treatment and techniques for intervention. Prerequisite: Senior or graduate level practice course, or permission of instructor.

SOW 5357 Animal Assisted Treatment for Social Work (3) An introduction to the human animal bond and animal assisted treatment. There will be illustrations of programs using small animals, horses, and dolphins. Prerequisites: SOW 3313 or SOW 5342 or permission of instructor.

SOW 5369 Social Work Practice with Sexual Problems (3). Skills applicable to sex-related concerns encountered in social work practice. Presents theories of the etiology of common sexual problems; explores treatment intervention modalities. Prerequisite: Graduate or senior level practice course or permission of instructor.
Certificate Programs

**Law and Criminal Justice Certificate**

The Law and Criminal Justice academic certificate is designed to provide legally-conscious students with concepts and information utilized by law professionals. Study shall include casework, procedures, court processes, research methods, and other introductory coursework designed to enhance careers in the legal profession.

**Admissions**

Students must be fully admitted to the Bachelor of Science degree in Criminal Justice or another bachelors degree program.

**Certificate Award**

The Certificate will be awarded upon completion of the required certificate courses and the bachelor degree requirements. The certificate will be posted on the student's transcript at the time completion of the bachelor degree requirements is posted.

**Required Criminal Justice Courses**

The student shall complete a minimum of 18 semester hours of the following selected criminal justice courses with a minimum grade of "C" in each course. Core criminal justice courses will not count for Criminal Justice majors.

- CCJ 3271 Criminal Procedure  3
- CCJ 3270 Judicial Policy Making  3
- CCJ 3291 Criminal Administration  3
- CCJ 4032 Crime and the Media  3
- CCJ 4252 Criminal Justice and the Constitution  3
- CCJ 4260 Law and Criminal Justice  3
- CCJ 4282 Legal Issues in Corrections  3
- CCJ 4752 Legal Research  3
- CCJ 5216 Criminal Law  3
- CCJ 5235 Comparative Procedure  3
- CCJ 5286 Comparative Law  3

**Certificate in Urban Affairs**

The certificate program requires completion of 15 credit hours of coursework. Students are encouraged to take introductory courses in microeconomics and political science before enrolling in the program. All students are required to take a common introductory course—Introduction to Urban and Regional Studies—and two other core courses. Then students fulfill certificate requirements by taking two electives consistent with their academic and career objectives.

**Required Course (3)**

- URS 3001 Introduction to Urban and Regional Studies  3

**Core Courses (6)**

Students must take two of the following four courses:

- POS 3142 Urban Politics  3
- ECP 3613 Introduction to Urban Economics  3
- SYD 4610 Urban Sociology  3
- URP 5313 Introduction to Urban Planning and Growth Management  3

**Electives 6**

Students must take two courses from the following list to complete certificate requirements:

**College of Business**

- MAN 3701 Business and Society  3
- MAN 4065 Business Ethics  3
- MAN 4102 Women and Men in Management  3
- MAN 4120 Intergroup Relations in Organizations  3
- MAN 4731 Modern Business History  3
- MAN 4742 Business and the Physical Environment  3

**School of Design**

- ARC 4058 Computer Applications in Architecture  3
- LAA 5715 Architectural History and Theory  3

**Department of Economics**

- ECP 3123 Economics of Poverty  3
- ECP 4143 Economics of Racism  3

**College of Education**

- EDF 3521 Education in History  3
- EDF 3723 Schooling in America  3

**College of Health**

- DIE 3317 Dietetics and Community Health  3
- HUN 3191 World Nutrition  3

**School of Policy and Management**

- CCJ 3011 The Nature and Causes of Crime  3
- CCJ 4130 Police and the Community  3
- HSA 3103 Health and Social Service Delivery Systems  3
College of Urban and Public Affairs

Dean (Acting)  Mark Rosenberg
Associate Dean  Donald E. Klingner
Assistant Dean  Valerie L. Patterson

Faculty

Albertini, Velmarie, M.S.W. (Florida International University), Instructor, Student Services Coordinator and Acting MSW Coordinator
Averch, Harvey, Ph.D. (University of North Carolina), Professor, Public Administration
Bacarisse, L. Yvonne, M.S.W., A.C.S.W., L.C.S.W. (Tulane University), Associate Professor, Social Work
Becker, Fred, Ph.D. (University of Oklahoma), Associate Professor, Health Services Administration
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Safford, Florence, D.S.W. (Hunter College), Associate Professor, Social Work

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Terry, W. Clinton, Ph.D. (University of California), Associate Professor, Criminal Justice

White, Vandon E., Ph.D. (Purdue University), Professor, Health Services Administration

Wilbanks, William, Ph.D. (State University of New York), Professor, Criminal Justice

Yarnold, Barbara, Ph.D. (University of Illinois), J.D. (DePaul University), Associate Professor, Public Administration
The Honors College

Fernando Gonzalez-Reigosa, Dean
Joe Wisdom, Director
Caryl Myers Graf, Associate Director

Talented students often are forced to choose between the exciting opportunities and challenges offered by large, research-oriented universities and the close, personal environment offered by small liberal arts colleges. FIU offers the best of both worlds. The Honors College is a small community of dedicated scholars—outstanding students and committed teachers—who work together in an atmosphere usually associated with small private colleges, but they do so with all of the resources of a major state university readily at hand.

The College provides an important foundation for students who want to get the most out of their undergraduate years. Transition into higher education is made easier by the student's immediate association with a small group of students and teachers with similar capabilities and aspirations: the undergraduate experience is significantly enhanced by the broad liberal arts focus of the curriculum and the opportunity to work closely with experienced faculty from the first day on campus; and the opportunities for graduate and professional study or employment are greatly expanded because of the range of activities and experiences made available to students in the College. The Honors College at FIU offers the very best in undergraduate education.

Location

While the majority of the activities and facilities of the College are located at University Park, honors courses also are available at the North Campus.

Admission Policy

Admission to The Honors College is selective and limited. Students are admitted only at the beginning of each academic year (fall term).

Freshmen: Students with a 3.5 overall high school GPA and commensurate scores on the SAT or ACT are eligible for admission to the College.

Transfer and Continuing FIU Students: Students who have maintained a 3.3 GPA in all college-level work are eligible for admission to the College. To be eligible for admission, students must have at least two full academic years remaining in their undergraduate programs.

Graduation Policy

Students are eligible for a transcript notation indicating that they "Graduated Through The Honors College" if they comply with the following requirements:

1. met all other requirements for graduation from the University;
2. were continuously enrolled in honors seminars;
3. completed at least 12 credits of honors courses with no grade lower than "B;"
4. maintained an overall GPA of at least 3.3.

The Honors Curriculum

Students in the College possess dual academic citizenship. They pursue any major available in the University and at the same time complete the honors curriculum. In most cases, participation in the College does not increase the number of credits required for graduation. Each term through the third year, students enroll in one honors seminar that is designed to stimulate thoughtful discussion and creativity and to develop communications skills. Honors seminars are limited to a student/faculty ratio of 20:1 and are taught by some of the best teachers in the University. In the senior year, students may choose from several options including additional seminars, independent research, and foreign study.

All classes interdisciplinary; most are team-taught. Years Hill are structured similarly: all students and faculty at each level meet in a large group session one day each week for activities such as lectures, panel discussions, case studies, and student presentations; the other class meeting each week is spent in small group preceptuals. Professors meet with the same small group throughout the year. Senior seminars meet as independent classes with an emphasis on synthesizing the students’ experiences during the previous three years and introducing them to graduate level research activities.

The curriculum emphasizes the following activities:

- Critical, integrative, and creative thinking;
- Group and independent research;
- Oral presentation;
- Close contact between students and faculty;
- Integration of class work with the broader community.

Year One

IDH 1001, IDH 1002 The Origin of Ideas and the Idea of Origins (6). The course is designed to encourage students to become self-conscious learners, exploring not only the what, but also the how and why of knowing. The course focuses on the nature of truth and reality and our role in the world each of us has constructed.

Year Two

IDH 2003, IDH 2004 Inhabiting Other Lives (6). Exposes students to issues of cultural commonality and diversity, and invites them to investigate and to understand the interconnectedness of various cultures.

Year Three

IDH 3005, IDH 3006 Aesthetics, Values, and Authority (6). Building on the investigations of the first two years, the third course examines the aesthetic underpinnings of culture and foundations of what commonly are held to be "western values." Discussions focus not only on these paradigms, but on the authority and power relationships that surround them.

Year Four

Prerequisites

1. admission to The Honors College;
2. no grade below "B" in prior honors course work;
3. and a cumulative GPA of at least 3.3.

(these requirements may be appealed in writing to the Director, UHC)
Option 1
IDH 4007, IDH 4008 Looking to the 21st Century (6). Discussion of contemporary issues within the framework provided by the first three years of study.

Option 2
Departmental Honors Requirements—Honors course work or honors thesis opportunities offered by individual departments:

Option 3
Independent Study—Individual research projects under the direction of a faculty member from either the Honors College or the student’s major department:

Foreign Study
Students may choose to complete the fourth year of the honors curriculum at one of the College’s summer study programs abroad. During the summer of 1997 programs are planned in Prague, The Czech Republic; Madrid and Santiago, Spain; and Florence, Italy.

National Student Exchange
This program enables students in the College to spend one semester or a full year at any one of more than 130 universities throughout the United States and its territories.

The Honors College Society
Made up of a representative of each honors seminar, the Honors College Society moves the honors experience beyond the classroom by organizing social and cultural activities and community service projects. The Society plans picnics and parties and the annual honors awards night, and in recent years has coordinated volunteer activities with various local community-service groups.

Mentoring
For students in the College, the facilities and programs available at the university, extensive as they might be, are only the beginning. The faculty and staff of the College feel a personal responsibility to see that every student is aware of and prepared for the many fellowship and internship opportunities available to undergraduate students. It is not uncommon for Honors College students to be involved in some sort of funded off-campus activity during each summer of their undergraduate career.

Graduate and Professional School Placement
The College provides placement assistance in two very important ways. The staff is knowledgeable and eager to help students find out about graduate and professional programs and the application process. More importantly, however, students who have complete the honors curriculum will have participated in a small seminar with at least six different faculty members who will be able to offer guidance to the students and personal, detailed evaluation in support of their applications.

Other Privileges
Because of the special nature of their contribution to the university, Honors College students enjoy other privileges as well, including, priority registration, special dormitory facilities, opportunities for scholarships and fee waivers, assistance in finding on-campus employment, and special recognition at commencement ceremonies.

Pre-Collegiate Summer Institute
The Summer Institute offers high school students the opportunity to attend college classes during the summer prior to their senior year. Acceptance into the Institute includes a scholarship for 6 credits, which covers tuition, registration fees, and textbooks. The Institute may enable students to graduate from college in under four years. Any credits earned will count toward graduation from FIU and are transferable to other universities. Students also may arrange to apply these credits toward high school graduation.

Students who successfully complete the Summer Institute are guaranteed priority consideration for admission into The Honors College.

The Honors College Faculty
Bailey, Regina, M.F.A. (Pratt Institute), Assistant Director, The Art Museum
Beesling, William, Ph.D. (Florida State University), Assistant Dean, Undergraduate Studies
Canoves, Jaime, M.A. (University of Florida), Associate Professor, Design
Carvajal, Manuel, Ph.D. (University of Florida), Professor, Economics
Elkins, Mary Jane, Ph.D. (Southern Illinois University), Associate Professor, English
Fjeliman, Stephen, Ph.D. (Stanford University), Professor and Chairperson, Sociology/Anthropology
Gonzalez-Reigosa, Fernando, Ph.D. (Florida State University), Associate Professor, Psychology and Humanities and Dean
Graf, Caryl, M.S. (Florida International University), Associate Director, The Honors College
Hogner, Robert, Ph.D. (University of Pittsburgh), Associate Professor, Marketing and Business Environment
Ito-Adler, James, Ph.D. (Harvard University), Assistant Professor, Sociology/Anthropology
Keppler, William, Ph.D. (University of Illinois), Professor, Public Health
Levine, Barry, Ph.D. (New School for Social Research), Professor, Sociology/Anthropology
Maguire, William, M.S. (Illinois Institute of Technology), Professor, Visual Arts
Machonis, Peter, Ph.D. (Purdue University), Associate Professor, Modern Languages
Romelson, Meri-Jane, Ph.D. (University of Chicago), Associate Professor, English
Salokar, Rebecca, Ph.D. (University of Toronto), Associate Professor, Political Science
Schwartz, Bennett, Ph.D. (Dartmouth College), Assistant Professor, Psychology
Tracey, Martin, Ph.D. (Brown University), Professor, Biology
Wisdom, Joe, Ph.D. (Florida State University), Director, Honors College
Military Programs

Aerospace Studies

Florida International University, in cooperation with the Department of Aerospace Studies, Air Force Reserve Officer's Training Corps (AFROTC), at the University of Miami, provides academic instruction and training experiences leading to commissioned service in the United States Air Force. Two programs are offered:

1. The four-year AFROTC program is comprised of a two-year basic course in Air Force Organization and the development of air power, a four-week field training course at an Air Force base during the summer, and a two-year advanced course in improving communication skills, leadership, and managerial skills and knowledge of national security issues necessary for becoming an Air Force officer.

2. The two-year AFROTC program is comprised of a six-week field training course at an Air Force base during the summer prior to entry and the above two-year advanced course. It is available for students with two years of undergraduate/graduate studies remaining.

In order to complete either program, all Air Force ROTC cadets must pass the Air Force Officer Qualifying Test (AFQT), a five-part physical fitness test and a 1.5 mile timed run. In addition, all cadets must complete specified minimum requirements in English composition and mathematical reasoning.

AFROTC scholarships for two, three, and four years are available to qualified cadets and high school seniors on a competitive basis. Some scholarships provide full college tuition, others begin at $9,000 per year and may be extended to 80% of tuition (after Freshman or Sophomore year with a 3.0 cumulative GPA). All include the cost of books and a nontaxable $150 subsistence allowance each month during the school year.

Cadets earn two credits for each basic year and six credits for each advanced year of AFROTC. Basic cadets attend one hour of class each week and advanced cadets attend AFROTC classes for three hours each week. All cadets are involved in two hours of required leadership laboratory each week, during which time practical experience is provided in leadership development. All courses are conducted on the University of Miami campus.

Entry into the basic course involves no military obligation. Acceptance into the advanced course usually leads to active duty service as an Air Force officer, although the call to active duty may be delayed for cadets who plan to earn graduate degrees.

All cadets are furnished uniforms and textbooks. Additionally, advanced cadets, regardless of scholarship status, receive $150 per month. There is a $50 refundable deposit for uniforms.

Applicants who are veterans or who have completed Junior AFROTC or other military training will be considered for waiver of the basic course.

For more information, call Det 155, AFROTC at (305) 284-2870.

Course Descriptions

AFR 1101C First Semester Basic - First Term (1). Introduction to the Air Force and AFROTC. Mission and organization, officer ship and professionalism, military customs and courtesies, officer opportunities, group leadership problems, and introduction to communications skills.

AFR 1121C First Year Basic - Second Term (1). This course is a continuation of AFR 1101C.

AFR 2130C Second Year Basic - First Term (1). Air Force heritage and leaders, Quality Air Force, introduction to ethics and values, leadership, group leadership problems, and continuing application of communications skills.

AFR 2131C Second Year Basic - Second Term (1). This course is a continuation of AFR 2130C.

AFR 3220C First Year Advanced - First Term (3). Study of leadership and quality management fundamentals, professional knowledge, leadership ethics, and communication skills required of an Air Force officer. Case studies are used to examine leadership and management situations and demonstrated through practical application.

AFR 3230C First Year Advanced - Second Term (3). This course is a continuation of AFR 3220C.

AFR 4201C Second Year Advanced - First Term (3). The national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Focus on military as a profession, officer ship, military justice, civilian control of the military, preparation for active duty, current issues and refinement of communication skills.

AFR 4210C Second Year Advanced - Second Term (3). This course is a continuation of AFR 4201C.

Note: There is a required Leadership Laboratory, Wednesday 4:00 - 6:00 for all AFROTC courses.

Marine Officer Programs

Qualified students may apply for an officer program leading to a commission as a Second Lieutenant in the United States Marine Corps. Commissions are offered in both ground and aviation components. The Platoon Leaders Course (PLC) is offered to freshmen, sophomores and juniors who attend pre-commissioning training during the summer. Financial assistance and Flight Indoctrination Programs are available. Qualified seniors and 12 weeks of training in the Officer Candidate Course (OCC) after graduation. For details, contact the Career Development and Placement Office, or the Marine Officer Selection Officer when on campus.
Military Science

Robert Nicholson, Professor, Military Science and Chairperson
Bruce Staller, Assistant Professor
Richard Heugh, Assistant Professor

The Army Reserve Officer Training Corps is a college elective that will help students succeed in their desired career, whether civilian or military. Students who complete all ROTC requirements may be commissioned second lieutenants and serve in the Army, Army National Guard or Army Reserve.

Enrollment
Open to full-time male and female students attending Florida International University.

Instruction and Training
Freshmen and sophomores take Basic Military Science Courses. There is no military obligation associated with the first two years of the program. These courses introduce students to skills taught at U.S. Army Basic Combat Training. These include rappelling, patrolling, weapons handling and firing, map reading, first aid and many others. Courses consist of outdoor/instructional and practical ‘hands-on’ training on university intramural fields and South Florida military sites. Juniors and seniors continue to use these ‘hands-on’ techniques while developing leadership skills. As upper classmen they will have opportunities to teach underclassmen.

Scholarships
Army ROTC offers a number of scholarships that pay most tuition and fees, an allowance for books and spending money.

Organizations
Ranger Challenge - A physically demanding course designed to prepare cadets for area and regional competition against other ROTC units. Cadets train weekly to perfect skills in weapons handling and assembly, marksmanship, orienteering, hand grenade throwing, physical fitness, combat patrolling and combat field marching.

Scabbard and Blade - A national honor society for outstanding cadets selected for membership by their peers for academic and military excellence.

Color Guard - An elite organization of cadets skilled in marching and drill and ceremony. Members pass the colors at Golden Panther basketball games, civic/veteran events and campus functions.

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Association of the U.S. Army - A fraternal organization chartered by the national association to perpetuate the ideals of the U.S. Army.

Special Programs
Students unable to participate in ROTC during their freshman and sophomore years may qualify for admission to advanced ROTC (junior and senior years) by attending a six-week course at Ft. Knox, KY. Attendees receive $24,000 plus travel costs, lodging and food.

Students who want to pursue an advanced degree after receiving a baccalaureate may qualify for delayed entry on active duty.

Students interested in pursuing civilian careers after graduation may apply for study in the National Guard or Reserve.

Special Training
Outstanding cadets may qualify to attend special Army schools such as Mountain Warfare Training, Northern Warfare School, Air Assault School or Airborne School. Selection is on a competitive basis.

Cadets receive uniforms, shoes, boots and other equipment necessary for training. Outstanding cadets are honored at frequent award ceremonies. Scholarship cadets can fly space-available aboard military aircraft. Once commissioned, second lieutenants, students earn about $24,000 a year in the Army as a starting salary, or about $2,500 per year in the National Guard or Reserve.

Course Descriptions
MIS 3233 Second Year Basic (1)
MIS 3233L Second Year Basic Laboratory (0). Map reading skills, determining distance, direction, and location; analysis of terrain; and indirect fires. Required Laboratory, Field Training, and/or Activity Module.

MIS 3310 Advanced Military Science III (3). MIS 3310L Advanced Military Science III Laboratory (0). Advanced leadership and troop command procedures. Small unit tactics and communications. Map and compass skill. Patrolling, tactical operations. Required Leadership Laboratory. Prerequisite: Permission of the PMS.

MIS 4410 Advanced Military Science IV (3). The applied leadership techniques in counseling subordinates; written and oral communications; the command, staff, personnel, logistics, and training management systems; the role of NCO's.
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North Campus
North Miami, Florida 33181

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