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## florida

## internationa university <br> 1977-78 catalog

the state university system of florida

## ACADEMIC CALENDAR, 1977-1978

## FLORIDA INTERNATIONAL UNIVERSITY

| FALL QUARTER, 1977 |  |
| :---: | :---: |
| July 22. | Last Day for Receipt of Applications for Foreign Students Applying from out of the Country |
| September 5 | Labor Day Holiday (University Closed) |
| September 6 | Last Day for Receipt of Applications for Regular Admission to Fall Quarter |
| September 26 | Registration for New and Special Students |
| September 27. | Classes Begin |
| October 3. | Last Day to Complete Late Registration Last Day of Official Drop and Add Period Last Day to Drop Courses or Withdraw from the University Without Incurring a Financial Liability |
| October 10. | Last Day to Pay Fees Without a $\$ 25.00$ Late Fee |
| October 17. | Last Day to Apply for Fall Quarter Graduation |
| October 24. | Last Day to Pay Fees to Avoid Cancellation of Enrollment |
| November 7 | Last Day to Drop a Course with a Grade of DR Last Day to Withdraw from the University with WI Grade |
| November 11. | Veterans Day (University Closed) |
| November 14. | Last Day to Reinstate Cancelled Enrollments $\$ 25.00$ Reinstatement Fee) |
| November 24-25.. | Thanksgiving Holidays (University Closed) |
| December 16. | Classes End |
| December 17. | Official Commencement Exercises |
| December 20. | All Grades Due in Registration Office by 12:00 Noon |
| December 31 | New Year's Holiday (University Closed) |

## WINTER QUARTER, 1978

| October 17. | Last Day for Receipt of Applications for Foreign Students Applying from out of the Country |
| :---: | :---: |
| December 16 | Last Day for Receipt of Applications for Regular Admission to Winter Quarter |
| January 3. | Registration for New and Special Students |
| January 4 | Classes Begin |
| January 10. | Last Day to Complete Late Registration Last Day of Official Drop and Add Period Last Day to Drop Courses or Withdraw from the University Without Incurring a Financial Liability |
| January 17. | Last Day to Pay Fees Without a $\$ 25.00$ Late Fee |
| January 24 | Last Day to Apply for Winter Quarter Graduation |
| January 31. | Last Day to Pay Fees to Avoid Cancellation of Enrollment |
| February 14 | Last Day to Drop a Course With a Grade of DR Last Day to Withdraw from the University With WI Grade |
| February 21 | Last Day to Reinstate Cancelled Enrollments ( $\$ 25.00$ Reinstatement Fee) |
| March 17 | Classes End |
| March 21 | All Grades Due in Registration Office by 12:00 Noon |

## florida

 internationa university 1977-78 catalog
## the state university system of florida

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## GENERAL INFORMATION

## GOALS

Florida International University, a member institution of the State University System of Florida, offers upper level and graduate programs designed to achieve three goals:

Education of Students - To provide a university education for qualified students which (a) prepares them for useful careers in education, social service, business, industry, and the professions; (b) furnishes them with the opportunity to become effective members of the society; and (c) offers them an appreciation of their relationships to their cultural, aesthetic and technological environments.
Service to the Community - To serve the greater community, with a primary emphasis on serving the Greater Miami and South Florida area, in a manner which enhances the metropolitan area's capability to meet the ecological, cultural, social and urban challenges which it faces.
Greater International Understanding - To become a major international education center with a primary emphasis on creating greater mutual understanding among the Americas and throughout the world.

## HISTORY

Florida International University was established by the Florida State Legislature on June 22, 1965. On July 11, 1969, the Florida Board of Regents appointed the first president, Charles E. Perry. On September 19, 1972, classes opened with an initial enrollment of 5,667 undergraduate and graduate students. The enrollment grew to nearly 11,000 students in 1975-76.

Early in 1973, the Inter-American Center Authority deeded a tract of land on the Interama site to the Board of Regents for a second campus of Florida International University. Additional land was provided in 1974, and the University's first building on that site was completed during 1976.

## CAMPUSES

The University currently has one major campus location in Southwest Dade County with a planned second major campus to open in North Miami with a limited number of programs in 1977.

The Tamiami Campus is located 10 miles west of downtown Miami on the Tamıami Trail (SW Eighth Street) between SW 107 and 117 Avenues. It is bounded on the west by the Florida Turnpike. The North Miami Campus is located at the northern tip of Biscayne Bay, just east of Biscayne Boulevard between NE 135 and 151 Streets. Both campuses are operated under a central administrative plan.

As student needs develop and resources become available, academic programs will be offered on one or both campuses. Students will be able to complete all degree requirements on the campus of their academic major program.

## BUILDING PROGRAM

## Florida International University, Tamiami Campus

The Tamiami Campus is located on a 344 acre site in west central Dade County. Since 1970, six major buildings have been constructed at a cost of $\$ 38$ million. The campus building plan includes several other structures to accommodate growth needs for 15,000 students.

The campus plan is designed as an interactive complex of facilities connected by internal courts for pedestrian access. The complex is surrounded by a natural buffer of lakes and green areas to provide passive areas for study and relaxation.

Primera Casa, the first major building of the Tamiami Campus, opened in 1972. Its five floors house classrooms, laboratories, computer facilities, and administrative offices.

La Deuxieme Maison, the second building, opened early in 1973. The four-story structure houses classrooms, lecture-theatres, academic program and faculty offices.

University House accommodates student services offices, recreation and lounge areas, cafeteria, bookstore, an international conference theatre, and a classroom-auditorium seating 200 persons. The building was opened early in 1974.

Viertes Haus, a three-story structure opened early in 1975, houses Technology and Fine Arts laboratories, the Experimental Theatre, and media production facilities. The Central Utility Plant, which serves the entire campus, was constructed adjacent to Viertes Haus and opened at the same time.

Athenaeum, which houses the Library and the Film Library of the Media Center, opened in the Fall of 1975. This structure also includes a divisible auditorium seating 540 persons for lectures or performances.

Owa Ehan, the sixth building, is scheduled for completion in Fall 1977. This three story structure houses laboratories, faculty offices, classrooms, and specialized facilities for Physical Sciences, Biological Sciences, Health Sciences, and Hotel and Food Services.

The Campus, prior to 1970, was the site of the old Tamiami Airport. The former observation tower was remodeled and is presently the location of the campus information center. The former hangars were remodeled for offices, laboratories and recreation facilities on the west part of the campus, where outdoor recreation fields are also located.

## Florida International University, North Miami Campus

Florida International University, North Miami Campus, is located on a 106 acre site in North Dade County on Biscayne Bay. The campus building plan includes structures to accommodate growth needs over a several year period.

Trade Center Building, the first building on the Campus, was purchased from The InterAmerican Center Authority and remodeled for University use. The three-story structure includes the library, media services, student services, bookstore, computer center, faculty offices, classrooms, and campus administrative offices.

Academic Building One, scheduled to be completed in the Spring of 1979 will house classrooms, faculty offices, admissions and registration offices.

Student Services Building, also scheduled to be completed in the Spring of 1979, will include student activities offices, cafeteria, bookstore, student services offices, recreational space, a large lecture hall, and classrooms.

Academic Building Two, now in preliminary planning stages, will be a laboratory/classroom and faculty office complex including some science and technology facilities.

Several other academic buildings, a library building, an auditorium, and a major conference center will be completed as resources become available.

## GENERAL ACADEMIC INFORMATION

Florida International University offers a variety of academic programs and courses at the bachelors and masters degree levels, all designed to respond to the changing needs of the growing metropolitan area of Dade County and South Florida. Upper level bachelors programs and courses are offered in the College of Arts and Sciences and the five professional schools - Business and Organizational Sciences, Education, Health and Social Services, Hotel, Food and Travel Services, and Technology. Graduate study at the masters level is available in the Schools of Business and Organizational Sciences, Education, Health and Social Services, Hotel, Food and Travel Services, and Technology. Graduate study at the masters level is available in the Schools of Business and Organizational Sciences, Education, Health and Social Services, and Hotel, Food, and Travel Services.

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.

## ACCREDITATION AND MEMBERSHIPS

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

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

The University is also an affilliate member of the Association of Upper Level Colleges and Universities, the American Association of State Colleges and Universities, the Florida Association of Colleges and Universities, the Association of Caribbean Universities and Research Institutes, the American Association of Community and Junior Colleges, the Union of Experimenting Colleges and Universities, and numerous other educational and professional associations. The following agencies have accredited professional programs at Florida International University:

American Dietetics Association
American Physical Therapy Association
American Occupational Therapy Association
American Medical Association
National Accreditation Agency for Clinical Lab Sciences and The American Society of Clinical Pathologists Council on Social Work Education.

## ACADEMIC PROGRAMS

## ACADEMIC MAJORS LEADING TO THE BACHELORS DEGREE

## College of Arts and Sciences

| Anthropology | *English | Italian | Portuguese |
| :--- | :--- | :--- | :--- |
| *Art | Environmental Studies | Liberal Studies | **Psychology |
| *Biological Sciences | *French | *Mathematics | Religious Studies |
| *Chemistry | *German | *Music | *Sociology |
| Computer Science | *History | Philosophy | *Spanish |
| Earth Sciences | **Hunanities | Physics | Statistics |
| Economics | *International Relations | Political Sciences | Theatre |

*NOTE: In accordance with University regulations for two majors or iwo degrees (see page 13), students in these programs may request admission into the programs of the School of Education leading to teacher certification in the corresponding subject matter areas. To do so, they must obtain the approval of their College major advisor and of the Chairperson of the appropriate Division in the School of Education.
**NOTE: One of the initial academic major programs to be offered at the North Miami campus.

# School of Business and Organizational Sciences* 

Accounting
Finance
Insurance
International Business
Management
Management Information Systems

Marketing
Personnel Management
Public Administraton
Real Estate
Transportation
Urban Affairs \& Regional Development
*NOTE: At the time this catalogue went to press, no final decision had been made as to whether full undergraduate programs, graduate programs, or both will be offered at the North Miami Campus. It may be necessary for students to take some or all of their required coursework at the Tamiami Campus.

School of Education
*Art
*Biological Sciences
Elementary Education
Emotional Disturbance
*English
Health Education
*History
**Home Economics
Industrial Arts
*Mathematics
Mental Retardation
*French
*German
*Spanish
*Music
Physical Education (1-12)
*Physical Sciences
***Parks and Recreation
*Social Studies
Specific Learning Disabilities
Technical Education
Vocational Industrial Education

Remark: The following programs are the initial academic majors from the School of Education to be offered at the North Miami campus: Emotional Disturbance, Mental Retardation, Special Learning Disabilities, Elementary Education and Early Childhood Education.
*NOTE: In accordance with University regulations for two majors or two degrees (see page 13), students in these programs may request admission into the programs of the College of Arts and Sciences leading to the discipline majors in the corresponding subject matter areas. To do so, they must obtain the approval of their School major advisor and of the chairperson of the appropriate College Department.
**NOTE: Interdisciplinary program offered by the Schools of Education, Technology and Health and Social Services.
***NOTE: Does not lead to teacher certification.

## School of Health and Social Services

*Criminal Justice
Dietetics and Nutrition
**Health Science
Medical Technology
**Nursing
Occupational Therapy
Physical Therapy
*Social Work

* One of the initial academic major programs to be offered at North Miami campus.
**Consult academic advisor regarding course offerings at the North Miami campus


## School of Hotel, Food and Travel Services

General Hospitality Management Hotel-Motel Management International Hotel Management Restaurant and Food Service Management

Tourism and Travel Management
Condominium/Cooperative and Apartment Management

## School of Technology

Architectural Technology
Civil Engineering Technology
Construction Engineering
Technology
Electrical Engineering Technology

Environmental \& Urban Systems
Home Economics
Interior Design
Mechanical Engineering
Technology

## NORTH MIAMI CAMPUS ACADEMIC PROGRAM

The second major campus of the University opened in June 1977. The academic major programs listed below will be offered at the North Miami Campus during the 1977-78 academic year with sufficient courses planned to be scheduled at the North Miami Campus to satisfy full degree requirements. Selected courses from academic majors, other than those listed, and many electives will be offered and may be taken in partial fulfillment of degree requirements. Students are advised to review the quarterly course listing to determine if desired subjects are offered at North Miami.

The degree requirements and other academic rules and regulations apply equally to both campuses of the University. Those interested in programs at either location should consult the requirements listed elsewhere in this catalog or see an academic advisor in the appropriate Department or Division.

The course offerings for each academic quarter are listed in the course schedule published prior to the registration period.
College/School
School of Business and
Organizational Sciences

School of Education

School of Health and Social Services

College of Arts and Sciences

Level
Undergraduate

Graduate

Undergraduate

Graduate

Undergraduate


Major Program
Accounting
Management
Marketing
Master of Business
Administration
Master in Management (Accounting)
Master in Management (Public Administration)
Emotional Disturbances
Mental Retardation
Specific Learning Disabilities
Elementary Education
Emotional Disturbances
Mental Retardation
Specific Learning Disabilities
Elementary Education
Early Childhood Education
Criminal Justice
Social Work
*Health Science
*Nursing
Consult Your Academic
Advisor regarding course offerings.
Humanities
Psychology
International Relations
(minor in Political Science)
Computer Science

## State University System External Degree Program

Many of the undergraduate majors offered by the College of Arts and Sciences, the School of Business and Organizational Services, the School of Health and Social Services, the School of Hotel, Food and Travel Services, and the School of Technology, are offered through the State University System External Degree Program.

Consult the academic program in which you are interested to determine if it is also offered through the External Dregree Program.
NOTE: In order to be admitted to the External Degree Program, a student must first be admissable to the University in a regular degree program.

## Division of Continuing Education and Special Programs

A student can earn credit toward the bachelors degree in courses and programs offered through the Department of Off-Campus Credit Programs.

## ACADEMIC MAJORS LEADING TO THE MASTERS DEGREE

## College of Arts and Sciences

Community Psychology

## School of Business and Organizational Science*

Business Administration
Public Administration
Management: concentrations in
Accounting
Finance
*NOTE: At the time this catalogue went to press, no final decision had been made as to whether full undergraduate programs, graduate programs, or both will be offered at the North Miami Campus. It may be necessary for students to take some or all of their required coursework at the Tamiami Campus.

## School of Education*

Curriculum and instruction: concentrations in

* Early Childhood Education Industrial Arts
**Elementary Education
Mathematics
Reading
Art
Science Education
English
Adult Education, General
Health Education
Home Economics Education
Psycho-Educational Services:
concentrations in
**Emotional Disturbance
Counselor Education
**Mental Retardation
School Psychology

Administration and Supervision: concentrations in

Administration of Adult Education
Elementary School Administration
Administration of Vocational
Education and Supervision
Secondary School Administration and Supervision
Educational Administration and Supervision, General

- Programs meet Rank II certification requirements.
**One of the initial academic major programs to be offered at Florida International University At North Miami.


## School of Health and Social Services

Criminal Justice
Dietetics and Nutrition

School of Hotel, Food and Travel Services
Hotel and Food Service Management

## School of Technology

Environmental \& Urban Systems

## ACADEMIC DEGREES

## College of Arts and Sciences

Bachelor of Arts
Bachelor of Fine Arts
Bachelor of Science
Master of Community Psychology

## School of Health and Social Services

Bachelor of Sciences
Master of Science in Criminal Justice
Master of Science in Dietetics

## School of Hotel, Food, and Travel Services

Bachelor of Science
Master of Science in Hotel and Food Service Management

Bachelor of Science
Master of Science

## School of Technology

Bachelor of Science Bachelor of Technology Master of Science

## School of Independent Studies

Bachelor of Arts
Bachelor of Fine Arts
Bachelor of Science
Bachelor of Business Administration
Bachelor of Technology

## ADMISSION

## UNDERGRADUATE PROGRAMS

A student who has completed an Associate of Arts degree at a Florida public community college, or has earned 90 quarter hours ( 60 semester hours) of collegiate work at any other accredited institution at an acceptable performance level, and has completed the general education requirements (or the equivalent) as listed in the Academic Regulations of the catalog, is eligible for admission to the degree program of his or her choice.

A student who has completed an Associate of Science degree, or has earned 90 quarter hours ( 60 semester hours), at a Florida public community college, and who has completed at least 40 quarter hours of the 54 quarter hours of general education requirements (or the equivalent) as listed in the catalog, is eligible for admission to the degree program of his or her choice.

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

The School of Technology normaily regards the Associate of Science degree in an appropriate technical discipline as the full equivalent to the first two years ( 90 quarter hours) of the Bachelor of Technology program.

An undergraduate student, who has been denied admission to a program of the University for academic reasons, may appeal the decision through the following steps: the Chairperson of the program, the Dean of the College or School of the program, the Vice President for Academic Affairs. An undergraduate student, who has been denied admission to the University for other than academic reasons, may appeal to the Dean of Student Services.

## GRADUATE PROGRAMS

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

A bachelor's degree or equivalent from a regionally accredited university or college.
Advanced degree requirement option
A "B" or better average in all work attempted while registered as an upper division student for the bachelors degree, OR a total score (quantitative plus verbal) of 1,000 or higher on the Graduate Record Examination or an equivalent score on some other measure specified by the University.
An applicant who does not have a " $B$ " average on his or her upper level work is required to present a score of 1,000 on the Graduate Record Examination (School of Education, School of Health and Social Services, and the School of Hotel, Food and Travel Services) or 450 on the Graduate-Management Admission Test-(GMAT) (School of Business and Organizational Sciences). All graduate applicants to the School of Business and Organizational Sciences regardless of previous grade-point average - are required to submit the appropriate aptitude test scores. For a student applying to the Public Administration or the Health Care Management programs in the School of Business and Organizational Sciences, the appropriate test is the Graduate Record Examination (GRE) rather than the GMAT.

NOTE: Grades earned at institutions with non-traditional grading systems will be given every consideration at Florida International University. Applicants will be treated equally with students from institutions with traditional grading systems.

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

## ADMISSION PROCEDURES

Undergraduate and graduate degree-seeking students may obtain an application for admission, catalog and other admission material from the Office of Admissions and Records, Florida International University, Tamiami Trail, Miami, Florida 33199. Students desiring admission to an academic program offered at the North Miami Campus may also contact the Admissions and Records office at that campus. Course registration information will be provided.

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

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

Completed Academic Record: Official transcripts must be forwarded to the Office of Admissions and Records by the Registrar of all college-level institutions attended. It is the responsibility of the applicant to initiate requests for necessary transcripts (including final transcripts) from each post-secondary institution attended.

NOTE: Transcripts must be received no later than 15 days preceding the first day of class.
Student Health Form: Every student must complete a student health form. The forms will be supplied after a student is admitted to the University.

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

Previously enrolled students that have not attended classes for one year or more will be requested to fill out a Readmissions form which can be obtained in (PC 140) Office of Admissions and Records.

## REGISTRATION

During each academic quarter, an Official Registration Period is held, during which time all currently enrolled students who anticipate enrolling in the following quarter are expected to register for their courses. The new student will be notified of registration dates at the time he or she is officially notified of admission to the University.

## LATE REGISTRATION FEE

Approximately five weeks after each quarter begins, the official registration period for the next quarter begins. During the two week registration period, all currently-enrolled, degreeseeking students are expected to register. Those who fail to register then, and who subsequently register on Registration Day or thereafter will be assessed a $\$ 25$ registration fee.

Although new and non-degree students are encouraged to register during the official twoweek registration period, they are not required to register until Registration Day. Those students who request to register during the first week of classes will be assessed a $\$ 25$ late registration fee.

## VETERAN'S REGISTRATION

The Office of Admissions and Records will assist a student eligible for veteran's benefits during his or her enrollment at the University. Any student in doubt concerning his or her eligibility should contact the office to avoid any loss of veteran's eligibility and benefits. The veteran who desires personal counseling or tutoring should contact the Director of Veterans Programs in the Division of Student Services.

## SPECIAL STUDENT (NON-DEGREE SEEKING) REGISTRATION

The Special Student classification is primarily designed for the person who is not in-
terested at the time of registration in working toward a degree at Florida International. The following regulations will apply to a person registered as a Special Student:

- He or she is not required to meet the usual admission requirements. Such a student is not officially admitted as a regular student and registration as a special student in no way implies future admission as a regular, degree-seeking student.
- He or she must complete a non-degree application and be admitted as a non-degree student prior to registration.
- Registration is on a space-available basis and is determined at the time of registration, on Registration Day, or during Late Registration.
- Credit earned will not be counted toward a degree at Florida International unless the student subsequently applies for regular admission and is accepted as an undergraduate or graduate student.
- No more than the following quarter hours earned as a special student may be counted toward a degree:
Graduate Level
15 quarter hours
Undergraduate Level........................................... 20 quarter hours
The appropriate Dean must approve the acceptance of credit earned as a special student;
- If a change to regular, degree-seeking student status is desired, an appropriate appiication must be filed in the Office of Admissions and Records;
- Regular Rules of Scholarship will apply;
- A faculty advisor is not assigned, but academic counseling is available from the academic unit offering the course.
NOTE: A foreign student is not permitted to enroll as a special student. Immigration regulations require a foreign student to be degree-seeking.


## ACADEMIC REGULATIONS

NOTE: Question concerning the University's academic regulations should be directed first to the student's academic advisor. Subsequent concerns may be directed to the appropriate Dean or the Office of Admissions and Records.

## GENERAL REGULATIONS

## DEGREE REQUIREMENTS

Florida International University will confer the bachelors degree when the following conditions have been met:

1. Successful completion of a minimum of 180 credit hours.
2. Completion of the last 45 credit hours of coursework at Florida International University.
3. Satisfactory completion of Florida International University's general education requirement.
4. Maintain at least a 2.0 G.P.A. on all Florida International University's coursework.
5. Recommendation of the Faculty of the College or School awarding the degree.
6. Certification by the Dean of the College or School concerned that all requirements of the degree being sought have been completed.
Florida International University will confer the masters degree when the following conditions have been met.
7. Successful completion of a minimum of 90 quarter hours for degrees requiring two years of work and 45 quarter hours for those requiring one year of work.
8. Maintain at least a 3.0 G.P.A. on all Florida International University's coursework.
9. Recommendation of the faculty of the College/School awarding the degree.
10. Certification by the Dean of the College/School concerned that all requirements of the degree being sought have been completed.
NOTE: Normally, a minimum of 35 quarter hours must be completed at Florida International University for a 45-quarter-hour program and 75 quarier hours for a 90 -quarter-hour program.

## GENERAL EDUCATION REQUIREMENTS

Florida International University requires that all undergraduate students must have completed a general education program prior to graduation. The general education program as presently defined by the Board of Regents consists of 54 quarter hours ( 36 semester hours). Florida International University recognizes the following general education program: 9 quarter hours each in the areas of social science, natural science, English composition and humanities; 4 quarter hours in mathematics, and 14 quarter hours of electives in the above areas. In this connection, the following policies have been established:

- A student who has graduated from a Florida public community college with an Associate in Arts degree shall be considered as having met the general requirements of Florida International University;
- A student who has met the general education requirements of any institution in the State University System of Florida shall be considered as having met the general education requirements of Florida International University;
- A student who has taken his or her freshman and sophomore years in a college other than a Florida public community college or at an institution in the State University System of Florida may similarly receive credit for such courses shown on his or her transcripts as meeting the general education requirements;
- A student may be admitted before completion of an equivalent general education program provided such a program can be completed through an inter-institutional registration arrangement with a Florida public community college or through some other arrangements designed to meet individual needs as noted in the section describing the undergraduate admission standards.


## CLASSIFICATION OF STUDENTS AND COURSE LOADS

Students are classified by the Office of Admissions and Records as follows:
Junior: Through 134 quarter hours credit.
Senior: 135 or more quarter hours credit, but no baccalaureate degree earned at Florida International University or elsewhere.
Post Baccalaureate: Any student enrolled in graduate level courses who has earned a bachelors degree but is not admitted to a graduate degree program.
Graduate: Any student admitted to a graduate program.
Special Student: Any non-degree seeking student not admitted to a degree program enrolled in undergraduate or graduate level courses who has not earned a bachelor's degree.

In terms of credit-hour-load, students are classified as full-time according to the following minimum schedule:

|  | Undergraduate <br> Quarter Hours | Graduate <br> Quarter Hours |
| :--- | :---: | :---: |
| Credit-Hour Loads | 10 | 10 |
| Selective Service | 12 |  |
| Veterans Benefits (full allowance) | 12 | 9 |
| Veterans Benefits (3/4 allowance) | 9 | 7 |
| Veterans Benefits (1/2 allowance | 6 | 5 |
| Foreign Students (F-1 Visa) | 15 | 10 |

Part-time students are those taking less than the figure indicated. The typical course load for a full-time undergraduate or graduate student is 15 quarter hours. A course load of more than 20 quarter hours must be approved by the student's advisorand dean (or designee). An undergraduate foreign student must carry and satisfactorily complete 15 quarter hours each quarter, and a graduate foreign student must carry and satisfactorily complete 10 quarter hours each quarter to meet the full-time status requirement of the 1 mmi gration and Naturalization Service.

## CLASS ATTENDANCE

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

## STUDENT RECORDS

Legislative Act authorizes the Florida Board of Regents, through the State Board of Education, to prescribe the data to be included in student records maintained by a University, and to limit access to such records to the student, and members of the professional staff of the University who have need for such information. The President, through designed designated staff, is authorized to release information from a student's record when required in the discharge of his official responsibilities, when authorized in writing by the student, or when ordered by a court of competent jurisdiction.

Transcripts requested by the student will not be released if there are financial obligations owed to the University.

## PROGRAM AND COURSE REGULATIONS

## Academic Definitions:

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

Major - An integral part of the bachelors and masters degree is a major concentration of course work in an approved academic discipline or area. The major areas of study are listed on pages 5-8 of the Catalog. The exact course and credit requirements and prerequisites for each major are outlined in the departmental or program areas of the Catalog.

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

Minor Program - A Minor Program is an arrangement of courses that enables the stucient to develop some degree of expertise in one area of study. A minor is associated with the completion of the bachelors degree, but is not interdisciplinary in nature.

Certificate Program - In the College and Schools of the University, a Certificate Program is a combination of courses with a common base or interest selected from one or more academic disciplines and so arranged as to form an area of academic concentration. Two types of certificates are awarded by the College or Schools:

Academic Certificate - awarded with the bachelors degree, or upon completion of an approved area of concentration to a student already possessing a bachelors degree. This certificate is interdisciplinary in nature.
Professional Certificate - awarded to a student upon completion of an approved area of concentration. This certificate need not be interdisciplinary in nature nor associated with the bachelors degree.
A Certificate in Continuing Studies is awarded to a person who has attended a conference, seminar, or program sponsored by the Division of Continuing Education and Special Programs.

Two Majors - Any undergraduate student who elects to do so may carry two majors and work to fulfill the requirements of both concurrently. Upon successful completion of the requirements of two majors, a student will be awarded only ONE degree unless a minimum of 45 appropriate, quarter hours in addition to the requirements of the first degree have been earned. In cases where the requirements of two majors have been met and only one degree is involved, a notation denoting both majors will be entered on the transcript.

Two Degrees - Two bachelors 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 45 appropriate, quarter hours in addition to the requirements of one degree has been earned.

A graduate from an accredited four-year institution who applies for admission to work towards a second bachelors degree must meet the requirements of the major department which shall include (but is not limited to) a minimum of 45 quarter hours of course work, as well as any other University-wide graduation requirement.

Change of Major - A student may change majors by processing a Request for Changes of Major form. The form and directions are available in the Office of Registration and Records.

## TRANSFER CREDIT

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

## Limitations on Transfer Credit

A student transferring from a four-year college may transfer up to 135 quarter hours ( 90 semester hours), and those transferring from two-year colleges may transfer up to 90 quarter hours ( 60 semester hours) toward a bachelors degree. In individual cases, at the discretion of the appropriate academic dean, a greater number of credits may be transferred. Normally, the grade of " $D$ " will be accepted for transfer; however, such coursework in the major field is subject to review and approval by the appropriate dean.
Normally, credit from non-accredited institutions will not be accepted; however, such credit, when presented, will be considered on an individual basis by the appropriate College or School.
Credit from military schools will be considered for transfer in accordance with the recommendations of the American Council on Education.
Credit from foreign institutions will be considered on an individual basis. Credit will be granted for all work which is applicable toward the degree being sought.

## ACCELERATION

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

## College Level Examination Program (CLEP)

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

Because CLEP credit is regarded as transfer credit, no matter how earned, the maximum transferability of credit under CLEP, both General and Subject examinations combined, is 45 semester (or 67.5 quarter) credits.

Not more than six semester (or nine quarter) hours will be transferred in each of the five areas of the General Examinations (English, Humanities, Mathematics, Natural Sciences, Social Sciences - History).

NOTE: A student who desires additional information on CLEP should contact the Office of Admissions and Community College Relations.

## 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 and register for the courses in the regular manner.

## CREDIT FOR LIFE/WORK EXPERIENCES

Undergraduate - The awarding of credit for life/work experience is the prerogative of each academic department or program. Only the degree-seeking student is eligible to receive this type of credit. The experiences must be applicable to the degree program of the student, and should be discussed and appropriately documented at the time the desired program of study is initially discussed and decided with the student's program advisor.
Graduate - Graduate credit, per se, will not normally be awarded for life experience, nor will life experience credit be used to meet requirements for the masters degree. In cases where a student's life experience would appear to have been sufficient to develop the understanding and skills associated with a course that would otherwise be included in his graduate program of study, he or she will be allowed to register for Independent Study credits and demonstrate competency through development of an appropriate project acceptable to the faculty person who represents that specific area of specialization. Not more than 20 quarter hours of a 45 credit masters degree, nor 30 quarter hours of a 90 credit masters degree, may be so earned. A student wishing to have this policy waived, wholly or in part, may petition the Dean of the Academic unit to which he or she has been admitted for special consideration and final responsibility for a decision will rest with that Dean.

## TRAVELING SCHOLAR PROGRAM

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

## DROPPING AND ADDING COURSES

The first week of each quarter is the official drop/add period. During this period, a student may add courses, drop courses (no records kept), withdraw from the University (with a fee refund).

Courses officially dropped during the second through the sixth weeks of classes are recorded on the transcript with a symbol of DR (dropped).

## REPEATED COURSES

A student who repeats a course for which credit was not received may have that designation removed from the transcript record by filing a Repeated Course Form with the Office of Admissions and Records. The previous grade will be replaced by an asterisk.

A student may repeat a course as many iimus as he/she wishes; only the last grade will be recorded on transcript and calculated in G.P.A.

## FINAL EXAMINATIONS

While the University calendar does not designate specific dates as a final examination period, final course examinations may be given at the discretion of the faculty member teaching the course.

## APPLICATION FOR GRADUATION

Each student who plans to graduate is required to submit to the Office of Admissions and Records an Application for Graduation Form. This form (supplied by the Office of Admissions and Records) must be submitted before the end of the third week of classes of the academic quarter in which graduation is expected. There is no charge for applying for graduation.

## WITHDRAWAL FROM THE UNIVERSITY

A student who wishes to leave the University during the quarter for any reason whatsoever must officially withdraw through the Office of Admissions and Records.

A student who officially registers for a particular quarter and subsequently decides not to attend (no shows) or to leave during the quarter must officially withdraw from the University through the Office of Admissions and Records. (Dropping all courses is equated to a withdrawal. Therefore, a withdrawal form instead of a drop/add card MUST be completed).

The transcript record of a student who withdraws during the first week of classes will contain NO references to the student being registered that quarter.

The transcript record of a student who officially withdraws after the first week and before the end of the sixth week of classes will contain a WI for each course.

The transcript record of a student who stops attending the University without offically withdrawing will contain a $N C$ grade for each course.

## READMISSION

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

## GRADING SYSTEM

| Grades | Definition | Grade Points <br> Per Credit Hour |
| :---: | :--- | :---: |
| A | Excellent | 4 |
| B | Good | 3 |
| C | Average | 2 |
| D | Poor | 1 |
| CR | Satisfactory | N/A |
| NC | No Credit | 0 |
| F | Failure | 0 |
| IN | Incomplete | N/A |
| WI | Withdrew from University | N/A |
| AU | Audit | N/A |
| DR | Dropped Course | N/A |
| NR | Grade Not Reported | N/A |
| EM | Examination | N/A |

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

## DEAN'S LIST

Any undergraduate student who earns a quarter average of 3.5 or better on 10 or more hours of course work for which grade points are earned is placed on the Quarter Dean's List. This achievement is noted on the student's quarterly report of grades and permanent academic record.

## ACADEMIC HONORS (UNDERGRADUATE)

To graduate WITH HONORS requires a cumulative GPA between $3.50-3.749$
To graduate WITH HIGH HONORS requires a cumulative GPA of $3.75-3.999$
To graduate WITH HIGHEST HONORS requires a cumulative GPA of 4.0

## ACADEMIC WARNING, PROBATION AND DISMISSAL

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

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

DISMISSAL: A student on PROBATION whose cumulative and quarterly GPA falls below a 2.0 (undergraduate) or 3.0 (graduate) will be automatically dismissed from his/her program and the University. The student has ten working days to appeal the dismissal decision. This appeal must be made in writing to the Dean of the College/School in which he/she is enrolled. If the student's appeal is denied, the student's dismissal from the University is for a minimum of four (4) quarters. After four quarters, the student may re-apply to the University in the same program, a different program or register as a special student.

## CREDIT/NO CREDIT OPTION

The College/Schools may specify particular courses which may be taken for grades of CR/NC only and those which may be taken, at the option of the student, for either a CR/NC or a regular $A B C D F / N C$ grade. A student who decides to take a course that has been designated for CR/NC grading or ABCDF/NC grading, must indicate at the time of course registration which grading option is desired. Once the grading option has been indicated, a student will not be allowed to change his or her mind.

## CHANGE OR CORRECTION OF GRADES

Once submitted, end-of-quarter grades (except incompletes) are final and are subject to change only through a Change of Grade Form to correct an error in computation or transcribing, or where part of the student's work has been unintentionally overlooked. A change-of-grade form requires the instructor's statement as to the reason for the change, the instructor's signature, and the approval of the appropriate Academic Dean, and must be submitted within one calendar year after the date of the initial end-of-quarter grade.

## GRADE REPORTS

At the end of each quarter, the Office of Admissions and Records provides each registered student a copy of his or her grades.

## FOREIGN STUDENTS

## UNDERGRADUATE AND GRADUATE ADMISSION STANDARDS AND PROCEDURES

A foreign student must meet the regular admission requirement of the Universityand comply with the following:

Application and Fee: A completed admission application must be received by the University at least 6 months prior to the desired entering date together with the non-refundable \$15 (U.S. dollars) fee.
Academic Records: Proper transcripts or certified copies of academic records and their English translations, validated by an official public translator, and all other appropriate credentials must be forwarded to the Office of Admissions and Records.
Proficiency in English: Proficiency in English must be established if the native language is not English. Since the University does not have a program of English as a foreign language, it must have evidence that proficiency is sufficient to immediatey begin a full-time, degree-seeking program. The following are accepted ways to verify proficiency:

- A minimum score of 500 in the Test of English as a Foreign Language (TOEFL). For information write to: The TOEFL Program, Box 899, Princeton, New Jersey, 08540, U.S.A.
- ELS Language Center Certification of satisfactory completion at the 109 level of proficiency. For information write to: ELS Language Centers, 3331 Ocean Park Blvd., Suite 201, Santa Monica, Calif. 90405.
- The ALIGU Test, (American Language Institute, Georgetown University) Washington, D.C. 20007.
- Successful completion of 45 quarter hours ( 30 semester hours) of course work in an American college or university including 9 quarter hours ( 6 semester hours) of English Composition.
Declaration and Certification of Finance: A Declaration and Certification of Finances must be completed before the Certificate of Eligibility (Form 1-20A) is issued. Upon receipt of application for admission the Declaration and Certification of Finances will be mailed to the applicant.

The University is required by immigration authorities to carefully check the financial resources of each student prior to issuing the Form 1-20A. Therefore, it is important that the applying student know the costs of attending the University and have the necessary support funds for the period of enrollment.

Before completing the Declaration and Certification of Finances, review the estimate of institutional costs and living expenses. The total funds available to the student for the first and/or second academic years must at least equal the total estimates of institutional costs and living expenses. All questions in the Declaration and Certification of Finances must be accurately answered to avoid unnecessary delay in processing.

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

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

Health Insurance: Florida International University requires that all foreign students purchase health insurance in order to help pay for Major Medical expenses. The health insurance policy should be kept active as long as the student is enrolled at the University. Information on the most economical plans are available from the Foreign Student Services Department.

Graduate Students: For information about the GRE and GMAT, write to Educational Testing Service, Princeton, New Jersey, 08540, U.S.A. Information about test center location also may be obtained in the American Embassy in student's home country.

Tuition: A foreign student is considered a non-resident, and as such will be assessed nonresident fees. The minimum charge for a foreign student is $\$ 705.00$ per quarter (undergraduate) or $\$ 570.00$ per quarter (graduate). Fees are subject to change without notice.

NOTE: Opportunities for financial assistance are limited if a foreign student is not a resident alien or a U.S. citizen.
Full-Time Enrollment: The non-immigrant alien student on an F-1 visa is required by United States Immigration regulations to be enrolled full-time except for summer session. He or she should make satisfactory progress toward the bachelor or master degree program objectives each term. Otherwise the continuation of study on a student visa may be jeopardized. Full-time enrollment for a student on an F-1 visa (student visa) is defined as enrollment in, and successful completion of, a minimum of 15 quarter hours each quarter (undergraduate) and 10 hours each quarter (graduate).

United States Department of Justice, Immigration and Naturalization Service Law and Regulations: It is the student's responsibility to comply with all non-immigrant alien requirements as stated under the United States laws under Section 101 (a) (15) (f) (i) of the Immigration and Nationality Act. The University is required to report to the Immigration Office any nonimmigrant alien student who:
a) Does not register at the University at the time expected.
b) Does not carry a full course of studies.
c) Terminates attendance.

Granting official Extension of Stay is dependent upon the student making normal academic progress toward the bachelors or masters requirements.

Employment: An F-1 visa student may not be employed off campus while attending the University unless permission has been granted by the U.S. Immigration and Naturalization Service. Normally, employment will not be permitted, especially during the student's first year of enrollment. Only under very special circumstances because of unexpected conditions or emergencies which arise after the student's arrival, will a foreign student be recommeneded for a work permit. Adequate proof must be presented to the Foreign Student Advisor in order to obtain the necessary authorization from that institution. On campus employment can be authorized by the Foreign Student Advisor.

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

## FEES AND REFUNDS

## FEES

The fees are established by the Board of Regents and the State Legislature. The fee structure for the 1977-78 academic year is as follows:

FALL, WINTER, SPRING TERMS

|  | Florida | Non-Florida |
| :---: | :---: | :---: |
|  | Residents | Residents |
| Upper Level Undergraduate Courses | \$16.50 per qtr. hr. | \$51.50 per qtr. hr. |
| Graduate Courses | \$22.00 per qtr. hr. | \$62.00 per qtr. hr . |
| Thesis | \$24.00 per qtr hr. | \$64.00 per qtr. hr. |


|  | SUMMER TERM |  |
| :---: | :---: | :---: |
|  | Florida | Non-Florida |
|  | Residents | Residents |
| Upper Level Undergraduate Courses | \$10.50 per qtr. hr. | \$45.50 per qtr. hr. |
| Graduate Courses | \$22.00 per qtr. hr. | \$62.00 per qtr. hr. |
| Thesis | \$24.00 per qtr. hr. | \$64.00 per qtr. hr. |

Fees are based on the level of each course attempted. The dates by which fees must be paid for each academic quarter may be obtained from the University Cashier's Office. Current fee information can be obtained upon request from the Cashier's Office.

NOTE: Registration is not complete until fees are paid.

## REFUNDS

A full refund of fees will be made if a student withdraws completely from the University on or before the last day of late registration. A full refund will be made if the University cancels a student's registration on or before the end of the late registration.

After the end of late registration there will be no refund of Registration Fees except in the following cases:

- Death of the student
- Illness of the student so severe that it prevents completion of the program for which the student is registered. A doctor's certificate of this iliness is required.
- Involuntary call to military service.

In the above instances the per hour fee less $\$ 2.85$ per hour will be refunded.
No refund will be made under this policy except upon proper application through the Cashier's Office.

## PAST DUE STUDENT ACCOUNTS

All student accounts are due and payable at the Cashier's Office, Room 120 Primera Casa, at the time such charges are incurred.

Delinquent accounts will be considered sufficient cause to prohibit registration, graduation, granting of credit, or release of transcript for students. The University is not able to grant credit or time payments for any fees. Financial aid is available for those qualifying from the Office of Financial Aid. A limited number of short term loans are available to individuals who may experience problems in meeting fee due dates.

## CLASSIFICATON OF STUDENTS FOR TUITION PURPOSES - FLORIDA OR NON-FLORIDA

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

## FLORIDA STUDENT DEFINITION

For the purpose of assessing registration fees, a student shall be classified as Florida or non-Florida. A Florida student is a person who shall have resided and had his or her domicile in the State of Florida for at least twelve (12) consecutive months immediatey preceding the first day of classes of the current term.

In applying this policy, "student" shall mean a person admitted to the institution. If such person is a minor, it shall mean parents, parent, or legal guardian of his or her person.

The word "minor" shall mean a person who has not attained the age of 18 and whose disabilities of minority have not been removed by reason of marrige or by a court of competent jurisdiction.

The word "domicile" for fee-paying purposes shall denote a person's true, fixed, and permanent home and place of habitation. It is the place where the person intends to remain, and to which the person expects to return after a leave without intending to establish a new domicile elsewhere.

The word "parent" shall mean a minor's father, or mother; or if one parent has custody of the minor, the parent having custody; or if there is a guardian or legal custodian, of the minor, then such guardian or legal custodian.

In all applications for admission by a student as a citizen of Florida, the applicant, or if a minor, the parents or legal guardian shall make and file with such application a written statement under oath that such applicant is a bonafide citizen, resident, domicilliary of the State of Florida entitled as such to admission upon the terms and conditions prescribed for citizens, residents, and domicilliaries of the State.

A non-Florida student is a person not meeting the requirements above. A non-Florida student (or, if a minor, the parent or parents) after having been a resident and domiciliary of Florida for twelve months may apply for and be granted reclassification prior to the first day of classes of any subsequent term; provided, however that those students who are non-resident aliens or who are in the United States on a non-immigration visa will not be entitled to reclassification. However, for fee-paying purposes, Cuban nationals will be considered as resident aliens. Such application shall comply with the provisions above. In addtion the application for reclassification must be accompanied by a certified copy of a declaration of intention to establish domicile filed with the clerk of the Circuit Court as provided by Section 222.17 Florida Statutes.

Unless the contrary appears to the satisfaction of the registering authority of the institutions at which a student is registering it shall be presumed that:

1. The spouse of any person who is classified or is eligible for classification as an in-state student is likewise entitled to classification as an in-state student. This provision will not apply in the case of students who are non-resident aliens or who are in the United States on a non-immigrant visa.
2. A minor whose parent is a member of the armed forces and stationed in this State pursuant to military orders is entitled to classification as an in-state student. The student, while in continuous attendance, shall not lose residence when the parent is thereafter transferred on military orders. A member of the armed forces of the United States stationed in this State on military orders shall be entitled to classification as an in-state student while on active duty in this state pursuant to such orders.
3. No person over the age of 18 years shall be deemed to have gained residency while attending any educational institution in this State as a full-time student, as such status is defined by the Board of Regents, in the absence of a clear demonstration that the student has established domicile in the State.
4. Any person who remains in this State when the parent, having theretofore been domiciled in this State, removes from this State, shall be entitled to classification as a Florida student, so long as the student's attendance at a school or schools in this State shall be deemed continuous. Attendance at a school or schools in this State shall be deemed "continuous" if the person claiming continuous attendance has been enrolled at a school or schools in this State as a full-time student, as such term is defined by the Board of Regents, for a normal academic year in each calendar year, or the appropriate portion or portions of such years, thereof, since the beginning of the period for which continuous attendance is claimed. Such person need not attend summer sessions or other such intersession beyond the normal academic year in order to render attendance "continuous".

Appeal from a determination denying Florida status to any student may be initiated by the filing of an action in court in the judicial district in which the institution is located.

Any student granted status as a Florida student, which status is based on a sworn statement which is false, shall, upon a determination of such falsity, be subject to
such disciplinary sanctions as may be imposed by the President of the University, which sanctions may include permanent expulsion from the State University System or any lesser penalty.

NOTE: A student who initially registers as a non-Florida resident, but subsequently changes to Florida residency, must indicate this change prior to the academic quarter he or she wishes to be considered a Florida resident. All changes of residency are to be made in the Office of Admissions and Records.

## SPECIAL CATEGORIES

The following categories shall be treated as Florida residents for tuition purposes:

1. Military personnel of the United States of America on active duty and stationed in Florida, including dependent members of their immediate families.
2. Veterans of the United States of America retired with twenty (20) years or more of active military service, including dependent members of their immediate families, who are in Florida at the time of retirement, or who move to Florida within one year following retirement and intend to make Florida their permanent home.
3. Full-time public elementary, secondary, and junior college faculty members under current teaching contracts in the State of Florida. (This is construed to exclude the spouses of such faculty members.)
4. Full-time faculty and career emploees of the University System and members of their immediate families. (This is construed to exclude the spouses of students.)
5. Students selected by their respective states for participation in the Southern Regional Education Board academic common market program who are enrolled in programs approved by the Florida Board of Regents.
A student who is in one of the special categories above may change status from non-Florida to Florida resident by presenting to the Office of Admissions and Records a copy of the Declaration of Intent to establish domicile that has been filed with the Clerk of the Circuit Court and the completed and notarized Residency Affidavit Form. To claim the military exception, the student must furnish the Office of Admissions and Records a copy of the military orders showing assignment to Florida. A public school official must submit a written statement from the applicant's superior as to the applicant's public school status. A University employee must submit a statement from the Personnel Office as to the applicant's employment status.

## STUDENT SERVICES

The Division of Student Services exists to facilitate your receiving services needed to successfully complete your education, to advise you (and possibly advocate for you) should you experience any difficulties while you attend Florida International University, and to grow in its responsiveness as a result of the interaction with you. The Division of Student Services at Tamiami Campus is located on the 2nd and 3rd floors of University House at North Miami in Trade Center Room 110. The following paragraphs list some of the services available to you through this Division. If one of your needs is not covered below, please come to the Division Office.

## UNIVERSITY HOUSE (Tamiami Campus)

University House is the primary student center and provides a focal point for the University community to meet and interact in a non-classroom, yet educational environment. As the hub of student life, the facility houses the bookstore, cafeteria, Rathskeller, Cinema Center, International Conference Theater Publications/Communications Workroom, recreation rooms, TV lounges, Student Government Association offices, student organization offices, and meeting
rooms. The Student Activities Office is located on the second floor. The Division of Student Services, which includes Career Planning and Placement, Cooperative Education, Foreign Student Services, Financial Aid, Veterans Affairs, and the Office of the Dean, is on the third floor. Financial Aid at Tamiami is located on 1st floor of Primera Casa.

## STUDENT ACTIVITIES AND ORGANIZATIONS

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

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

Students who are interested in organizing a group to meet their needs, or in joining one that exists, should go to the Student Activities Office in University House 211 on the Tamiami Campus and in Trade Center Building Room 111 on the North Miami Campus.

There are currently 90 registered student organizations on the Tamiami Campus, ranging from the Student Consumer Group, the Professional Commerce Association and the Student Art Association through the International Student Club, the Future Attorneys Association and the Mass Communications Club. Meetings for all student groups are posted on the glass directory boards and bulletin boards throughout the university, and are announced daily on Eventline, 552-2177. The Student Activities Office in University House 211 also has a master schedule of student meetings.

On the North Miami Campus, student groups are just in the process of forming. Students have a unique opportunity to have an impact on what groups become a part of campus life there. The Student Activities Office in Trade Center 111 can provide information on how to become involved in any way with student organizations or activities, as well as information about what's happening on campus.

## STUDENT PUBLICATIONS

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

On the North Miami Campus, the opportunity also exists for students to initiate any publications they wish. Come to the Student Activities Office in Trade Center Building Room 111 for further information.

## STUDENT GOVERNMENT

The Student Government Association (SGA), with offices on the Tamiami Campus in University House 310 and 311, and on the North Miami Campus in Trade Center Building Room 112, actively represents the student body within the University community. One of the functions of the SGA is to place all interested students on university-wide committees and task forces to insure student representation. Three of the most vital SGA standing committees are the Social and Cultural Committee, which is in charge of coordinating all concerts, lectures,
film series and cultural and social activities involving students; the Budget Committee, which reviews and funds budget requests from registered student organizations and university departments; and the Committee on Committees, which reviews and screens student applicants for university-wide committees and recommends them to SGA for approval.

This first year will more clearly define the role of student government on the North Miami Campus. There is currently one group of officers for both campuses; however, students at the North Miami Campus may run for the Senate and may also bring concerns to current Senators who represent them by virtue of being elected from the schools and college within the university.

## GOVERNANCE

Students at Florida International are encouraged to participate in the governance of the University. The essential thrust of the University's philosphy is to provide an effective governance program that truly represents the students, the faculty and the staff in developing the institutional policies.

The governance of Florida International is intended to reflect common goals, and to bring honest differences of opinion out into the open when such exist. Through coordinated action and cooperation, the ingenuity of students can be an effective force in serving the total University community. The students' concerns will be considered within the framework of the total governance of the University because students have the right to be represented on all major University governing councils and committees.

Faculty and staff of Florida International actively seek to learn students' desires and needs, which receive major consideration in the decision-making process at the University. At the same time, to enhance "two-way" communication. It is important that students also give consideration to the views of faculty and staff as the "University family" works together to meet the basic goals of the institution.

The elected Student Government Association is one of the four Senates in the University Council, the primary governance unit of the University.

## STUDENT HEALTH CARE

The Health Services at Florida International are designed to supplement the normal health care of our totally non-residential population and are adequately prepared to provide emergency health care for anyone becoming injured or ill while on campus.

Our emergency health clinic at the Tamiami Campus is staffed by a registered nurse from 8:00 AM to 11:00 PM, Monday through Thursday, and from 8:00 AM to 6:00 PM, Friday. Twenty-four-hour emergency medical services are available through a medical clinic off campus. The Clinic at the Tamiami Campus is located in Primera Casa, Room 304, and at the North Miami Campus in the Trade Center Building, Room 105, but hours of operation are more limited for 77-78. See posting on clinic door.

Upon annual ratification by SGA all students paying for the number of hours designated by SGA are automatically covered with a $\$ 1,000$ blanket accident insurance policy upon payment of their fees. Other students may purchase this coverage at a nomianl fee. A student can elect additional personal insurance coverage at low group rates through the Student Health Insurance Program. Options include a $\$ 2,500$ major medical accident and illness coverage, and a maternity benefit clause. Information regarding this coverage will be mailed to each new student after he or she enrolls in the University, or the student may contact the Health Clinic on either campus. Brochures are also available in the Student Activities Department.

## FOREIGN STUDENT SERVICES

The Department of Foreign Student Services is organized to meet the special needs of foreign students and to help each student achieve his or her educational goals. The Department
is a source of information and liaison for immigration responsibilities, financial aid, referral services and other questions concerning the general welfare of foreign students. The counselors serve as advisors, friends, and advocates for foreign students, helping students understand the law and receive fair treatment. An orientation program is planned at the beginning of every quarter to acquaint the new foreign student with the University, Immigration Regulations and the Community.

Students wishing to attend the Noth Miami campus should contact the Division of Student Services at North Miami, Trade Center 110 or contact the foreign student advisor at the Tamiami Campus in University House 340.

## SPECIAL SERVICES AND THE HANDICAPPED

Special arrangements have been made at Florida International to serve the needs of those who have physical handicaps. Special Services operates to provide information and assistance to disabled students attending or wishing to attend FIU. Our services include assistance with architectural, academic, registration, or transportation obstacles which the disabled student may encounter. Students with physical limitations are encouraged to attend Florida International University if they can participate in the educational program using existing facilities. Those students who can demonstrate the physical capacity to carry out academic responsibilities shall be admitted. Students who will attend the North Miami Campus should contact the representative from the Division of Student Services at North Miami, Trade Center 110 or contact the Special Services advisor at the Tamiami Campus in University House 340.

## FOOD SERVICE

Food and beverage service at Tamiami Campus is available on the first floor of University House. Snacks and complete meals are served cafeteria style. The cafeteria includes tables in the main area, surrounded by small dining rooms and patio dining areas. Food Service offers complete catering service. North Miami Campus initially will be served by a variety of vending machines.

## COOPERATIVE EDUCATION

Cooperative education allows students to alternate quarters of full-time paid employment for which academic credit is earned with quarters of full-time study. Students work in professional level training positions related to their major field of study. Interested students may obtain detailed information about cooperative education from their academic advisor or the Department of Cooperative Education on either campus in student services.

## CAREER PLANNING AND PLACEMENT

The Career Planning and Placement Department at both campuses exists solely to assist students and alumni with career-life decision making. Students who wish to explore their full potential and interest will find the Department's professional counselors most helpful. This also applies to alumni. Professional counselors work closely with graduates who are pursuing career changes or evaluating options open to them. The services which are included in career planning are one-to-one counseling, topic seminars for group guidance (eg. interviewing techniques, resume and letter writing), on-campus recruiting by employers, and maintenance of full and part time employment opportunities. Resources of Career Planning include a career information library, employment directories and pertinent application forms for many schools, businesses, and industries. Career Planning also provides a placement file service where students and alumni may maintain their job credentials, resumes, letters of recommendation and transcripts. These placement files serve both as a source of reference for individuals seeking
positions and as an office referral system between the Career Planning Department and potential employers. Students at the North Campus will meet with recruiters for interviews at the Tamiami Campus.

## FINANCIAL AID

Florida International University subscribes to the philosophy that a student is entitled to a college education regardless of his or her financial condition. The Offices of Financial Aid (Tamiami Campus, Primera Casa, ground floor; North Miami Campus, Trade Center 110) have an extensive program of student financial aid which includes scholarships, grants, loans and employment. Awards are based on need. Each application is given individual attention.

Assistance may be in the form of a scholarship, loan, part-time employment or a combination of all three in a "package". Florida International participates in the National Direct Student Loan Program, the Florida Student Loan Program, the Federal Nursing Student Loan and Scholarship Program, the Law Enforcement Education Program, the College Work-Study Program, the Florida Student Assistance Grant Program, the Supplemental Education Opportunity Grant Program and the Basic Educational Opportunity Grant Program. Forms for the Federally Insured Loan, a type of transaction between local lenders and the student, are also processed through the Office of Financial Aid. Interest rates vary, and most loans are repayable starting six months to a year after graduation or withdrawal from an institution of higher education.

In order to qualify for aid, a student must be degree-seeking. A new application for aid must be submitted each year. Forms are available in February for the following Summer Quarter and academic year. A student enrolling in the Summer and Fall is strongly encouraged to apply between February 1 and May 1 in order to receive priority consideration. Apply as soon as possible. DO NOT wait until you have been accepted by the Admissions Office. A student starting at Florida International University in the Winter Quarter should apply during the previous October. Before a financial aid application can be evaluated, students are expected to do the following:

1. Complete a Parents Confidential Statement (PCS) or a Student Financial Statement (SFS) which is mailed directly to the College Scholarship Service. The Student must complete a PCS if during the preceding 12 months he or she resided with, was claimed as a dependent for federal income tax purposes, or received $\$ 600.00$ or more from one or both parents or legal guardian. The College Scholarship Service will send Florida International University a computerized version of the student's application which is evaluated to determine his or her need.
2. Complete an office application and mail it to the Financial Aid Office.
3. Every transfer student must complete the financial aid transcript form (Section A-C) available at Florida International University's Financial Aid Office, and have their Financial Aid Office complete Section D and mail it to Florida International University.
If a student is dependent and his or her family's gross income is less than $\$ 15,000.00$ or if he or she is an independent student and his or her gross income is less than $\$ 15,000.00$ the student is expected to do the following, assuming he or she meets the basic qualifications of the programs:
4. Apply for the Florida Student Assistance Grant Program. The student must be a United States citizen and a Florida resident for at least 24 months immediately preceding the beginning of the academic year for which he or she is applying. The student must be enrolled for at least 12 hours per quarter.
5. Apply for the Basic Economic Opportunity Grant (BEOG) Program and submit the Student Eligibility Report to Florida International University. In order to be eligible the student must have started his or her post high school education after April 1, 1973. The student must be enrolled for at least 6 hours per quarter.
Awards may be adjusted if the income of the student changes. Applicants who fail to notify the Financial Aid Office of assistance from other sources are subject to complete withdrawal of aid.

Please note that the opportunities for financial assistance are limited if a student is not a resident alien or a United States citizen.

## VETERANS' PROGRAMS AND SERVICES

The Office of Veterans' Programs and Services in the Division of Student Services is a focal point for Veterans to receive advice and referral services regarding academic and administrative questions. The office also facilitates concerns regarding veterans educational benefits, including tutoring provisions. In addition, the Office of Registration and Records provides facilities and support for a Veterans Administration representative on-campus and a V.A. Clerk for certification purposes.

Veterans Benefits
Full Time Allowance
3/4 Time Allowance
$1 / 2$ Time Allowance

Undergraduate
12 quarter hours
9 quarter hours
6 quarter hours

Graduate
9 quarter hours
7 quarter hours
5 quarter hours

Student veterans planning to attend the North Miami campus should contact the Division of Student Services Trade Center 110 or contact the Student Services V.A. Counselor at the Tamiami campus University House 340.

## COUNSELING SERVICES

A variety of special advising and counseling is provided by a range of qualified professional staff to aid any student experiencing difficulty with career choice and/or personal growth. Individualized assistance in this area is provided for foreign students, veterans and the handicapped. To supplement the on-campus professional staff, off-campus psychological counseling services are available at no cost to the student.

## ORIENTATION

The various academic departments and schools may hold individual orientation programs for their students. Students will be notified by the departments of these sessions.

## HOUSING AND TRANSPORTATION

Florida International does not provide on-campus housing but does assist students in locating housing. For lists of available housing, a student should contact the Division of Student Services.

There is ample on-campus parking space for automobiles with the purchase of a permit, and bike racks are available for securing bicycles. In addition, connecting bus service to the campus is provided by the Metropolitan Transit Authority.

## CAMPUS MINISTRY

Campus Ministry serves as a center for student groups on campus involved in a variety of religious activities. Professional representatives from various faiths are available for personal appointments. Often individual denominations will sponsor campus-wide programs through the auspices of the Campus Ministry.

The office is open Monday through Friday from 9:30 a.m. to 6:00 p.m. (4:00 on Friday) and evenings as posted. Office location is Primera Casa 233.

## ADMINISTRATIVE AFFAIRS

Administrative Affairs at Florida International University exists to plan, facilitate, and service the other areas of the University. It provides many services centrally for the multi-campuses to the advantage of the economy of scale. At the same time, recognizing the importance
of full service needs of each individual campus where it maintains fully functioning staffs of problem solvers. Administrative Affairs operates the following twelve service areas:

Staff Functions
Legal Affairs
University Planning \& Facilities
Southeast Regional Data Center
Internal Management Auditing Unit

Service Operations
Auxiliary Services
Physical Plant Operations
F.I.U. Computer Services

University Controller
University Budget Office
University Personnel Services
University Purchasing Services
University Public Safety Office Recreational, Intermural and Intercollegiate Athletics

Each area is described briefly below:

## ATHLETICS

Recognizing that mind and body combine in the total individual, the University offers the student a wide spectrum of physical activity. Programs are offered in four areas:
INTERCOLLEGIATE ACTIVITIES: There are men's teams in 5 NCAA sports (soccer, wrestling, baseball, golf and tennis.) There are women's teams in 5 AIAW sports (volleyball, softball, basketball golf and tennis.)
INTRAMURALS: Paddleball, racquetball, tennis, handball, softball, basketball, volleyball, table tennis, golf and the flying club.
CLUB SPORTS: Lacrosse, basketball, judo, fencing, bowling, sailing, karate, weightlifting, jogging and slimnastics.
RECREATION: Facilities are available on campus for tennis, outdoor handball, paddleball, fitness training, wrestling, and other activities. There is a practice golf green. Off-campus facilities are available for bowling, swimming and golf. Tennis lessons are offered on a regular basis.

## AUXILIARIES

The Campus Auxiliary Services of the University are self-supporting entities of the institution that sells goods and services at a price that approximates the cost, having as its general purpose to establish, operate, manage, promote, and cultivate educational activities between students, faculty, and administration of the University. Auxiliary Services operates and coordinates the University role in Food Service, Bookstore, Duplicating, Central Stores, Parking, Health Clinic, and Vending.

## FLORIDA INTERNATIONAL UNIVERSITY COMPUTER SERVICES

To provide the most readily accessible computer support, FIU Computer Services extends instructional, research, and administrative support to the university by interfacing with the Southeast Regional Data Center and other regional data centers in the State University System. A staff of support personnel is available to assist students and faculty in the use of interactive terminals, batch facilities, and the software library, and for general problem solving associated with their use. Computer Services furnishes software support and data entry services to the University administrative functions and operates batch remote job entry facilities.

## INTERNAL MANAGEMENT AUDITING UNIT

Internal auditing is an independent appraisal activity within the organization for the review of accounting, financial and other operations as a service to management. The overall objective of this Office is to assist all rilembers of management in the effective discharge of their responsibilities, by furnishing them with objective analyses, appraisals, recommendations and pertinent comments concerning the activities reviewed. This Office reports directly to the Board of Regents.

## LEGAL SERVICES

The Office of Legal Affairs is staffed by qualified attorneys licensed to practice law in the State of Florida. These attorneys provide all the necessary legal services for the University. The office has a legal library and can provide legal assistance in contractual and personnel matters as well as general legal advice.

## PHYSICAL PLANNING

The Division of Physical Planning is responsible for the preparation, maintenance, and implementation of the University's physical development Program. In fulfilling its mission, this Division is involved in the development and maintenance of the long-range campus master plans, coordinates the preparation of all building programs, serves as University liaison between BOR, metropolitan and local governmental agencies and maintains a University wide space management system. In addition the office prepares studies on projected University needs, prepares space utilization reports, makes traffic studies and formulates planning standards. A current inventory of all University development is maintained as well as base maps, as built drawings, and other development criteria essential to facilitating the University's accelerating Development Program.

## PHYSICAL PLANT OPERATIONS AND MAINTENANCE

The Physical Plant Division plans, designs, constructs, operates, maintains and repairs the physical facilities of both campuses and provides many auxiliary services.

- Planning, Design and Construction - Within the guidelines of the University Master Plan, Physical Plant plans new facilities, completes engineering and design for construction, renovation and alteration projects and administers the construction contract for those projects generally under $\$ 100,000$.
- Maintenance and Grounds Departments - These units repair and maintain the buildings, roads, and grounds. They also undertake smaller alteration and construction projects, usually under $\$ 10,000$.
- Campus Services and Custodial Departments - These departments provide a myriad of services including key issue, telephone service, furniture and equipment moving, set up for special events, recycling of newspapers, cleaning of classrooms, laboratories, offices and common interior areas, and pest control services.
- Central Utilities - This unit provides air conditioning for the campus buildings through the central chilled water system or packaged and window units.


## UNIVERSITY BUDGET OFFICE

Operating with an annual budget approaching $\$ 30,000,000$ - a significant investment of monies from the public and private sectors of the economy - Florida International University delivers programs and services to the South Florida community. The University Budget Office is the focal point where the seemingly unlimited programmatic needs and limited fiscal resources are molded into manageable and accountable budgets. Through the preparation of Legislative Budget Requests, Annual Operating Budgets and comprehensive Expenditure Analyses, this office serves the University by constantly monitoring and coordinating the distribution of fiscal resources.

## UNIVERSITY CONTROLLER

The Controller's Office is responsible for recording and reporting of all financial data of the University. Within the organizational structure are the following areas which are responsible for:

- CASHIER'S OFFICE - Collection of all University fees which includes registration, short term loans, library fines and parking decals. Also the distribution of financial aid awards and the billing of students for past-due accounts are administered through this office.
- CONTRACTS AND GRANTS - Fiscal and financial reports and analyses of all Feder-
al, State and local grants, along with a review of expenditures and budget for compliance with the grants.
- RECORD RETENTION - Inventories the various departments' files and sets up record retention schedules for data contained within the department.
- GENERAL ACCOUNTING - Performs various bank and ledger reconciliations as well as preparation of annual financial report and construction analyses and review.
- ACCOUNTS PAYABLE - Processes all University bills for payment. This includes travel reimbursements, consultants, construction and other payments that are allowable under State law.
- CASH DISBURSEMENTS - Distributes payroll, petty cash funds.


## UNIVERSITY PERSONNEL SERVICES

The Department of University Personnel Services is a staff department responsible for the administration of uniform personnel policies by providing the service and support functions of recruitment, position classification, training, personnel records, employee counseling and grievance adjustment, employee performance rating system, and the administration of employee fringe benefit programs. The department has further responsibilities in the administration of University payrolls for faculty members, administrative and professional employees, career service employees, and part time employees.

## UNIVERSITY PUBLIC SAFETY OFFICE

The Florida International University Department of Public Safety is a full service Public Safety organizational unit, dedicated to the maintenance of a peaceful academic environment throughout the entire university community. The protection of persons and property falls within the specific response category of the Department of Public Safety's police division. As State of Florida police officers, we assume complete law enforcement responsibility for the entire university community and its inhabitants. Further, the university police division attempts to address the needs of this educational community through objective enforcement and by providing quality Public Safety service to the entire community.

The institutional and occupational safety section of the University Department of Public Safety, is specifically intended to address the adherence to occupational safety regulations and stress the continued improvement of our safety awareness. The areas of handicapped facilities, fire safety, occupational safety and first aid precautionary safety, all rest within the safety section of the University Department of Public Safety.

The University Department of Public Safety, is a twenty-four hour per day functional service operation, at the disposal of the community seven days per week, on all university property.

## UNIVERSITY PURCHASING SERVICES

Purchasing Services provides for centralized buying of all university supplies, equipment and contractual services.

Within the organizational structure are the following functions:
Central Stores supplies commonly used items at substantial savings to university departments only.
Central Receiving is the central delivery point for receiving all materials and equipment purchased by the University.
Campus Mail processes all official University mail.
Property Control governs the accountability, transfer and ultimate disposal of all accountable property.

## COMMUNITY AFFAIRS

This modern, urban University does not confine its instruction and research activities to laboratories and classrooms on its two campuses. Since FIU's founding, strong emphasis has been placed on community service resulting in the creation of an umbrella administrative con-
figuration known as Community Affairs. This portion of the University provides specialized administrative skills which facilitate interaction between University faculty, students and staff and the South Florida Community.

University Outreach is fostered through the major administrative elements in Community Affairs which are: Continuing Education, Development and Alumni Affairs, the FAU-FIU Joint Center for Environmental and Urban Problems and the Division of University Relations. These units work with the teaching faculty to provide services in the community. They also provide a vehicle for friends of the University in the Community to contribute dollars, time and energy toward advancing the University.

In addition to those major administrative units, the Vice President's office serves as liaison to the Florida Legislature and provides the campus with legislative information. Because legislative relations involves the executive branch of state government as well as contact with Congress and federal agencies, this office provides support information on most governmental activities affecting the University.

## FAU-FIU JOINT CENTER FOR ENVIRONMENTAL AND URBAN PROBLEMS

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

In the next decade, decisions must be made on such critical areas as transportation, pollution control, land use, housing, energy policy and conservation, growth management, and the design of a regional government system capable of effective problem-solving. As a catalyst in coordinating and supporting private and public efforts to solve some of these problems, the Joint Center concentrates on both research and service responsibilities.

## RESEARCH

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

## SERVICE

As a service organization, the Center provides professional assistance, maintains inventories of needs and scientific manpower availabilities, disseminates information, and facilitates communication among groups concerned. Special effort is concentrated on providing services to the executive and legislative branches of state government since they are the key element in the solution of urban and environmental problems which increasingly have a regional character.

Other Center activities include: 1) The publication of a bimonthly magazine, Florida Environmental and Urban Issues; and a Spanish language edition, Temas Urbanos Y Del Medio Ambiente En La Florida. 2) Sponsoring of seminars and conferences addressing sureh topics as solar and nuclear energy, air and water quality, land use planning and resource recovery, which are announced through the news media as they are scheduled. 3) Facilitating communications within/between citizens groups and public agencies and providing information as a basis for effective action.

## DIVISION OF CONTINUING EDUCATION

The Division of Continuing Education increases the range of educational opportunities available to the community in several ways. Intensive short-term and long-term non-credit experiences are provided for professional, para-professional, and lay persons in their efforts to stay abreast of the latest developments in their fields of interest. Action programs are offered by the Division as community issues and needs are identified. Examples of such programs are: International Seminar on Lower Cost Housing Production, The New U.S. Economy: Challenges and Opportunities, and Financial Planning with economist Milton Friedman.

## INSTITUTE FOR LABOR RESEARCH AND STUDIES

The Institute provides educational services, with or without academic credit, in the areas of labor and manpower studies, labor relations for management and union groups, and collective bargaining, throughout the State of Florida. The institute maintains an applied research program designed to support instruction and consulting in the above areas. In cooperation with the External Degree Program, the Institute sponsors an external baccalaureate degree in Labor and Manpower Studies.

## DEPARTMENT OF CONFERENCES AND SHORT COURSES

The Department provides conferences, seminars, workshops, and short courses, to individuals and groups in their quest for lifelong learning. All activities are planned and designed to meet specific community clientele interests and needs.

Program participants are awarded the CEU (Continuing Education Unit) as a measure of their participation in non-credit activities. The record of CEU units earned is maintained for individual participants by the University Registrar.

## INSTITUTE FOR WOMEN

The Institute presents conferences, programs, courses, seminars, and workshops on issues of particular interest to women. It encourages women to take affirmative action on their own behalf. The Institute brings community representatives together to design and conduct their own educational programs, to prepare for re-entry into the work force or formal educational systems, to develop their management skills, and to investigate opportunities for fulfillment and self-improvement through purposeful volunteer activities in the community.

## REAL ESTATE INSTITUTE

The Institute offers credit and non-credit courses and seminars for persons seeking entry or already engaged in the real estate business. Several short courses such as: Principles and Practices, License Law, Mortgage Lending and Apartment House Management are offered on a non-credit basis. Basic study is given toward preparation for a real estate salesperson or brokers license. A program of courses is also offered leading to a Certificate in Real Estate.

## INTERNATIONAL INSTITUTE FOR CREATIVE COMMUNICATION

The Institute encourages creative communications in all academic disciplines by offering programs and activities in the areas of multi-media teaching techniques and educational theories in relation to creative communication.

## OFFICE OF PROGRAM DEVELOPMENT AND EVALUATION

The Office of Program Development and Evaluation provides direction and guidance in developing educational activities and program evaluation in cooperation with the various unit heads within Community Affairs. Planning of the needed Community Affairs activities is done in consultation with the deans and directors in the Community Affairs area. Program Evaluation enables the area of Community Affairs to move towards excellence in its offerings and to relate its programs to the primary mission, role and scope of the University.

Programmatic developmental activities include certificate programs, continuing education for the elderly, specialized programs for governmental relations, new assessment techniques of sponsored and prior experiential learning, and educational outreach programs for legislative relations. The evaluation activities include community impact studies of (1) conferences and university relations within the community, (2) legislative governmental relations, and (3) continuing education.

A major thrust of this office is to support a diversity of offerings to serve all groups within the community.

## OFFICE OF DEVELOPMENT AND ALUMNI AFFAIRS

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

THE FLORIDA INTERNATIONAL UNIVERSITY FOUNDATION, INC., is composed of business and professional leaders of the community who have dedicated themselves to furthering the University by encouraging, soliciting, receiving and administering donations for the benefit of the institution.
VIVA LAS ARTES was established to encourage interest and support in the fine arts programs of the University. Persons from the Greater Miami area seek funding for student financial aid and the betterment of the cultural arts.
THE SUNBLAZERS CLUB seeks student financial aid and support for the athletic programs of the University with the goal of providing a superior sports and recreation program for University students.
Although FIU is still a young institution, it has graduated over eight thousand, and nearly 33,000 persons have taken courses at the University. This department also maintains liaison with FIU alumni to solicit their support for the University's growth, and to encourage alumni to continue their post-secondary education.

## DIVISION OF UNIVERSITY RELATIONS

The division fosters internal and external communications and involvement in a variety of ways with the goal of fully informing interested publics with current information about all facets of the University, our impact in the communities we serve, our future goals and continuing progress. Three interrelated departments provide University-wide services in the areas of public information, publications, and the coordination of special events.

## DEPARTMENT OF INFORMATION SERVICES

Writers and media specialists in this department inform the various publics and University personnel of current events and activities through the distribution of daily news releases to all professional media, a weekly internal announcement sheet entitled The Blue Bulletin; a weekly internal/external bulletin called The Ivory Tower, and the maintenance of a Speaker's Bureau to provide high-quality University speakers on a wide variety of topics for any community group or organization.

## DEPARTMENT OF PUBLICATION SERVICES

Creative graphic design and publications production personnel in this department coordinate the preparation of hundreds of publications to convey information about University programs, activities and services to selected and general audiences.

## DEPARTMENT OF SPECIAL EVENTS

Involvement and service to the various publics of the University through attendance at special events such as lectures dramatic plays, musical concerts, athletic events, commence-
ments, and other public functions is the goal of this department. Such events are scheduled and coordinated by this unit which also maintains a University-wide information center and master calendar of events.

## ACADEMIC AFFAIRS

Florida International University provides many supportive services to assist the entire University community - students and staff - meet ongoing academic and business needs.

## STATE UNIVERSITY SYSTEM EXTERNAL DEGREE PROGRAM

The Florida Board of Regents has authorized Florida International University to administer the State University System External Degree Program. This statewide authorization enables students to take advantage of all educational resources throughout Florida, without requiring residency on any campus. It is a self-directed, non-residential program for residents of the State of Florida.

Individual study plans are designed for each student in the form of an Educational Contract. In the Contract, the student is awarded credit for previous academic experience and for previous work and other life experiences. The Contract also specifies the program of study outlining what remains to be done for the completion of a baccalaureate degree. Students may enroll in the program and begin their course of study at any time. The length of time required for each student will vary according to the amount of credit needed for completion and the speed with which the individual student wishes to work.

## PROGRAMS OFFERED

The External Degree Program is operated through the faculty of the regular departments and divisions in Florida International's college and schools. The degrees offered are the same degrees as the regular degrees offered by the college and the schools, but they are achieved through alternative means. All degrees offered by the College of Arts and Sciences, the School of Health and Social Services, the School of Technology, the School of Business and Organizational Sciences, and the School of Hotel, Food and Travel Management may be earned through the External Degree Program.

## CREDIT FOR LEARNING FROM WORK AND OTHER LIFE EXPERIENCE

Many persons have accumulated non-college experiences that can be translated into college credit. By various methods of evaluation, our faculty is able to assess a student's competence level and grant advanced standing accordingly. Methods of evaluation range from the standardized College Level Examination Program (CLEP) to individual written and oral presentation before persons with established credentials in the disciplines. There is no minimum or maximum number of credits the faculty may award.

Examples of work and other life experiences which may be consideed for credit are: Inservice training, short courses, continuing education, correspondence studies, seminars, travel, and professional occupational experiences.

## INDEPENDENT STUDY - NON-RESIDENTIAL WORK

Although most External Degree students take some formal classroom work as part of the Educational Contracts, classroom instruction is not required. When it is clear that classroom work is unsuitable or impossible for a particular student, arrangements for Independent Study, conducted at home or on the job and off of any university campus, are worked out through reading lists, research papers, and educational projects.
Entrance Requirements

1. Florida Residency.
2. Completion of two years of college studies or the equivalent.
3. Commitment to independent study.
4. Submission of detailed application forms.
5. Acceptance as an External Degree student by a faculty adviser.
6. An initial interview.

## Fees

Charges are listed under fee section of catalog.

## Financial Aid

The External Degree Program has been approved for scholarships, loans, and Veterans benefits. For detailed information, contact: Student Financial Aid.

## DEPARTMENT OF OFF-CAMPUS CREDIT COURSES

The Department serves various community audiences throughout Dade, Broward, and Monroe counties by identifying various needs and by coordinating the appropriate University resources toward meeting these needs with credit courses and programs offered at convenient locations throughout the service area. Groups served include personnel in public schools, business and industry, government and hospitals, as well as a large variety of other groups.

## INTERNATIONAL AFFAIRS CENTER

The prime function of the International Affairs Center of Florida International is to assist all elements of the University in acquiring an international dimension, whether it be in Florida or abroad, curricular or extra-curricular.

It has become traditional for like centers in other universities to create separate staffs and projects which remain on the periphery of student and faculty concerns. Florida International's non-traditional approach seeks total immersion of the University in international affairs. The goal is to make the University an international center. To achieve this, the staff of the Center serves alternately as advocate, lobbyist, convener, planner, broker and fund-raiser.

A principal premise upon which the Center operates is that the most valid international activites are those which are multi-disciplinary. For the Center's purposes, multi-disciplinary means that not only are both faculty and students to be brought in, but community groups and resources as well. Priority emphasis is given to those activities where two or more schools or departments of the University can be involved.

If there is one broad discipline around which the University's Internationalism clusters it is the institution's relationship with international students. The Center assists all elements of the University in seeing that the international student feels welcome at Florida International.

The Center aids all parts of the University in the research of the practical problems which face the international community.

The promotion of faculty and student travel and study abroad is also a function of the Center. In this regard, the Center acts as a clearing house for programs sponsored by the University as well as for those sponsored by such organizations as the State University System, various public agencies, and universities in the United States and abroad.

## LIBRARIES

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

Some 300,000 volumes comprise the total Library collection, in addition to substantial holdings in federal, state, local, and international documents; maps; microforms; music scores; newspapers; institutional archives; and curriculum materials. The Library subscribes to approximately 4,000 scholarly journals and other serials.

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

Classification of Library resources is according to the Library of Congress system except for the depository collection of U.S. government publications, which is arranged by the Superintendent of Documents classification. Separate public catalogs are maintained as the key to Library holdings of government documents.

In keeping with the University's commitment to day-night operations, the Libraries are open when the University is in session and during vacation periods. For exact Library hours, please consult the posted schedules. Library facilities are available to residents of the areas as well as to all members of the University community.

## MEDIA CENTER

The Media Center, a service facility to faculty, staff and students, is located in Viertes Haus and Primera Casa 419. The Film Library is located in the new Library building: Athenaeum. The services offered by the Media Center are provided by the following departments: Film Library, Equipment Distribution, Graphics and Photography, Learning Resources Specialist and a Faculty-Student Producton Center.

Faculty may seek assistance in the development of instructional support in any A.V. medium. Film librarians acquire films, audio/video tapes, and instructional kits. Films, tapes, and kits can be scheduled through Film Library. A Language Lab is also located in this area. The Equipment Distribution Center purchases and maintains all A.V. equipment for the university as well as delivering A.V. equipment to classrooms. Graphic artists and photographers assist faculty and staff in the preparation of desired instructional visual support. A Learning Resources Specialist is available for consultative and production support. Faculty and students may prepare graphic materials in the Faculty-Student Production Center with the assistance of an Audio-Visual Specialst.

## OFFICE OF MINORITY AFFAIRS AND WOMEN'S CONCERNS

The Office provides leadership and direction in the administration of the University as equalization programs for women and minorities in several ways. It assists University units in implementing and monitoring affirmative action-procedures, provides a channel for employee and student grievances regarding discrimination or issues that indicate the need for additional affirmative action, and promotes effective relationships between the University and community organizations.

## OFFICE OF INSTITUTIONAL RESEARCH

The Office conducts the research and evaluation related to the internal operations of the University, and analyzes and reports University statistics to federal and state agencies and other relevant groups. A member of the office serves as University data administrator with the responsibility of coordinating the completion of all data requests for the Florida Board of Regents and most data requests from all other sources.

The Office publishes a variety of reports on a regular basis. Those with widest applicability deal with student characteristics and student enrollments, both actual and projected.

The Office has the responsibility of overseeing the quality of questionnaires which are distributed within the University and provides support services for those conducting studies.

Additionally, through the use of an on-site demand terminal and special data files created for its use, the Office responds to ad-hoc requests for information from University committees, individual faculty members, administrators and students.

## DIVISION OF SPONSORED RESEARCH AND TRAINING

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

Among the major goals of the Division of Sponsored Research and Training are the following:
to help stimulate faculty and staff interest in research and training projects to assist the faculty and staff in obtaining funds for research and training projects, and
to provide technical assistance to faculty and staff who submit proposals to the Division for the University

## Statewide Course Numbering

Statewide or Common Course Numbering is a legislatively mandated system for designating comparable courses in the Florida Public universities and community colleges. A number of private universities and colleges are also participating in the program. The intent of Statewide Course Numbering is to facilitate comparison of courses and programs in planning student academic careers, evaluating student transcripts, and transferring of credits between institutions.

Academic task forces for each discipline assign a common course prefix and a number to each course offered by the participating institutions. Statewide or Common course prefixes and numbers are listed for the first time in this catalog. They appear as the first identifier of each course. For example each participating university offering the course entitled "State Government and Politics" uses the Statewide Course Number identifier POS 3122. All common courses are coded with a three alpha prefix and a four numeric identifier as in POS 3122. FIU course identifiers appear second and parenthetically. They are coded with a three alpha prefix and a three numeric identifier as in (POS 312).

EXAMPLE

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| Statewide | Course | F.I.U. | Course |
| Prefix | Number | Prefix | Number |
| POS | 3122 | (POS | 312 ) |
| CPO | 3644 | (POS | 313 ) |

Title State Government and Politics Government and Politics of the Soviet Union \& Eastern Europe
An additional code may also follow the Statewide Course Number. An " $L$ " designates either:
A. a course, the content of which is entirely laboratory; or
B. the laboratory component of a lecture-lab sequence in which the lab is offered at a different time and place than the lecture.
A "C" designates:
A combined lecture-lab sequence in which the lab is offered in conjunction with the lecture at the same time and same place.

| Statewide Course | FIU Course | Title |
| :--- | :--- | :--- |
| CHM 3412 L | (CHE 327 L) | Physical Chemistry Laboratory III |
| MLS 4625 L | (MDT 404 L) | Clinical Chemistry Laboratory |
| BCN 3210 C | (CSN 301) | Construction Materials |

When the Statewide Course Numbering system is fully implemented it will facilitate interinstitutional communication, improve the disciplinary and interdisciplinary classification system, assist students in their academic pursuits and provide better service to the public.

## COLLEGE OF <br> ARTS AND SCIENCES

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

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

The College also offer collegiate programs of study leading to bachelor degrees in humanities and liberal studies. Students may earn certificates, authorized by the College, in Ethnic Studies, Caribbean/Latin American Studies, Consumer Affairs, and Linguistics Studies.

As part of the conditions for a bachelor degree the College requires that at least ten (10) quarter hours of elective credit stipulated in each academic major program be earned through course work taken outside the department sponsoring the program. Moreover, students are encouraged to consider the possibility of taking a minor besides their major, in order to enhance the liberal quality of their education.

## ADMISSION

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

## ANTHROPOLOGY MAJOR

Anthropology is part of the Department of Sociology and Anthropology and all information should be obtained from that department's office.

## Campus Location: Tamiami Campus only

DEGREE: Bachelor of Arts
LOWER DIVISION PREPARATION:
Ninety quarters hours ( 60 semester hours) or the Associate of Arts degree from a community college (work should be pre-Arts and Sciences), or pre-Anthropology or Sociology if such programs exist. If the student does not have an AA degree, his background must reflect an ability to handle advanced academic work.
Required Courses: Introduction to cultural anthropology, or introduction to physical anthropology, or introduction to sociology.
Recommended Courses: (1) other anthropology courses, (2) ecology, economics, geography, history, political science, psychology, (3) arts, biology, English, foreign language, mathematics, philosophy.
UPPER DIVSION PROGRAM:

|  |  | Quarter Hours |
| :---: | :---: | :---: |
| Required Courses: |  | 60 |
| Core Courses: |  | 20 |
| ANT 3086 | (ASC 301) Anthropological Theories | 5 |
| SOC 3610 | (ASC 302) Sociological Theories | 5 |
| SOC 3500 | (ASC 303) Research Methods | 5 |
| SSI 3303 | (ASC 304) Ethical Issues in Social Science |  |
|  | Research | 5 |

NOTE: A student with special interests may consult faculty advisors to plan an individualized program of study.
Field Work Experience - A meaningful understanding of anthropology and sociology can best be developed through the interplay of theory and research. Each student will be encouraged to work outside of the formal classroom under faculty supervision.

## MINOR IN SOCIOLOGY/ANTHROPOLOGY

PRESCRIBED COURSES: 25 credits in the Department of Sociology/Anthropology including the following:

2 courses chosen from among the four core courses required of departmental majors ANT 3086 (ASC 301) Anthropological Theories, SOC 3610 (ASC 302) Sociological Theories, SOC 3500 (ASC 303) Research Methods, SSI 3303 (ASC 304) Ethical Issues in Social Science Research.

## COURSE OFFERINGS

ANT 3086 (ASC 301) ANTHROPOLOGICAL THEORIES (5) This course examines the process of theory building and explanation in the social sciences and outlines the historical and philosophical foundations of anthropological thought. Theorists and schools of thought reviewed include Darwin and evolution, Boas and historical particularism, Freud and culture and personality, and Malinowski and functionalism.
SOC 3610 (ASC 302) SOCIOLOGICAL THEORIES (5) Examines the emergence of sociology as the study of social relations. Compares and contrasts the work of selected theorists with respect to their methodologies, treatment of the emergence and consequences of modern society, political sociology, conception of social class and analysis of the role of religion in society. The student is expected to gain in-depth knowledge of opposing theories as well as an appreciation of the contingent nature of sociological theories.
SOC 3500 (ASC 303) RESEARCH METHODS (5) An introduction to the scientific method and its application to anthropological and sociological research. Topics include formulation of research problems, research design, field methods and collection of data, hypothesis testing and interpretation of results.
SSI 3303 (ASC 304) ETHICAL ISSUES IN SOCIAL SCIENCE RESEARCH (5) An introduction to the problems and 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.
SSI 3010 (ANT 300) INTRODUCTION TO SOCIAL SCIENCE (5) An introduction to anthropology, psychology, and seciology; a survey of the similarities and differences in history, philosophy, and goals and techniques of research in these disciplines, and a review of modern interdisciplinary efforts.
ANT 3000 (ANT 301) THE SCOPE OF ANTHROPOLOGY (5) An introductory survey of the major areas of anthropological inquiry, including social, cultural, physical and applied anthropology, as well as archaeology and linguistics. An examination of the anthropological perspective.
ANT 3500 (ANT 302) ORIGIN AND DISPERSION OF MAN AND WOMAN (5) A study of the biological history of man as interpreted through the theory of evolution, anatomy and the fossil record, contemporary population genetics, and the concept of race.
ANT 3144 (ANT 303) PREHISTORY OF THE AMERICAS (5) Early man in the Americas is examined through archaeological record.
ANT 3004 (ANT 304) MAKERS OF MODERN ANTHROPOLOGY (5) The craft of anthropology is explored through the work and writings of such well-known anthropologists as Ruth Benedict, L.S.B. Leakey, Claude Levi-Strauss, Oscar Lewis, Margaret Mead and Robert Redfield. Designed for non-majors; majors may enroll for elective credit only.
ANT 3512 (ANT 305) SOCIAL BIOLOGY (5) An examination of the biological bases for human adaption and sociocultural interaction.
ANT 3402 (ANT 311) ANTHROPOLOGY OF CONTEMPORARY SOCIETY (5) The application of classical anthropological methods and concepts to the analysis of contemporary American culture. Investigation of a unique cultural scene will involve the student in field work and the preparation of an ethnographic report.
ANT 3262 (ANT 313) AGRICULTURE AND SOCIETY (5) An introduction to the role of agriculture in the development of civilization; comparative agricultural production systems; problems and prospects of agricultural development.
ANT 3422 (ANT 325) KINSHIP AND SOCIAL ORGANIZATION (5) Topics will include the comparative study of systems of kinship, social organization and politics in preliterate societies. Age and sex differences, division of labor, class, caste, slavery and serfdom will also be explored.
ANT 3241 (ANT 326) MYTH, RITUAL AND MYSTICISM (5) 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 aind itual in primitive and complex societies will be compared.

ANT 3251 (ANT 327) PEASANT SOCIETY (5) Comparative study of peasant societies with emphasis on the concepts of folk community, traditional culture, and modernization. Data on peasantry in Latin America and other culture areas will be reviewed.
ANT 3476 (ANT 328) MOVEMENTS OF REBELLION AND REVITALIZATION (5) Crosscultural study of revolutionary, messianistic, and revitalization movements in tribal and peasant societies. Case materials include Negro slave revolts, cargo cults, and peasant wars of the twentieth century (Mexico, China, Vietnam).
ANT 3442 (ANT 335) URBAN ANTHROPOLOGY (5) Anthropological study of urbanization and urban life styles with particular emphasis on rural-urban migration and its impact on kinship groups, voluntary associations and cultural values.
ANT 3432 (ANT 337) CULTURE AND PERSONALITY (5) The relationship between culture and personality; problems of individual adjustment to cultural norms, and current issues in psychological anthropology.
LIN 3642 (ANT 338) LANGUAGE AND CULTURE (5) 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.
ANT 3462 (ANT 355) MEDICAL ANTHROPOLOGY (5) 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; instructor's permission required.
ANT 3542 (ANT 356) HUMAN BIOLOGY AND CULTURAL BEHAVIOR (5) The study of animal social behavior and the relevance of these ethological studies for the analysis of human development and socio-cultural behavior.
ANT 3403 (ANT 365) CULTURAL ECOLOGY (5) Systems of interaction between man and his environment; the role of social, cultural and psychological factors in the maintenance and disruption of ecosystems; interrelations of technological and environmental changes.
ANT 3302 (ANT 366) MALE AND FEMALE: SEX ROLES AND SEXUALITY (5) Cross-cultural enthnographic data will be utilized to examine the enculturation of sex roles, attitudes and behavior; cultural definitions of maleness and femaleness; and varieties of human sexual awareness and response.
ANT 3435 (ANT 370) THE INDIVIDUAL IN ANTHROPOLOGY (5) Study of the individual in his socio-cultural context, the place of the individual in anthropological theory, and the influence of culture on the individual through the use of biography autobiography, journals, diaries, novels, and narratives.
ANT 3425 (ANT 385) UTOPIAS AND INTENTIONAL COMMUNITIES (5) A case study examination of historical and contemporary attempts to develop the "ideal" social setting for human interaction. The community study approach in anthropology will serve as the theoretical basis for this course.
ANT 3733 (ANT 386) THERAPEUTIC COMMUNITIES (5) Cross-cultural and inter-ethnic analysis of mental health and illness. Analysis of formal and informal community mental health delivery systems with emphasis on clinical, humanistic, and therapeutic modalities.
ANT 4705 (ANT 400) APPLIED ANTHROPOLOGY (5) The theory and practice of applied anthropology; cultural factors and planned community change; implications of case data for public policy. Emphasis will be placed on the processes of economic development and culture change in developing nations.
ANT 4723 (ANT 401) EDUCATION AND SOCIALIZATION (5) A crosscultural examination of educational and socialization processes their functions in the larger society, and the value systems they transmit.
ANT 4451 (ANT 403) RACIAL AND CULTURAL MINORITIES (5) The study of selected ethnic and cultural groups with particular emphasis on patterns of interethnic and intercultural relationships. Minority groups studied will include Afro-Americans, American Indians, Chicanos, Cubans, women, senior citizens or prisoners.
ANT 4273 (ANT 405) LAW AND CULTURE (5) A cross-cultural examination of the practical and theoretical relationships between the legal system and other aspects of culture and society.
ANT 4452 (ANT 411) THE RURAL POOR: MIGRANTS, SHARECROPPERS AND TENANT FARMERS (5) The decline of the family farm and the rise of corporate agribusiness; the life styles of migrants, sharecroppers and tenant farmers; the farm labor movement and farmer cooperatives; government policy and the rural poor.
ANT 4453 (ANT 412) CULTURE AND POVERTY (5) Cultural patterns among the poor; current cultural models utilized in the study of poverty; and the impact of cultural models on anti-poverty programs and public policy.
ANT 3263 (ANT 413) WORLD FOOD SUPPLY (5) An examination of world food supply and distribution patterns and problems; comparisons between nutritional standards and human and economic development programs among industrialized and Third World nations are made.
ANT 4007 (ANT 415) THE ORGANIZER (5) A study of men who have inspired mass organizations and brought about major social and cultural transformations. The organizing styles of Christ, Gandhi, Hitler, Mao Tse-tung, and Martin Luther King will be examined. The relationship between culture content and organizational symbols will be analyzed.
ANT 2224 (ANT 418) TRIBAL ART AND AESTHETICS (5) This course deals with the social and cultural context and functions of art in preliterate societies, such 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.
ANT 4340 (ANT 420) CULTURES OF THE CARIBBEAN (5) An ethnological survey of native cultures and of the processes of culture contact and conflict in the Caribbean and Circum-Caribbean region.
ANT 4332 (ANT 421) LATIN AMERICA (5) Native cultures of Mexico, Central and South America; the lowland hunters and gatherers and the pre-Columbian Inca and Aztec Empires; the impact of the Spanish conquest.
ANT 4343 (ANT 422) CUBAN CULTURE AND THE REVOLUTION (5) Culture history of Indian, African and Spanish populations; the Revolution and traditional Cuban society; and the problems and prospects of the Cuban community in the United States.
ANT 4315 (ANT 423) AFRO-AMERICAN ANTHROPOLOGY (5) Interdisciplinary study of Afro-American cultures of the New World. Topics include cultural patterning, Black English, ethnomusicology, socioeconomic adaptations, black culture and ghetto ethnography.
ANT 4314 (ANT 424) THE AMERICAN SOUTH: A REGIONAL SUBCULTURE (5) A course designed to provide an understanding of the Southern regional subculture. Discussion topics will include an analysis of the sociocultural characteristics attributed to this region.

ANT 4211-4352-4360-4361-4328 (ANT 425-426-427-428-429) AREA STUDIES (5) Ethnological survey of selected indigenous cultures. Areas to be studied include: (1) North America; (2) Africa; (3) Asia or Southeastern Asia; (4) China. Topics will be announced and will vary depending on current staff.
ANT 4324 (ANT 430) MANY MEXICOS (5) An interdisciplinary examination of the major social, cultural, economic and political factors contributing to the transformation from the Aztec Empire to Colonial Society to Modern Mexico.
ANT 4930 (ANT 431-432-433-434-435) (5) Special courses dealing with advanced topics in the major anthropological subdisciplines; (1) social and cultural anthropology; (2) applied anthropology; (3) physical anthropology; (4) linguistics; and (5) archaeology. Instruction by staff or visiting specialists. Topics to be announced. Instructor's permission required. May be repeated.
ANT 4433 (ANT 437) PSYCHOLOGICAL ANTHROPOLOGY (5) Cross-cultural studies in cognition, possession states, myth making and world view are examined. The interface of anthropology, psychology and psychiatry is reviewed.
ANT 4312 (ANT 438) AMERICAN INDIAN ETHNOLOGY (5) An examination of the sociocultural patterns of selected American Indian groups as they existed in their indigenous state, prior to European contact.
ANT 4454 (ANT 439) AMERICAN INDIANS TODAY (5) An examination of the history of the American Indians since European contact, and their socio-cultural patterns as a contemporary American minority group.
ANT 4306 (ANT 440) THE THIRD WORLD (5) An interdisciplinary, cross-cultural survey of the factors contributing to the emergence of the Third World. Significant political, economic, and pan-national and pan-ethnic coalitions are analyzed.
ANT 4405 (ANT 450) CULTURE AND CONSCIOUSNESS (5) This course provides an introduction into the anthropological study of certain phenomena of consciousness. There are deep roots for the study of altered and/or higher states of consciousness in anthropology. Topics to be explored will include: vision questing, possession phenomena, trance dancing, glossalalia, curing, shamanism, and meditation.
ANT 4469 (ANT 455) SPECIAL TOPICS IN MEDICAL ANTHROPOLOGY (5) Special courses dealing with advanced topics including (1) folk medicine and ethnoscience (2) nutritional anthropology (3) anthropology and nursing (4) medical anthropology and the elderly.
ANT 4460 (ANT 456) HALLUCINOGENS AND CULTURE (5) Cross-cultural examination of the political, religious, and sociocultural factors related to the use of hallucinogens. Case materials from tribal and contemporary societies will be analyzed, including the study of soma, the divine mushroom of immortality of the Hindu Rig-Veda; the Native American Indian peyote cult; shamanism and healing in Latin America; the teachings of Don Juan, a Yaqui sorcerer; and the therapeutic uses of LSD. This course does not focus primarily on drug abuse and rehabilitation although these topics are mentioned within the comparative context of the ethnographic data.
ANT 4944 (ANT 461) PRACTICUM (5) Permission of the instructor required.
ANT 4242 (ANT 466) STUDIES IN TRANSPERSONAL PHENOMENA (5) The data on transpersonal phenomena such as psychic healing, trance induction, ESP, and expanded consciousness will be reviewed and related to the cultural settings in which they were collected.
ANT 4243 (ANT 467) WITCHCRAFT (5) Study of the theories, facts, and fantasies concerning witchcraft in western and nonwestern society from socio-cultural, socio-historical and socio-psychological perspectives.
ANT 4406 (ANT 469) ANTHROPOLOGY OF WAR AND VIOLENCE (5)
ANT 4930 (ANT 470-471-472-473-474) TOPICS IN ANTHROPOLOGY (5) Special courses dealing with advanced topics in the major anthropological subdisciplines; (1) social and cultural anthropology, (2) applied anthropology, (3) physical anthropology, (4) linguistics, and (5) archaeology. Instruction by staff or visiting specialists. Topics to be announced. Instructor's permission required. May be repeated.
ANT 4305 (ANT 475) EXPLORATIONS IN VISUAL ANTHROPOLOGY (5) An examination of the use of film in anthropology both as a method of ethnographic documentation and as a research technique for analyzing non-verbal modes of communication. Documentary films and cross-cultural data on paralanguage, kinesics, proxemics and choreometrics will be reviewed and discussed.
ANT 4474 (ANT 485) CULTURE SHOCK: THE YEAR 2000 (5) An investigation of future patterns of culture; an analysis of the concepts of culture lag, culture change, culture shock and future shock; review of conceptual models of projecting the shape of past-industrial society and the relationship of man to his environment in the year 2000.
ANT 4907 (ANT 491) DIRECTED INDIVIDUAL STUDY (VAR) Supervised readings and/or field research and training. May be repeated.
ANT 4908 (ANT 492) DIRECTED FIELD RESEARCH (VAR) Permission of instructor required.
ANT 5937 (ANT 501) COMMUNITY ACTION RESEARCH SEMINAR (5) Seminar will focus on the application of social science data gathering techniques to the analysis and resolution of community issues such as urban planning, environmental quality, and corporate/consumer accountability. Open to majors only. Prerequisite: ASC 303 or permission of the instructor required.
ANT 5726 (ANT 522) ANTHROPOLOGY FOR EDUCATORS (5) A course designed to provide educators, particularly at the secondary level, with an overview of anthropology as a discipline; its role in a social science curriculum; methods for designing and teaching anthropology courses; and sources of bibliographic and audio-visual aids.
ANT 5466 (ANT 555) CULTURAL FACTORS IN HEALTH CARE DELIVERY (5) Topics studied include the varieties of subcultural perceptions of and responses to illness; formal and informal healing systems; the indigent patient; and the design of health care delivery services in a multicultural area. Prerequisite: Medical Anthropology course or permission of the instructor required.
ANT 5468 (ANT 557) ADDICTS AND ADDICTIONS (5) A cross-cultural examination of the historical, socio-cultural, and pharmacological factors involved in drug abuse and addiction. Various treatment programs are compared and evaluated.
ANT 5908 (ANT 591) DIRECTED INDIVIDUAL STUDY (VAR) Supervised readings and/or field research and training. May be repeated.
ANT 5915 (ANT 592) DIRECTED FIELD RESEARCH (Variable) Permission of instructor required.

## BIOLOGICAL SCIENCES MAJOR

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science *Students interested in teacher certification see note on page 5.

## LOWER DIVISION PREPARATION:

Required Courses: 8 semester hours in each of the following areas: general biology, general chemistry, and general physics; 9 semester hours in college algebra, trigonometry, and analytical geometry.
Recommended courses: foreign language, calculus, organic chemistry.
Remark: ©́ semester hours above the introductory level in biology may be counted toward the upper division major.
UPPER DIVISION PROGRAM:
Required courses: Quarter Hours 24
PCB 3513 (BSC 341) Genetics 5
BCH 3030 (BSC 301) Biochemistry 7
PCB 3133 (BSC 302) Molecular Biology 7
PCB 4254 (BSC 401) Developmental Biology 5
Biological Sciences Electives* 15
CHM 3210 (CHE 301,302)** 14
or one year lecture and laboratory course in organic chemistry.
Mathematics: one course beyond analytical geometry 5
Electives 32
90
BSC 3023 (*BSC 300), BSC 3033 (BSC 305), APB 3253 (BSC 306), BOT 382,3 (BSC 364), PCB 3703 (BSC 374), BSC 3913 (BSC 380), BSC 4914 (BSC 480) and BSC 6916 (BSC 680) are not applicable to this requirement.
**Recommended CHM 3400 (CHE 311) Physical Chemistry for the Life Sciences.
Remark: Attendance at departmental seminars for at least one quarter is required from all senior students.

## SPECIAL PROGRAMS

Bachelor of Science (with Honors)
Requirements:
a) Admission to Program by permission of the department.
b) Program of study arranged in consultation with faculty advisor.
c) Two quarters of BSC 590 .
d) Completion of Undergraduate Honors Thesis.

## Pre-Professional Curricula

Programs of study satisfying requirements for admission to Colleges of Medicine, Dentistry and Veterinary Medicine arranged in consultation with faculty advisor. CHE 311, MAS 301 and BSC 336 are recommended as fulfilling requirements of many professional schools.

## Minor in Human Biology

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

BSC 3023 (BSC 300) Human Biology
APB 3253 (BSC 306) Biological Basis of Human Sexuality
MCB 3013 (BSC 310) General Microbiology
PCB 3513 (BSC 341) Genetics

## Master of Science in Biological Sciences <br> Program in preparation.

## COURSE OFFERINGS

BSC 3023 (BSC 300) HUMAN BIOLOGY (5) Human structure and function with emphasis on aspects that relate to human development, genetics and neurobiology. Their relationship to handicapping conditions with respect to mental retardation and behavioral disorders will be discussed.
BCH 3033 (BSC 301) BIOCHEMISTRY (5) Introduction to the chemistry of proteins, carbohydrates, lipids and their constituents. Principles of enzymology and metabolism. Prerequisites: CHE 220, 221 (MDCC) or CHE 301, 302.
BCH 3033L (BSC 301L) BIOCHEMISTRY LABORATORY (2) Laboratory to accompany BSC 301.
PCB 3023 (BSC 302) MOLECULAR BIOLOGY (5) Nucleic acid chemistry and molecular genetics; biosynthesis of protein and nucleic acids. Core course required of majors in Biological Sciences. Prerequisite: BSC 301 or equivalent.
PCB 3023L (BSC 302) MOLECULAR BIOLOGY LABORATORY (2) Laboratory to accompany BSC 302.
BSC 3033 (BSC 305) ISSUES IN BIOLOGY (5) Impact on society of recent developments in biological research. The course provides a general background for the intelligent discussion of problems related to states of disease, senescence and death, control of the growth of the population, genetic engineering and control of behavior.
APB 3253 (BSC 306) BIOLOGICAL BASIS OF HUMAN SEXUALITY (5) The physiological development of the human organism as a sexual being will be treated with a review of the psycho-social and psycho-sexual basis of human personality. Patterns of adult sexual behavior will be explored with emphasis on achieving healthy human sexual attitudes.
OCB 3010 (BSC 308) BIOLOGICAL OCEANOGRAPHY (5) The basic aspects of biological, geological, chemical, and physical oceanographic processes as they relate to marine organisms. Lecture and demonstrations. Prerequisite: 8 semester hours of biology.
MCB 3013 (BSC 310) GENERAL MICROBIOLOGY (5) Introduction to the principles and techniques of microbiology; genetics, taxonomy, biochemistry and ecology of microorganisms.
MCB 3013 L (BSC 310L) GENERAL MICROBIOLOGY LABORATORY (2) Introduction to the principles and techniques of microbiology, genetics, taxonomy, biochemistry and ecology of microorganisms.
BOT 3663 (BSC 320) TOPICS IN TROPICAL BOTANY (5) Survey of representatives of major plant families of the tropics. Examination of selected adaptive characteristics of plants in the tropical ecosystems. Introduction to spices and economically significant tropical plants.
BOT 3935 (BSC 329) BIOLOGY OF THE ORCHIDS (5) Examination of classification systems of the major orchid groups. Study of the role of floral morphology, environmental adaptation, and pollinator co-evolution in speciation. Summary of accepted cultural techniques.
BOT 3935L (BSC 329L) BIOLOGY OF THE ORCHIDS LABORATORY (2) Laboratory to accompany BSC 329.
ZOO 3023 (BSC 331) THE INVERTEBRATES (5) Taxonomy, anatomy, development, physiology and ecology of major invertebrate phyla excluding insects. Emphasis on marine invertebrates.
ZOO 3023 L (BSC 331L) THE INVERTEBRATES LABORATORY (2) Laboratory to accompany BSC 331.
ENY 3004 (BSC 332) GENERAL ENTOMOLOGY (5) Taxonomy, development, morphology and distribution of insects. Ecology and economic problems Lecture conference and laboratory.
ZOO 3423 (BSC 334) AMPHIBIANS AND REPTILES (5) Comparative studies in distribution, development, anatomy and physiology of amphibians and reptiles. Lecture, conference, field trips and laboratory.
ZOO 3433 (BSC 335) BIRDS AND MAMMALS (5) Taxonomy, distribution and natural history of birds and mammals. Lecture, conference, field trips and laboratory.
ZOO 3603 (BSC 336) EMBRYOLOGY (5) Animal morphogenesis.
200 3603L (BSC 336L) EMBRYOLOGY LABORATORY (2)
ZOO 3553 (BSC 337) TOPICS IN MARINE BIOLOGY (5) Selected problems in the biology of marine organisms. Lecture and field trips.
ZOO 3753 (BSC 338) HISTOLOGY (5) Microscopic anatomy of cells, tissues and organs.
ZOO 3753 L (BSC 338L) HISTOLOGY LABORATORY (2)
PCB 31 B3 (BSC 339) MICROTECHNIQUE (5) Laboratory techniques of preparation and microscopic examination of cells, tissues and organs.
PCB 3513 (BSC 341) GENETICS (5) Mendelian inheritance and introduction to molecular genetics.
PCB 3873 (BSC 349) BIOLOGICAL FOUNDATIONS OF BEHAVIOR (5) Biological basis of behavior emphasizing neural and hormonal mechanisms of integrated behavior. Lecture, conference, library or laboratory projects.

PCB 3703 (BSC 350) HUMAN PHYSIOLOGY I (4-5) Basic facts and concepts relating to the physiology of cells, nervous, muscular and cardiovascular systems with emphasis on regulatory mechanisms and abnormal physiology.
PCB 3703L (BSC 350L) HUMAN PHYSIOLOGY LABORATORY I (1) Laboratory course demonstrating principles in BSC 350. PCB 3704 (BSC 351) HUMAN PHYSIOLOGY II (4-5) Physiology of respiratory, gastrointestinal, excretory, endocrine and reproductive systems. Continuation of BSC 350.
PCB 3704L (BSC 351L) HUMAN PHYSIOLOGY LABORATORY II (1) To accompany BSC 351.
ZOO 3733 (BSC 355) HUMAN GROSS ANATOMY I (4) Structure and function of various tissues, organs, and organ systems of the human body.
ZOO 3733L (BSC 355L) HUMAN GROSS ANATOMY LABORATORY (2) Dissection of human cadaver material to reveal the relationships of the various organ systems of the body.
ZOO 3733L (BSC 355D) HUMAN GROSS ANATOMY DEMONSTRATIONS (1) Demonstrations of the prosected human cadaver.
ZOO 3734 (BSC 356) HUMAN GROSS ANATOMY II (4) Continuation of BSC 355. Prerequisite: BSC 355.
ZOO 3734L (BSC 356L) HUMAN GROSS ANATOMY LABORATORY II (2) Continuation of BSC 355L. Prerequisites: BSC 355 and 355 L .
2003734 L (BSC 356D) HUMAN GROSS ANATOMY DEMONSTRATIONS (1) Continuation of BSC 355D. Prerequisites: BSC 355 and 3550.
2003834 (BSC 357) NEUROSCIENCE (4-6) Structure and function of the human nervous system. Prerequisites: One course in physiology, plus BSC 355 and 356.
200 3834L (BSC 357L) NEUROSCIENCE LABORATORY (2) Dissection and demonstration of the various parts of the human brain.
PCB 3033 (BSC 360) FUNDAMENTALS OF ECOLOGY (5) The basic principles governing the interaction of organism and environment. Trophic structure and energetics of ecosystems, biogeochemical cycles, limits and controlling factors in organismic distribution and abundance, biological interactions, species diversity, evolution of populations and communities, the impact of man. Lecture and field trips. Prerequisites: One year of biology; basic chemistry.
BOT 3353 (BSC 362) MORPHOLOGY OF VASCULAR PLANTS (5) A survey of groups of vascular plants emphasizing comparative life histories, vegetative and productive structures, and evolutionary relationships.
BOT 3353L (BSC 362L) PLANT MORPHOLOGY LABORATORY (2) Laboratory to accompany BSC 362.
BOT 3823 (BSC 364) HORTICULTURE (5) Examination of theoretical and practical problems of plant growth and production. Prerequisite: A course in plant sciences or advanced biology (or instructor's permission).
BOT 3503 (BSC 365) INTRODUCTION TO PLANT PHYSIOLOGY (5) Fundamentals of plant growth considering such topics as growth reactions to environmental stimuli, endogenous growth hormones, and practical modification of plant life cycles. PCB 3702 (BSC 372) INTERMEDIATE HUMAN PHYSIOLOGY (5) Functions of the human body and the physico-chemical mechanisms responsible for each organ's function.
PCB 3702L (BSC 372L) INTERMEDIATE HUMAN PHYSIOLOGY LAB (2) Laboratory course demonstrating principles in BSC 372.

PCB 3703C (BSC 374) FOUNDATIONS OF HUMAN PHYSIOLOGY (5) Functional survey of the organ systems of the human body. Intended primarily for non-science majors.
PCB 3233 (BSC 376) IMMUNOLOGY (5) Course required in medical technology curriculum. Lecture and laboratory.
BSC 3913 (BSC 380) PROJECT LABORATORY (3-8) Independent laboratory study in a project or projects of the student's choice. Registration by consultation with instructor. May be repeated for credit.
PCB 4254 (BSC 401) DEVELOPMENTAL BIOLOGY (5) Comprehensive survey of principles of development and critical analysis of methods used to study these problems. Core course required of major in Biological Sciences, Prerequisite: BSC 302. PCB 4254L (BSC 402) EXPERIMENTAL BIOLOGY (2) Laboratory techniques used in biological research. The specific techniques covered will depend on the field of work of the instructor responsible for the course during a given quarter. May be repeated for credit under different instructors. Prerequisite: Permission of the instructor.
PCB 4024 (BSC 403) CELL BIOLOGY (5) Structure and function of cellular organelles.
ZOO 4334 (BSC 420) PRINCIPLES OF SYSTEMATIC ZOOLOGY (5) A practical and theoretical approach to evolutionary zoology. Prerequisites: 8 semester hours of biology or zoology.
PCB 4754 (BSC 423) INVERTEBRATE PHYSIOLOGY (5) Lectures treating functional processes in invertebrates from the standpoint of adaptation to their environment and specialization in evolution. Prerequisites: General Biology, Organic Chemistry, Invertebrate Zoology.
PCB 4754L (BSC 423L) INVERTEBRATE PHYSIOLOGY LABORATORY (2) Laboratory study to follow or accompany BSC 423.

PCB 4724 (BSC 425) COMPARATIVE PHYSIOLOGY I: REGULATION OF INTERNAL ENVIRONMENT (5) Osmotic, gastrointestinal, metabolic, circulatory and respiratory physiology. Prerequisites: general biology and organic chemistry.
PCB 4724L (BSC 425L) COMPARATIVE PHYSIOLOGY LABORATORY I (2) Laboratory course demonstrating principles in BSC 425.
PCB 4725 (BSC 427) COMPARATIVE PHYSIOLOGY II: NEUROENDOCRINE PHYSIOLOGY (5) Neuromuscular, sensory and endocrine physiology. Prerequisites: General biology and organic chemistry.
PCB 4725L (BSC 427L) COMPARATIVE PHYSIOLOGY LABORATORY II (2) Laboratory course demonstrating principles in BSC 427.
PCB 4701 (BSC 451) HUMAN SYSTEMIC PHYSIOLOGY (5) Selected topics in mammalian and human physiology, with emphasis on topics of clinical significance.
BSC 4914 (BSC 480) PROJECT LABORATORY (3-8) Independent laboratory study in a project or projects of the student's choice. Registration by consultation with instructor. May be repeated for credit.

2005265 (BSC 501) BIOLOGY OF CRUSTACEANS (5). Morphology, physiology, systematics and evolution of crustaceans with emphasis on marine forms. Lecture and laboratory.
AP8 5933 (BSC 502/MAS 502) APPLICATIONS OF COMPUTERS IN BIOLOGY (5) Introduction to computer techniques of great relevance to modern Biology and their application to the study of a representative group of biological problems. Prerequisite: MAS 311 or permission of instructor.
PCB 5205 (BSC 504) CELL PHYSIOLOGY AND BIOPHYSICS (5) Fundamental biophysical properties of membranes; transport of water and solutes across biological membranes; passive and active electrical phenomena in membrane systems. Biochemistry and biophysics of contractile mechanisms. Transfer of information from cell to cell. Bioluminescence. Effects of radiation on macromolecules. Prerequisites: BSC 301, 302; CHE 311 or CHE 321 and 322.
BCH 5313 (BSC 507) BIOCHEMISTRY I (6) Chemical reactions and macromolecular properties of proteins, nucleic acids and polysaccharides. Genetic and evolutionary aspects of protein structure.
BCH 5213 (BSC 508) BIOCHEMISTRY II (6) Comparative biochemistry: metabolism and regulation of metabolism in microorganisms, plants and animals, mechanisms of enzyme reactions.
MCB 5504 (BSC 511) ADVANCED VIROLOGY (5). Principles and methods of study of bacterial, plant and animal viruses. Molecular aspects of viral development, virus pathogens and carcinogens.
MCB 5504L (BSC 511L) ADVANCED VIROLOGY LABORATORY (5). Laboratory to accompany MCB 5504.
PCB 5259 (BSC 542) TOPICS IN DEVELOPMENTAL BIOLOGY (5) Molecular and cellular mechanisms in the development of plants and animals.
BOT 5575 (BSC 545) PHOTOBIOLOGY (5) Study of basic photochemical mechanisms as they occur in molecular biological processes such as plant growth, animal vision and radiation damage.
BOT 5575L (BSC 545L) PHOTOBIOLOGY LABORATORY (2) Laboratory to accompany BSC 545.
2005745 (BSC 550) ADVANCED NEUROANATOMY (5) Indepth knowledge of the embryonic development, structure and function of the human nervous system with a great deal of clinical consideration.
OCB 5635 (BSC 560) MARINE ECOLOGY (5) Environmental variations in the oceans, characteristic organisms and ecosystem analysis with particular emphasis on shallow water habitat in the South Florida area. The course will emphasize fieldwork, projects and systematic analyses of ecosystem components. Prerequisites: BSC 308, 331 and 360.
OCB 5635L (BSC 560L) MARINE ECOLOGY LABORATORY (2) Laboratory to accompany BSC 560.
BOT 5665 (BSC 570) TOPICS IN TROPICAL PLANT SCIENCE (5) (SS) Survey of living materials of at least 50 major tropical plant families. Developmental studies using tropical plant materials are reviewed from both physiological and morphological viewpoints. In addition to lectures in economic botany, field studies of tropical fruit and spice trees are carried out. At least four major tropical ecosystems are analyzed and examined in the field.
BOT 5665L (BSC 570L) TOPICS IN TROPICAL PLANT SCIENCE LABORATORY (2) Laboratory to accompany BSC 620.
BSC 5931 (BSC 590) SENIOR-GRADUATE SEMINAR (2) Oral presentation of an assigned literature survey by senior and graduate students. Required of candidates in the proposed Honors Program. Registration by letter grade for oral presentation or credit/no credit option by participation and submission of written report.
BCH 6506 (BSC 601) ENZYME CHEMISTRY (5) Physical and chemical properties of enzymes. Review of modern, analytical technique in measurement of enzymatic reactions. Discussion of selected enzyme systems.
BOT 6536 (BSC 665) PLANT PHYSIOLOGY AND BIOCHEMISTRY (5) Advanced topics emphasizing on transport, plant hormones, tropisms and photosynthesis. Lecture conference and laboratory.
BSC 6916 (BSC 680) PROJECT LABORATORY (5) As BSC 380.

## ECONOMICS MAJOR

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

## Required Courses: None

Recommended Courses: six semester hours in principles of economics; three semester hours in social science; six to nine semester hours in humanities; six semester hours in college algebra and trigonometry; three semester hours in statistics.
Remark: The entering student who has not taken Principles of Economics must enroll in ECO 3003 (ECO 301) during his or her first quarter at the University.
UPPER DIVISION PROGRAM:

## Major Required Courses:

Quarter Hours
$45-60$

MAC 3233 (MAS 321) Calculus for Management and Social Science
*ECO 3003 (ECO 301) ECO 3040 (ECO 305) or ECO 3432 (ECO 311) cannot be included in this grouping
Electives:

Remarks: A student may choose a program in general economics or concentrate in one of the following areas: urban and environmental economics, labor and manpower studies, international economics and development, monetary and fiscal policy. The student should select courses in consultation with an advisor. The student planning graduate study in economics should complete 10 quarter hours of the specified method courses.

Quarter Hours
\(\left.$$
\begin{array}{cl}\begin{array}{c}\text { Minor Required } \\
\text { ECO } 3101\end{array}
$$ \& Courses: <br>

(ECO 307) Theory of Price\end{array}\right]\)| ECO 3203 | (ECO 308) Aggregate Economic Analysis |
| :---: | :--- |
|  | Additional Economics Courses |

ECO 3101 (ECO 307) Theory of Price or
ECO 3203 (ECO 308) Aggregate Economic Analysis 5
Additional Economics Courses* 15
*ECO 3003 (ECO 301), ECO 3040 (ECO 305), or ECO grouping

Remark: Introductory courses in calculus and statistics are strongly recommended for the student minoring in economics.

## COURSE OFFERINGS

ECO 3003 (ECO 301) ECONOMICS, MAN AND SOCIETY (5) (F,W,S,SS) Relationship of economics to individual and group action. Identification of economic and noneconomic objectives and problems. Analysis of economic behavior of individuals, business firms, public agencies, and interest groups. Public issue interpretation in the light of economic theory.
ECS 3402 (ECO 304) THE POLITICAL ECONOMY OF SOUTH AMERICA (5) 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 whom we share this hemisphere.
ECO 3043 (ECO 305) CONSUMER ECONOMICS (5) Consumer behavior; advertising and other influences affecting demand. Patterns of consumer expenditure, effects of public policy on family incomes and consumption patterns. The consumer protection movement.
ECO 3223 (ECO 306) MONEY AND BANKING (5) Elements of monetary theory; relationships between money, prices, production and employment; factors determining money supply; history and principles of banking with special references to the United States.
ECO 3101 (ECO 307) THEORY OF PRICE (5) (F,S) Operation of individual markets; market structure; theory of the firm; theory of production; demand theory; general equilibrium and welfare economics. Recommended preparation: ECO 3003 (ECO 301).

ECO 3203 (ECO 308) AGGREGATE ECONOMIC ANALYSIS (5) (W,SS) Analysis of the measurement, determination, and control of aggregate economic activity; the monetary system in relation to income and employment short-term income fluctuations; long-term growth. Recommended preparation: ECO 3003 (ECO 301).
ECO 3433 (ECO 311) APPLIED MACROECONOMICS (5) F,S,W,SS) Aggregate economic performance and business conditions analysis. Analysis of the nature and causes of business fluctuations. Economic expansions and stagilation. Public policies for economic stability; fiscal policy, monetary policy and income policy. Sectoral analysis and macroeconomic forecasting. Recommended preparation ECO 3003 (ECO 301).
ECO 3303 (ECO 312) DEVELOPMENT OF ECONOMIC THOUGHT (5) (W,S) 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.
ECS 3003 (ECO 313) COMPARATIVE ECONOMIC SYSTEMS (5) (F,S) Analysis of alternative economic systems of the industralized and emerging nations; emphasis on the comparative study of the capitalist, socialist, and communist economic systems of the modern world.
ECS 3440 (ECO 316) ECONOMICS OF CENTRAL AMERICA (5) (W) 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.
ECP 3303 (ECO 319) INTRODUCTION TO ENVIRONMENTAL ECONOMICS (5) (W) Economic principles applied to environmental problems. Relationship of market and nonmarket forces to environmental quality; development of tools for policy analysis.

ECP 3613 (ECO 320) INTRODUCTION TO URBAN ECONOMICS (5) Study of the urban environment, characteristics and trends. Location behavior of firms and households. Urban financial problems, transportation, and housing.
ECP 3623 (ECO 321) REGIONAL ECONOMICS (5) The spatial order of the economy. Systems of cities, industrial location patterns, regional land use, interregional income and trade, regional economic expansion, population and migration.
ECP 3123 (ECO 328) ECONOMICS OF POVERTY (5) Poverty in the United States: its measurement and history. Theory of personal income distribution. Present and proposed policies to alleviate poverty.
ECP 3144 (ECO 329) ECONOMICS OF RACE AND SEX DISCRIMINATION (5) (S) Economic and non-economic implications of discrimination on the basis of race and sex. Discrimination in the labor and commodity markets. Problems of educational training, unemployment, and personal income distribution.
ECS 4430 (ECO 403) THE ECONOMIC DEVELOPMENT OF CUBA - PAST AND PRESENT (5) (S) Survey of the Cuban economy under capitalist and Marxist ideologies; emphasis on the transition stage and on current policies of economic and social change.
ECS 4432 (ECO 408) ECONOMIC INTEGRATION - CARIBBEAN (5) (W) Analysis of the method, meaning and implications of economic integration in the Caribbean area. Designed to enable the student to appreciate the trend toward regionalism and economic cooperation.
ECS 4433 (ECO 409) ECONOMICS OF THE CARIBBEAN (5) (W) 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 4013 (ECO 410) INTRODUCTION TO ECONOMIC DEVELOPMENT (5) Analysis of institutional and structural factors which determine the course of economic progress in developing countries. Characteristics of less developed areas: agriculture, investment, technology, population, international trade, economic integration.
ECS 4024 (ECO 411 ) ECONOMIC PLANNING (5) 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.
ECO 4314 (ECO 412) RADICAL POLITICAL ECONOMY (5) 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.
ECS 4014 (ECO 413) THEORIES OF ECONOMIC PROGRESS (5) (F) Dynamics of economic progress and change in industrialized and underindustrialized countries of the modern world; historical theories of growth; empirical case studies; formulation of development projects and programs. Recommended preparation: ECO 3101 (ECO 307) or ECO 3203 (ECO 308). ECS 4044 (ECO 414) ECONOMICS OF TECHNOLOGICAL CHANGE (5) Economic analysis of technological possibilities in the production process and the estimation of production and cost functions. Case studies of research and development (R\&D) and technical innovation. Management of science and technology; transfer and adaptation of intermediate and advanced technologies to emerging nations.
ECO 4632 (ECO 415) EUROPEAN ECONOMIC HISTORY (5) 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 4622 (ECO 416) ECONOMIC DEVELOPMENT OF THE UNITED STATES (5) The growth of the American economy from colonial times to the present; special emphasis on the market forces, institutional arrangements, and policies contributing to this process.
ECO 4623 (ECO 417) AMERICAN BUSINESS HISTORY (5) The growth of American business from 1880 to present; integration, diversification, and foreign expansion. Business strategies and managerial structures.
ECO 4603 (ECO 41B) ORIGINS OF INDUSTRIALIZATION (5) The transformation to modern society. The earliest industrial revolution in England, 1750-1850, and its impact on the European continent.
ECP 4314 (ECO 421) LAND AND RESOURCE ECONOMICS (5) Availability, use, and control of land and other natural resources. Resource conservation, investment, and taxation. Environmental implications. Resource markets and pricing.
ECP 4433 (ECO 422) ECONOMICS OF TRANSPORTATION (5) Economic analysis applied to specific problems of transport. Effects of location and transportation cost on firm behavior; public regulation and policy; capacity, rate structure, service areas; problems of urban mass transportation. Recommended preparation: ECO 3101 (ECO 307).
ECP 4403 (ECO 424) ECONOMIC POLICY FOR INDUSTRY (5) Governmental activities affecting business, government regulation of business and its historical, legal, and economic perspectives, including recent developments in the United States and abroad; governmental assistance to business; proposed policies. Recommended preparation: ECO 3101 (ECO 307).
ECO 4504 (ECO 425) PUBLIC CHOICE AND THE PUBLIC FINANCES (5) (W) Analysis of administrative and legislative decisions applicable to public goods and services; government expenditure policy; sources of revenue; public credit; fiscal policy, principles and methods of taxation and financial administration. Recommended preparation: ECO 3101 (ECO 307).
ECO 4224 (ECO 426) ISSUES IN MONEY AND BANKING (5) Formulation and execution of monetary policy. Analysis of how monetary policy has been carried out in recent years and how it should be conducted.
ECP 4203 (ECO 428) LABOR ECONOMICS (5) (S) Economic problems and issues of trade union organization and wage theory; job security, hours, working conditions, labor legislation, unemployment, and discrimination. Recommended preparation: ECO 3101 (ECO 307).
ECP 4222 (ECO 429) MANPOWER PROBLEMS AND PROGRAMS (5) (W) Problems of human resource development, examination of programs for training and upgrading of workers; barriers to skill development and job entry; formulation of public policies on human resources.
ECO 4401 (ECO 430) INTRODUCTION TO MATHEMATICAL ECONOMICS (5) (W) 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 (ECO 307) or ECO 3203 (ECO 308).
ECO 4422 (ECO 431) INTRODUCTION TO ECONOMETRICS (5) (S) Introduction to measurement in economics; numerical evaluation of mathematical modesl by statistical methods; survey of classical models; scope and method of econometric analysis. Recommended preparation: ECO 3101 (ECO 307) or ECO 3203 (ECO 308) and ECO 4401 (ECO 430).

ECO 4134 (ECO 432) CAPITAL THEORY (5) The role of capital in economic analysis. Capital and growth theory - turnpike theorems, applied capital theory and business optimality, capital and distribution theory Prerequisites: ECO 3101 (ECO 307) or ECO 3203 (ECO 308) and ECO 4401 (ECO 430).
ECP 4534 (ECO 434) MEDICAL AND HEALTH ECONOMICS (5) Economic analysis of medical and health services. Physician and dentist pricing; hospital supply; markets in health-related professions; drug and equipment markets; medical and health insurance; national priorities and policy for health service delivery. Recommended preparation: ECO 3101 (ECO 307).
ECO 4225 (ECO 436) MONEY AND NATIONAL INCOME DETERMINATION (5) (W) The basic model of income determination is built emphasizing the roles of real and monetary sectors of the economy. Results of empirical work are surveyed.
ECO 4701 (ECO 437) WORLD ECONOMY (5) A broad overview of the international economy in historical perspective. Topics: economic demography, trade flows, capital movements, diffusion of technology, and the emergence of transnational institutions. The student will obtain a conception of how economic interdependence has developed.
ECO 4703 (ECO 438) INTERNATIONAL ECONOMICS (5) Principles of international trade and balance of payments; significance of geographic, economic, social and political influences; current problems in international trade and payments; tariffs and commercial policy; role of international organizations. Recommended preparation: ECO 3101 (ECO 307).
ECO 4713 (ECO 439) INTERNATIONAL MONETARY RELATIONS (5) International money and capital markets, international financial institutions. Interpretation of balance of payments statements. Adjustments to disequilibria through changes in prices, exchange rates, and national income.
ECO 4733 (ECO 440) MULTINATIONAL CORPORATION (5) Growth and development of multinational enterprise. Theories of direct foreign investment. Impact on the United States and other developed and less developed nations. Policy implications relating to employment, economic growth, balance of payments, taxation, and national defense. National sovereignty and the multinational corporation.
ECP 4013 (ECO 441) ECONOMICS AND DIPLOMACY (5) Description and analysis of interactions between economic and foreign policy. Free trade ys. protectionism; balance of payments problems; raw material needs and their influence on foreign policy; the "open door" policy; antitrust, taxation, and technology; East-West trade. The approach will be historical.
ECP 4003 (ECO 444) PROSPERITY, DEPRESSION AND INFLATION (5) Historical analysis of the Great Depression, business cycles, inflation, and prosperity. Emphasis on the theories of economic cycles and inflation.
ECS 4403 (ECO 454) THE LATIN AMERICAN ECONOMIES (5) 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 the different attempts of economic integration.
ECS 4403 (ECO 455) LAS ECONOMIAS LATINOAMERICANAS (5) Estudio de los problemas economicos de lbero-America con enfasis en los paises mas grandes. Estudio detallado de problemas de intervencion, dependenia, y integracion economica.
ECS 4404 (ECO 456) ECONOMIC INTEGRATION - LATIN AMERICA (5) Analysis of the method, meaning and implications of economics in the Latin American area. Designed to enable the student to appreciate the trend toward regionalism and economic cooperation. Prerequisite: ECO 3101 (ECO 301) or equivalent.
ECO 4902 (ECO 460-463) UNDERGRADUATE TUTORIAL (VAR) Supervised readings, individual tutorial, and preparation of reports. Requires consent of faculty supervisor and department chairman.
ECP 4004 (ECO 467) SEMINAR ON CURRENT ECONOMIC TOPICS (5) (W,S) Faculty and student discussion of contemporary economic and social issues.
ECO 5216 (ECO 507) MONETARY THEORY AND POLICY (5) (W) Relationship of money supply and interest rate to economic stabilization; consideration of federal reserve system, money market, and factors determining money supply and demand; neoKeynesian, Chicago, and radical policy views.
ECS 5025 (ECO 510) ECONOMIC PROBLEMS OF EMERGING NATIONS (5) (W,SS) Specific economic problems of emerging nations and national groupings; basic approaches to economic development; major proposals for accelerating development; role of planning; trade, aid and economic integration. Recommended preparation: ECO 3101 (ECO 307) or ECO 3203 (ECO 308).

ECP 5605 (ECO 520) URBAN AND REGIONAL ECONOMICS (5) Application of economic analysis to urban growth and the urban-regional environment; consideration of public services, transportation, ghetto problems, and urban organization; analysis of environmental protection problems and policies. Recommended preparation: ECO 3101 (ECO 307) or ECO 3203 (ECO 308) and ECP 3303 (ECO 319).

ECO 5423 (ECO 531) ECONOMETRIC METHODS (5) Application of statistical methods to the estimation of simultaneous equation systems. Special topics including dynamic models, errors in variables, random coefficient regression. Prerequisite: MAC 3233 (MAS 321) and STA 3161 (MAS 322). Recommended preparation: ECO 4422 (ECO 431).
ECO 5906 (ECO 560-563) ADVANCED INDIVIDUAL STUDY (Variable) Supervised readings, individual tutorial, and preparation of report. Requires consent of faculty supervisor and department chairman. Open to seniors and graduate students.
ECO 5115 (ECO 565) ADVANCED SEMINAR IN ECONOMIC THEORY (5) (F, WS,SS) Variable-topic study group in theoretical problems. Open to seniors and graduate students.
ECO 5938 (ECO 566) ADVANCED SEMINAR IN APPLIED ECONOMICS (5) F,W,S,SS) Variable-topic study group in application of economic analysis to specific problems. Open to seniors and graduate students.
ECP 6704 (ECO/MBA 606) MANAGERIAL ECONOMICS I (5) (F,W,S,SS) Basic microeconomic concepts as they apply to decision making within the organization; supply and demand; market structure and market behavior in specfic industries; basic aggregate economic models and forecasting.
ECO 6236 (ECO 626) MONEY AND MONETARY POLICY (5) (W) Monetary theory and its application; consideration of central banking in the U.S. and its relation to the international economy, money markets, and financial intermediaries; survey of current policy views.
ECP 6705 (ECO/M8A 656) MANAGERIAL ECONOMICS II (5) (W) Extension of topics covered in ECP 6704 (ECO/MBA 606). Includes capital budgeting, linear programming, pricing, decision making under uncertainty, recent developments in theory of the firm. Prerequisite: ECP 6704 (ECO/MBA 606).
ECO 6938 (ECO 660) INDIVIDUAL GRADUATE STUOY (5-10) (F,W,S,SS) Supervised readings, tutorial and preparation of report. Open only to graduate students. Requires consent of supervisor and approval of department chairman.

ECO 6115 (ECO 665) GRADUATE SEMINAR IN ECONOMIC THEORY (5) (F,W,S,SS) Variable-topic graduate study group in theoretical problems. Open only to students with graduate standing.
ECO 6938 (ECO 666) GRADUATE SEMINAR IN APPLIED ECONOMICS (5) (F,W,S, SS) Variable-topic study group in application of economic analysis to specific problems. Open to students with graduate standing.

## ENGLISH MAJOR

## Campus Location: Tamiami Campus only

## DEGREE: Bachelor of Arts

## LOWER DIVISION REQUIREMENTS:

## Required Courses: None

Remark: The prospective secondary school teacher should take the Foundations of Education courses in the lower division. *Students interested in teacher certification see note on page 5 .
UPPER DIVISION PROGRAM:
Required Courses
Quarter Hours
English
45

Electives:

Students in the Teacher Preparation Program carry two majors-English and English Education. They must request admission to both programs. Students interested in teacher certification, see note on page 5 .

## COURSE OFFERINGS

(ENG 300-310) THEMES IN LITERATURE (5) (F,W,S,SS) Individual sections will read and discuss works relating to topics of current and enduring interest. 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.
(ENG 311) EXPOSITORY WRITING (5) )F,W,S,S) An advanced composition course in the techniques of exposition, argumentation, and persuasion. Special sections for the foreign-born.
ENC 3353 (ENG 312) REPORT AND TECHNICAL WRITING (5) (W,S) For business, professional, and scientific students needing practice in collecting, organizing, interpreting, and presenting factual material.
ENG 3137 (ENG 314) THE MOVIES (5) (F,S) Viewing and discussion of films, with attention to cinematic ways of story-telling and to the popular film as an expression of cultural values.
ENG 3070 (ENG 315) RESEARCH AND WRITING (3) (S,F) This course has dual objectives: to acquaint students with basic research methodologies and give students practice in communicating the data generated by their research. Assignments will include such matters as researching information, documentation, organization, revising rough drafts and presenting the final draft. The primary emphasis will be to use the student's own interests and background for exploring relevant topics upon which to write.
ENG 3500 (ENG 320) ENGLISH LINGUISTICS (5) (F,W) Study of the sounds, vocabulary, and sentence patterns of standard modern English. Other topics include meaning, social and regional dialects, language change, and style.
ENG 3101 (ENG 360-370) MAJOR LITERARY MODES (5) (F,W,S) Individual sections will read and discuss the literary expression of heroic, tragic, comic, satiric, mythic, realistic or other formalized views of human existence. May be repeated.
LIT 3333 (ENG 380) SURVEY OF AFRO-AMERICAN LITERATURE (5) (S,F) Study of Afro-American Literature from Phyllis Wheatley to James Baldwin. The first half of the course will be concentrated on writers before World War II while the second half will be designed to give students the opportunity to study modern authors from 1920 to present.
ENG 4103 (ENG 400-410) MAJOR LITERARY GENRES (5) (F,W,S,SS) Individual sections will read and discuss the form and development of novels or drama, poetry, short fiction, or such special kinds as biographies, folksongs and tales, or essays, among other genre. May be repeated.
CRW 4340 (ENG 415) WRITING POETRY (5) (F,W,S,SS) An intermediate course in writing poetry. Admission requires consent of the instructor.
CRW 4240 (ENG 416) WRITING FICTION (5) (F,W,S,SS) An intermediate course in writing fiction. Admission requires consent of instructor.
ENG 4134 (ENG 420) HISTORY OF THE FILM (5) Discussion, with examples, of the development of cinematic art from its European and American beginnings to its place as the major world art form.
ENC 4522 (ENG 421) RHETORIC AND POETICS (5) Ancient and modern theory and practice in discussing the formal properties of elevated language.
LIT 4349 (ENG 422) RHETORIC AND COMMUNICATION: BLACK RHETORIC (5) (F) Black people in America have been involved in several significant movements designed primarily to meet the challenges of institutionalized racism. The course will
focus on these movements, i.e., abolition, segregation, integration, and emigration, giving special emphasis to each of the movements' leading rhetors, their arguments, counter-arguments, and appeals.
ENG 4574 (ENG 423) BLACK ENGLISH
ENL 4138 (ENG 431) SHAKESPEARE: COMEDIES (5) (F) Reading and informal dramatic interpretation of representative plays.
ENL 4139 (ENG 432) SHAKESPEARE: TRAGEDIES (5) (W) Reading and informal dramatic interpretation of representative plays.
ENL 4137 (ENG 433) SHAKESPEARE: HISTORIES (5) (S) Reading and informal dramatic interpretation of representative plays.
AML 4144 -AML 4144 (ENG 435440 ) PERIODS IN AMERICAN LITERATURE (5) (F,W,S,SS) Individual sections will read and discuss works in the context of such historical settings as the colonial, federal, antebellum, reconstruction, and other period of the American past. May be repeated.
LIT 4203-LIT 4291 (ENG 441-445) REGIONAL LITERATURE IN ENGLISH (5) 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 4401 (ENG 450) LITERATURE AMONG THE ARTS AND SCIENCES (5) Individual sections will relate the study of literature to other disciplines in the humanities, fine arts, the social and natural sciences. May be repeated.
ENL 4540 (ENG $451-454$ ) PERIODS IN ENGLISH LITERATURE (5) (F,W,S) Individual sections will read and discuss works in the context of such historical settings as the medieval, Tudor, Restoration, Victorian, and other periods of the English past. May be repeated.
(ENG 459) STRUCTURE AND FUNCTION OF MASS MEDIA (5) Will include the study of such topics as: Mass communication and society, popular culture, communication and social order, classic studies in mass communication, propaganda, mass media and government, and problems of the mass media. Topic will vary from quarter to quarter.
LIN 4400 (ENG 460) APPLIED LINGUISTICS (5) Linguistics in the classroom. English as a Second Language, Stylistics, Dialects.
ENG 4555 (ENG 461) MODERN ENGLISH GRAMMAR (5) Practical study of syntax. Prerequisite: ENG 320 or consent of the instructor.
ENG 4141 (ENG 462) STUDIES IN THE FILM (5) Intensive examination of the work of a particular industry, group, or director. May also explore various film genres, e.g., documentary, horror, the Western. With change of content may be retaken for credit.
ENG 4906 (ENG 498) INDEPENDENT STUDY (variable) (F,W,S,SS) Individual conferences, assigned readings, reports on independent investigations with the consent of the chairman.

- LIT 4930 (ENG 499) SPECIAL TOPICS (Variable) (F,W,S,SS) A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. Requires consent of the chairman.
AML 5212 (ENG 500-510) MAJOR AMERICAN LITERARY FIGURES (5) (F,W,S,SS) Each section will consider the lifework of several authors such as Hawthorne, Melville, Whitman, Twain, James, Faulkner, Mailer, Wright, Baldwin, or others.
ENL 5220 (ENG 511 -520) MAJOR BRITISH LITERARY FIGURES (5) (F,W,S,SS) Each section will consider the lifework of an author such as Chaucer, Spenser, Milton, Pope, Wordsworth, Dickens, Browning, Joyce, or others. May be repeated.
LIT 5542 (ENG 541-550) LITERARY MOVEMENTS (5) (F,W,S) Individual sections will study the authors, works, and audiences involved in such phenomena as Humanism, Mannerism, Romanticism, Symbolism, The Harlem Renaissance, and others. May be repeated.
ENG 5517 (ENG 553) HISTORY OF THE ENGLISH LANGUAGE (5) (S) Study of the development of the grammar and vocabulary represented in samples of the English language from the 8th century down to modern times. Prerequisite: ENG 307 or consent of the instructor.
ENG 5816 (ENG 557) LITERARY CRITICISM AND SCHOLARSHIP (5) Techniques and goals of humanistic research, bibliography, and critical commentary.
ENG 5907 (ENG 598) INDEPENDENT STUDY (Variable) (F,W,S,SS) Individual conferences, assigned readings, reports on independent investigations with the consent of the chairman.
LIT 5934 (ENG 599) SPECIAL TOPICS (Variable) (F,W,S,SS) A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. Requires consent of the chairman.
ENG 6909 (ENG 698) INDEPENDENT STUDY (Variable) (F,W,S,SS) Individual conferences, assigned readings, reports on independent investigations with the consent of the chairman.
LIT 6934 (ENG 699) SPECIAL TOPICS (Variable) (F,W,S,SS) A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. Requires consent of the chairman.


## FINE ARTS ART MAJOR

CAMPUS LOCATION: Tamiami Campus only
DEGREE: Bachelor of Fine Arts *Students interested in teacher certification see note on page 5.

## LOWER DIVISION PREPARATION

Required Courses: 6 semester hours of art survey or department exam; 6 semester hours of design or acceptable portfolio; 6 semester hours of drawing; 6 semester hours of beginning studio.

Recommended Courses: painting, scultpure, printmaking, ceramics, photography, jewelry, weaving, cinematography.
Remarks: Student who does not have an A.A. degree and/or who lacks proficiency in required courses will be expected to take more than 90 quarter hours to complete the degree or to make up courses at the lower division level.

## UPPER DIVISION PROGRAM

| Required Courses: |  | Quarter Hours |  |
| :---: | :---: | :---: | :---: |
| ARH 4470 | (ARH 475) (Contemporary Art) | 5 |  |
| ARH 4800 | (ARH 477) (Critcism) | 5 |  |
|  | Art History Elective | 5 |  |
|  | Studio Major | 25 |  |
| ART 4955 | (FIA 490) | 5 |  |
|  | Studio Elective | 15-25 |  |
| Electives: |  |  | 10-30 |
|  |  |  | 90 |

## COURSE OFFERINGS

ARH 3009 (ARH 305) SURVEY OF CONTEMPORARY ART (5) (F,S) A survey of the most recent developments in the fields of visual arts and architecture through lectures, films and speakers. Open to all students.
ART 3310 (FIA 315) ART 4320 (FIA 415) ART 5340 (FIA 515) DRAWING (5-5-VAR.) (W,S) Drawing will be considered as an essential part of every art student's curriculum. Depending on his lower level work, a student will be encnuraged to take at least one drawing course at the University. Off-campus studio work may be arranged. (May be repeated).
ART 3331 (FIA 316) ART 4332 (FIA 416) ART 5341 (FIA 516) (5-5-VAR.) (F,W,S,SS) Drawing from the model during assigned studio time. Open to all students. (May be repeated).
ART 3510 (FIA 325) ART 4532 (FIA 425) ART 5580 (FIA 525) PAINTING (5-5-VAR.) (F,W,S,SS) A study through the use of visual aids and individual criticism of the student's work. Any media may be used. (May be repeated).
ART 3702 (FIA 335) ART 4703 (FIA 435) ART 5730 (FIA 535) SCULPTURE (5-5-VAR.) (F,W,S) 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 3150 (FIA 337), ART 4151 (FIA 437), ART 5159 (FIA 537) JEWELRY AND METALS ( $5-5-\mathrm{VAR}$ ) (F,W,S) A study of basic metal technique 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 3401 (FIA 345), ART 4402 (FIA 445), ART 5403 (FIA 545) PRINTMAKING ( $5-5-$ VAR) (F,W,S) 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 3601 (FIA 355), ART 4604 (FIA 455), ART 5620 (FIA 555) PHOTOGRAPHY (5-5-VAR) (F,W,S) With a knowledge of beginning developing, printing and use of a camera, the art student will pursue his own direction with emphasis on individual approach, print quality, use of equipment and criticism. (May be repeated).
ART 3630 (FIA 357) INTRODUCTION TO FILMMAKING (5) (F,W) For the beginning student of filmmaking. Survey of the origins and development of cinematography as an art form. Presentation and technical analysis of selected films.
ART 3631 (FIA 358), ART 4632 (FIA 458) FILM PRODUCTION II (5) (S) Conceptual study of total-filmmaking. Equipment, procedures, locations, sets, actors, and production staff will be examined from the point of view of the director. Student will conceptualize, shoot and edit a short film. Prerequisite: FIA 357 or permission of the instructor. May be repeated.
ART 3111 (FIA 361) CERAMICS (5) (F,W,S,SS) A beginning course for art and non-art majors. Fundamentals of throwing, hand building, and glaze application.
ART 3651 (FIA 375), ART 4652 (FIA 475), ART 5660 (FIA 575) VIDEO ART (5-5-VAR) (F,W,S) Studio experience in conventional and experimental video processing with an emphasis on relating contemporary developments in art theory and criticism. An international exchange video tape bank and color capable television facilities will be available (may be repeated).
ART 3133 (FIA 377), ART 4133 (FIA 477), ART 5133 (FIA 577) FA8RICS AND FIBERS ( $5-5-$ VAR) A creative approach to Fabrics and Fibers using processes such as dyeing, embroidery, quilting, soft sculpture, batik, on and off loom weaving, etc. (May be repeated)
ART 4114 (FIA 465), ART 5125 (565) CERAMICS (5-VAR) (F,W,S) The advanced student will explore all aspects of expression in clay and glaze. Students are expected to be mostly self-directed. Prerequisite: FIA 361 or permission of the instructor. (May be repeated).
ART 3905 (FIA 385), ART 4906 (FIA 485), ART 5907 (FIA 585) DIRECTED STUDY (VAR) (F, W,S,SS) A group of students, with the approval of the Art Department faculty, may select a master artist teacher and pursue a course of art study in selected areas such as glass, graphic design, film, multi-media, environmental design, sound, etc. Arrangements must be made at least a quarter before course is offered. (May be repeated).
ART 3905 (FIA 395), ART 4910 (FIA 495), ART 5910 (FIA 595) RESEARCH (VAR) (F,W,S,SS) Students may study or research an individual art project with an art faculty member. Complexity and amount of work will determine the number of hours. (May be repeated).
ART 4955 (FIA 490) (5) (F,W,S,SS) Completion of the student's major area in a studio situation that will result in a student
exhibit. Arrangements must be made at least 3 quarters in advance of expected graduation date. Prerequisite: 25 hours of one studio area.
ARH 4552 (ARH 416), ARH 5552 (ARH 516) ART OF CHINA AND JAPAN ( 5 -VAR) An introduction to the Art of China to the Ming Dynasty and Japan through the 18th Century. The emphasis will be on painting and sculpture with some ceramics and architecture.
ARH 4170 (ARH 435), ARH 5172 (ARH 535) GREEK AND ROMAN ART (5-VAR) Lectures, slides, visitors and student research will be used.
ARH 4301 (ARH 455), ARH 5303 (ARH 555) RENAISSANCE ART (5-VAR) Lectures, slides, visitors and student research will be used.
ARH 4431 (ARH 466), ARH 5432 (ARH 566) NINETEENTH CENTURY PAINTING (5-VAR) A study of the various challenges offered artists at the beginning of the nineteenth century and of subsequent solutions created by painters in America, England, France, Germany, and Italy. Styles such as neo-classicism, romanticism, realism, eroticism, pre-raphaeliticism, luminism and impressionism will be examined.
ARH 4610 (ARH 467), ARH 5615 (ARH 567) AMERICAN ART (5-VAR) Lectures, slides, visitors and student research will be used.
ARH 4470 (ARH 475-575) CONTEMPORARY ART (5-VAR) Lectures, slides, visitors and student research will be used.
ARH 4410 (ARH 476), ARH 5412 (ARH 576) MODERN ART (5-VAR) Lectures, slides, visitors and student research will be used.
ARH 4800 (ARH 477), ARH 5812 (ARH 577) THEORY AND CRITICISM (5-VAR) Examinations, films, lectures and slides ARH 4931 (ARH 478-578) WOMEN AND ART (5-VAR) Women in the history of art; past, present and future. Slides, lectures, films, panels and discussions.
ARH 4905, ARH 5907 (ARH 485-585) DIRECTED STUDIES (VAR) 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 quarter before course is offered. (May be repeated).
ARH 4910, ARH 5913 (ARH 495-595) RESEARCH (VAR) Art history, criticism and theory in areas not covered by the present program and in which the student wishes to study. (Permission of instructor. May be repeated).

## MUSIC MAJOR

Campus Location: TAMIAMI CAMPUS ONLY
DEGREE: Bachelor of Music
LOWER DIVISION PREPARATION:

## Required courses: None

Recommended courses: applied, 12 quarter hours; organizations, 6 quarter hours; theory, 18 quarter hours; sight-singing, 6 quarter hours.

Remark: The student who does not have an Associate of Arts or lacks proficiency in theory, sight-singing and performance in a major instrument will be expected to take more than 90 quarter hours of upper division work to complete the degree.

## UPPER DIVISION PROGRAM:

## APPLIED MUSIC



## CONDUCTING

Required Courses:
Theory ..... 15
History ..... 15
Organizations (6 quarters) ..... 12
Conducting ..... 6*
Applied (6 quarters) ..... 12
*The student is required to conduct a performing organization(a couple numbers, not a complete program) during his orher senior year.60
Electives: ..... 30

## THEORY AND COMPOSITION

Required Courses:
Theory ..... 15Quarter Hours
Composition ..... 10
History ..... 10
Organizations (5 quarters) ..... 10
Conducting ..... 2
Applied (5 quarters or 5 hours applied and 5 hours composition lessons) ..... 10
Recital and Research and Directed Study ..... 3*
*The performance of an original composition with analysis ora lecture on a theoretical subject for the student body.Electives:30
90
MUSICOLOGY
Required Courses:60
Theory ..... 15
History ..... 20
Organizations (5 quarters) ..... 10
Conducting ..... 2
Applied (5 quarters) ..... 10
Research ..... 3**A lecture for the student body, part of the research require-ment.
Electives: ..... 3090
DUAL DEGREE MAJOR
Required Music Courses: ..... 60
Theory ..... 15
History ..... 15
Organizations (6 quarters) ..... 12
Conducting ..... 2
Applies (6 quarters) ..... 12
Research and Recital ..... 2
Guitar MUS 3116 (MUP 366) ..... 2
Required Education Courses:
EDF 3604 (EDU 305) Schooling in America ..... 545
EDG 3321 (EDU 311) General Teaching Lab I ..... 5

EDG 3322

(EDU 312) General Teaching Lab II5

RED 4325

(EDS 401) Reading5
(EMU 305) Special Teaching Lab Music I ..... 5
MUE 4341 (EMU 406) Special Teaching Lab Music II ..... 5
MUE 4940 (EMU 425) Student Teaching ..... 15
*Students interested in teacher certification see note on page 5.

## COURSE OFFERINGS

MUL 3011 (MUS 305) UNDERSTANDING AND ENJOYMENT OF MUSIC I (5) (F,'S) A non-technical introduction to program music of the 19th century and folk/popular music of the 20th century.
MUL 3012 (MUS 306) UNDERSTANOING AND ENJOYMENT OF MUSIC II (5) (W, SS) A non-technical introduction to music before the 1800's and music of the 20th century. Comparisons of music up to and including electronic music.
MUH 3116 (MUS 307) EVOLUTION OF JAZZ (5) (F,W,S) The influx of Africa and Latin America on the development and styles of jazz music and its various exponents such as soul, blues, rock, etc.
MUH 3211 (MUS 315) MUSIC HISTORY SURVEY (5) (F) A technical study of music from antiquity to 1850. Lectures on historical styles will be supplemented with recordings and analysis.
MUH 3212 (MUS 316) MUSIC HISTORY SURVEY (5) (W) A technical study of music from 1850 to the present. Lectures on historical styles will be supplemented with recordings and analysis.
MUH 3372 (MUS 317) TWENTIETH CENTURY MUSIC - EXPLORATION (5) (F,S) An exploration study of music since 1900. Lectures on style plus demonstration will be supplemented with recordings and analysis. Elements of the popular idiom will be investigated.
MUT 3031 (MUS 325) MUSIC THEORY II (5) (F,W,S) Designed for students to develop their skills ir or to review basic theory, harmony, sightsinging and ear training. Prerequisite: The music theory content of MUS 328 or equivalent.
MUT 3416 (MUS 326) COUNTERPOINT (5) (F,S) With a background of basic theory, harmony and ear training, the student will study linear writing through species counterpoint and its comparison with the 18 th century harmonic idioms as well as polyphonic and homophonic idioms of the 14th through the 20th centuries.
MUT 3611 (MUS 327) FORM AND ANALYSIS (5) (W,S) With a background of counterpoint, the student will study the analysis of phrases, binary and ternary song forms, variation, rondo, sonatina and sonata - allegro forms, cyclic and free forms of Western culture music. Particular emphasis will be placed on 20 th century compositions.
MUC 3201 (MUS 328) MUSIC THEORY I (5) (F,W,S,SS) A music theory course, designed to provide a basis in the composition and analysis of tonal music, particularly that of twentieth century popular styles.
MUE 3140 (MUS 335) CHORAL TECHNIQUES (5) (F,W,S,SS) A course designed to strengthen and build the student's ability to write and perform Melodic, Harmonic and Keyboard dictation. It will also provide a rhythm pattern sequence necessary to write and understand the modern idiom of score reading, analysis and transposition.
MUS 3905-MUS 5905 (MUS 385-585) DIRECTED STUDY (1-5) (F,W,S,SS) Designed for students to provide areas of exploration and specialization beyond the basic selected study programs such as electronic music, religious music literature, sound techniques, etc.
MUS 3910 (MUS 395) MUS 4910 (MUS 495) MUS 5910 (MUS 595) RESEARCH (1-5) (F,W,S,SS) Research composition or performance projects under the guidance and direction of the music faculty. (May be repeated.)
MUL 4661 (MUS 415) HISTORY AND LITERATURE OF OPERA (5) (S) Chronological survey of opera literature from the 17th century to present day. Analysis and performance of representative works.
MUL 4500 (MUS 416) SYMPHONIC LITERATURE (5) (SS) Survey of symphonic literature from the 17 th century to present day. Analysis and illustrations of representative works.
MUL 4400 (MUS 417) KEYBOARD LITERATURE (5) (S) Study of solo works and concertos from the 17 th century to present day. Stylistic analysis and performance practices with illustrations of representative works.
MUT 4311 (MUS 425) ORCHESTRATION (5) ( $W$, S) With a background of basic theory, the student will explore the techniques of writing and arranging for instruments in performing organizations and choral groups.
MUT 4561 (MUS 426) TWENTIETH CENTURY THEORY - COMPOSITION (5) (F,W) This course will analyze and compose works using the following procedures: melodic-harmonic techniques developed in the late nineteenth century, serial, improvisational and those derived from the use of electronic devices as performance media. Prerequisites: Survey of Basic Music and Counterpoint.
MUC 4201 (MUS 427) MUSIC COMPOSITION I (5) (F,W,S) A course designed to give the advanced student more intensive experience in creative writing. Compositional techniques and devices will be studied through an analysis of works by major composers. Prerequisite: Orchestration or permission of instructor.
MUC 4202 (MUS 428) MUSIC COMPOSITION II (5) (F,W,S,SS) A continuation of Music Composition I. The larger forms of music composition are analyzed and composed. Prerequisite: Music Composition I or permission of instructor.
MUM 4301 (MUS 429) BUSINESS OF MUSIC (5) (W,SS) Principles and practices of modern publishing techniques, copyright laws and 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.
MUG 4101 (MUS 435) BASIC CONDUCTING (2) (F,S,SS) A basic conducting course to gain fundamental techniqus and interpretation. A prerequisite for both advanced instrumental and choral conducting.
MUG 4301 (MUS 436) INSTRUMENTAL CONDUCTING (2) (W) With a background in basic theory and having performed in organizatıons, the student will develop a knowledge of baton technique, score reading and interpretation. Prerequisite: Basic Conducting.

MUG 4201 (MUS 437) CHORAL CONDUCTING (2) (W) With a background in basic theory and having performed in organizations, the student will develop techniques of group conducting including madrigal, glee, choir, etc. A survey of choral literature will be included. Prerequisite: Basic Conducting
MVS 4975 (MUS 485) RECITAL AND RESEARCH (2) (F, W,S,SS) All music majors, before graduation, must present at least one half of a public recital and pass an oral examination on the music programmed
MUH 5375 (MUS 517) TWENTIETH CENTURY MUSIC "NEW DIMENSIONS" (4) (W,SS) A technical study of music since 1900. Lectures on style plus demonstrations and practical application will be supplemented with recordings and analysis. Electronic and multi-media performance will be accented
MUT 5325 (MUS 526) ARRANGING (4) (W,SS) A practical course in arranging with a definite theory approach to meet the high school needs.
MUG 5105 (MUS 534) ADVANCED CONDUCTING TECHNIQUES (2) (W,SS) 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.
MUN 3310 (MUP 305) MUN 4310 (MUP 405), MUN 5315 (MUP 505) UNIVERSITY SINGERS (VAR) (F,W,S) A chorus performing repertoire primarily from great choral works. Large orchestral accompaniment as well as various instrumental ensembles will be utilized.
MUN 3310 (MUP 307) MUN 4310 (MUP 407), MUN 5315 (MUP 507) COLLEGIATE CHORALE (VAR) (F,W,S,SS) A small ensemble of selected mixed voices performing repertoire of the modern popular idiom. Miniature contemporary accompaniment will be utilized.
MUN 3210 (MUP 315) MUN 4210 (MUP 415) MUN 5215 (MUP 515) ORCHESTRA (VAR) (F, W,S,SS) An instrumental ensemble performing works from the symphonic repertory. Previous experience and permission of conductor.
MUN 3140 (MUP 317) MUN 4460 (MUP 417 ) MUN 5465 (MUP 517) WIND ENSEMBLE (VAR) (F,W,S,SS) A group of wind and percussion instrumentalists. Permission of conductor.
MUN 3710 (MUP 325) MUN 4710 (MUP 425) MUN 5715 (MUP 525) STUDIO JAZZ (VAR) (F,W,S,SS) An ensemble to provide creative professional level experience in the contemporary popular idiom.
MUN 3460 (MUP 327) MUN 4460 (MUP 427) MUN 5465 (MUP 527) CHAMBER MUSIC (VAR) (F,W,S,SS) Small ensemble in the performing of Chamber Music literature. Permission of conductor.
MVB 3334 (MUP 335) MVB 4345 (MUP 435) MVB 5355 (MVP 535) APPLIED MUSIC - BRASS (1-2) (F,W,S,SS) Individual instruction in applied music on trumpet, French horn, trombone, baritone horn or tuba.
MVP 3331 (MUP 345) MVP 4341 (MUP 445) MVP 5350 (MVP 545) APPLIED MUSIC - PERCUSSION (1-2) (F, W,S,SS) Individual instruction in applied music on all percussion instruments.
MVK 3331 (MUP 355) MVK 4341 (MUP 455) MVK 5351 (MUP 555) APPLIED MUSIC - PIANO/ORGAN (1-2) (F,W,S,SS) Individual instruction in applied music on piano or organ.
MVS 3332 (MUP 365) MVS 4343 (MUP 465) MVS 5353 (MUP 565) APPLIED MUSIC - STRINGS (1-2) (F,W,S,SS) Individual instruction in applied music on violin, viola, cello, string bass, guitar or harp.
MVS 3116 (MUP 366) GUITAR SKILLS (5) (F,W,S,SS) Emphasis on music reading and elementary techniques. Open to all Florida International University students.
MVS 3216 (MUP 367) INTERMEDIATE GUITAR SKILLS (5) (F,W,S,SS) Emphasis on technique and styles such as calypso, folk, blues, classical and jazz. Open to all Florida International University students.
MWV 3331 (MUP 375) MW 4341 (MUP 475) MW 5351 (MUP 575) srqb MUSIC - VOICE (1-2) (F,W,S,SS) Individual instruction in applied music in voice.
MVW 3333 (MUP 385) MVW 4345 (MUP 485) MVW 5353 (MUP 585) APPLIED MUSIC - WOODWINDS (1-2) (F,W,S,SS) Individual instruction in applied music on flute, oboe, clarinet, bassoon or saxophone.

## THEATRE MAJOR

## Campus Location: Tamiami Campus only

DEGREE: Bachelor of Fine Arts in Theatre
LOWER DIVISION PREPARATION:
Required Courses: Three semester hours each in acting and stagecraft. Equivalent life experience is acceptable upon approval.
Recommended Courses: Three-six semester hours in dance; three semester hours in voice for the stage; three semester hours in costuming; three semester hours in stage lighting; three-six semester hours in Theatre workshop.

## UPPER DIVISION PROGRAM:

The Theatre Program is production oriented. A student entering the program may elect to specialize in one of the following three areas: Performance (Acting-Directing), Production (Design-Technical Theatre) or Film. In addition to satisfactory completion of all course work, a Theatre major is required to participate (within his or her area of specialization) in at least half of all major productions presented during enrollment in the Theatre Program.

| Required courses: | Quarter Hours |
| :--- | :---: |
| Theatre History | $\mathbf{6 0}$ |
| Performance and Production | 5 |
| Theatre courses (in area of |  |
| selected emphasis) | 45 |
| Elective courses: |  |
| Theatre electives | 20 |
| Non-Theatre electives (minimum required) | 10 |

## COURSE OFFERINGS

## (by area of specialization)

## PERFORMANCE (Acting/Directing)

DAA 3820 (DAN 315) DANCE (5) (F,S) Basic stage movement. Development of the body as an instrument of expression. (May be repeated)
DAA 4821 (DAN 415) DANCE (5) ( $F$,S) With some basic movement experience, the student will do movement studies to develop impluses to rhythm and melody patterns. (May be repeated.)
TPP 3700 (THE 315) VOCAL TECHNIQUES (2) (F) Development of breath control, diction, resonance and related vocal music techniques. (For Theatre Majors only.)
ORI 3000 (THE 316) BASIC ORAL INTERPRETATION (5) (F) Development of the voice as an instrument for expressive interpretation of literature.
IPP 3100 (THE 317) ACTING (5) (W,S,SS) With a fundamental knowledge of stage nomenclature, vocal and physical performance skills, audition and rehearsal techniques, the student will focus on developing a character within a particular acting style. Extensive study and practice in scenes from period plays. (May be repeated.)
TPP 4230 (THE 417) ACTING (5) (F,W) With a thorough knowledge of all aspects of the actor's craft and a highly motivated background of performance experience, the actor will concentrate of refinement of ensemble playing techniques in a total performance situation. (May be repeated.)
TPP 3310 (THE 325) DIRECTING (5) (W) A study of fundamental directing principles. Areas included will be: choice of play and its analysis, casting, blocking, rehearsal techniques and coordination of cast and production personnel. Students will direct short scenes for performance. (May be repeated.)
TPP 4311 (THE 425) DIRECTING (5) (S) With a broad understanding of basic directing skills and some directing experience, focus will be on methods of unifying all production elements toward the finished performance. Students will direct a play for public performance. (May be repeated.)

## PRODUCTION (Design/Technical Theatre)

TPA 3200 (THE 335) STAGECRAFT (5) (F) A lecture-laboratory course covering the basic elements of scenery construction, painting, rigging and stage properties.
TPA 4201 (THE 435) STAGECRAFT (5) (F) Advanced studies of the scene technician's craft with emphasis on the creative use of modern materials and methods. Selection and cost of materials, multimedia effects, sound effects, advanced stage carpentry and stagecraft supervision will be covered.
TPA 3220 (THE 336) STAGE LIGHTING (5) (S) The study of elementary electricity, lights and circuits; basic techniques of designing and executing lighting for the stage.
TPA 3250 (THE 337) STAGE MAKEUP (5) (F) Fundamentals of straight and character makeup. The application of principles governing line, color, light and shade to makeup. Practical experience through production participation.
TPA 3060 (THE 345) THEATRE DESIGN (5) (W) Fundamentals of design for the theatre. Included are methods of analysis and research technical drawing and rendering.
TPA 4061 (THE 445) THEATRE DESIGN (5) (S) With a knowledge of the fundamentals of theatre design, the student will survey historical styles and work with advanced directing students to design and execute scenery for a play.
TPA 4230 (THE 431) STAGE COSTUMING (5) (F) Study of period costume design with emphasis on research techniques, design adaptation, cut fabric, and decorative detail for stage costume.
TPA 4231 (THE 432) STAGE COSTUMING (5) (W) A continuation of THE 531. Applied studies in design adaptation, pattern drafting and total costume.

## FILM

FIL 3506 (THE 357) INTRODUCTION TO FILMMAKING (5) (F,W,SS) For the beginning student of filmmaking. Survey of the origins and development of cinematography as an art form. Presentation and technical analysis of selected films.
FIL 3200 (THE 358) FILM PRODUCTION I (5) (W) Conceptual study of total-filmmaking. Equipment, procedures, locations, sets, actors, and production staff will be examined from the point of view of the director. Student will conceptualize, shoot and edit a short film. (Prerequisite: THE 357 or permission of the instructor. May be repeated.)
THE 4058 (THE 458) FILM PRODUCTION II (5) (S) Conceptual study of total-filmmaking. Equipment, procedures, locations, sets, actors, and production staft will be examined from the point of view of the director. Student will conceptualize, shoot and edit a short film. (Prerequisite: THE 358 or permission of the instructor. May be repeated.)

## SUPPLEMENTARY THEATRE ELECTIVES

SPC 3600 (SPE 305) PUBLIC SPEAKING (5) Study of the principles of ethical and effective public speaking with practice in the construction and delivery of original speeches before an audience. (For non-theatre majors only)
THE 3000 (THE 305) SURVEY OF THE THEATRE ARTS (5) A consideration of all the dramatic elements of the theatre; television, film and live theatre. Designed for the non-theatre student to generate an awareness and appreciation of the theatre. (For non-theatre majors only)
THE 3051 (THE 328) CHILDREN'S THEATRE (5) Techniques of selection, production and performance of plays for children. THE 3061 (THE 339) BLACK THEATRE TECHNIQUES (5) Study and practice of production methods unique to the Black performer and Black Theatre; i.e., making-up and lighting the Black performer, play selection, rehearsal techniques. (May be repeated.)
THE 4820 (THE 427) CREATIVE DRAMATICS (5) The study of informal drama activity with children. Techniques of improvisation, sense recall, music and movement are employed.
THE 4110 (THE 451) DEVELOPMENT OF THE THEATRE (5) A survey of theatre architecture, modes of production, major figures and trends in the theatre from its origins to early 19 th century.
THE 4111 (THE 452) DEVELOPMENT OF THE THEATRE (5) A continuation of THE 551 . Survey will be from early 19 th century to the present.
THE 4235 (THE 455) DEVELOPMENT OF BLACK THEATRE IN AMERICA (5) A historical survey of the Black performer in America. Primary emphasis on current trends in Black Theatre.
TPP 4600 (THE 465) PLAYWRITING Study of the theory and principles of writing plays for the stage. Practice in writing either the short or long play. (May be repeated.)
TPA 4400 (THE 475) THEATRE MANAGEMENT (5) Survey of all aspects of theatre administration: i.e. budget planning and maintenance; public relations; box office and house management; unions and contracts.
THE 4950 (THE 485) PERFORMANCE AND PRODUCTION (VAR 1-15) Supervised work in university, community, or professional theatre production on an internship basis. Credit will vary with amount of time and responsibility involved. (If taken for less than maximum credit, may be repeated for a total of not more than 15 quarter hours.)
THE 4916 (THE 495) RESEARCH (1-5) Supervised individual investigation of special research projects. Credit will vary with the nature and scope of the project. (May be repeated.)

## GRADUATE COURSES

THE 5940 (THE 585) PERFORMANCE AND PRODUCTION (1-15) (F,W,S,SS) Supervised work in university, community, or professional theatre production on an internship basis. Credit will vary with amount of time and responsibility involved. (If taken for less than maximum credit, may be repeated for a total of not more than 15 quarter hours.)
THE 5916 (THE 595) RESEARCH (1-5) (F,W,S,SS) Supervised individual investigation of special research projects. Credit will vary with the nature and scope of the project. (May be repeated)

## HISTORY MAJOR

Campus Location: Tamiami Campus only<br>DEGREE: Bachelor of Arts *Students interested in teacher certification see note on page 5. LOWER DIVISION PREPARATION:

## Required Courses: None

Remark: 6 semester hours of advanced history courses may be counted toward the upper division major.

## UPPER DIVISION PROGRAM:

Required Courses:
HIS 3001 (HIS 301) Introduction to History 5
Courses in the following areas:

1. Medieval History 5
2. Modern European History 5
3. U.S. History 5
4. Asian, African, Latin American or Caribbean History 5

General History Courses 20
These catagories are indicated by bracketed numbers at the end of course description.
Electives: 45

## COURSE OFFERINGS

HIS 3001 (HIS 301) INTRODUCTION TO HISTORY (5). A study of why and how people read and write history. Emphasis will be upon the uses of history and historians' assumptions. Required of all majors and those seeking certification to teach history.
HIS 3308 (HIS 302) WAR ANO SOCIETY (5). 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.
EDF 3521 (HIS 303) EDUCATION IN HISTORY (5). An examination of the concepts of childhood and process of social initiation in differing historical contexts.
EUH 3100 (HIS 304) THE ANCIENT NEAR EAST (5). A survey of the history of ancient Mesopotamia, Egypt and Israel. The course will stress the interaction of their social structure with the religion of the three societies.
EUH 3420 (HIS 305) GREECE AND ROME (5). An examination of the society, politics and culture of Ancient Greece and Rome.
EUH 3186 (HIS 309) HISTORY OF KING ARTHUR AND THE KNIGHTLY LEGEND (5). A study of Arthurian romance from the 12 th to the 15 th 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 3142 (HIS 313) RENAISSANCE ANO REFORMATION (5). A study of the development of humanism in Italy and Protestantism in Germany and the impact of these new philosophies on Europe in the fourteenth, fifteenth and sixteenth centuries. [2]
EUH 3452 (HIS 316) THE FRENCH REVOLUTION AND THE ENLIGHTENMENT (5). An examination of the intellectual and social origins of the French Revolution. It will focus upon the old regime in France, the ideas of Rousseau and the philosophies and traditions of social protest in the 18th century. [2]
EUH 3460 (HIS 317) GERMANY FROM CHARLEMAGNE TO HITLER (5). An overview of German history with special emphasis on the development of the National Socialist movement. Political, economic, social, cultural and religious aspects of German history will be covered. [2]
AMH 3570 (HIS 322) AFRO-AMERICAN HISTORY 4 (5). A survey of Black society in the United States and its relation to the political, economic, social and cultural history of America. [3]
AMH 3440 (HIS 325) THE GREAT AMERICAN WEST (5). 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]
HIS 3244 (HIS 326) HISTORY OF COMMUNISM (5). A survey of the history of communism from the writings of Marx through the Soviet, Chinese, and Cuban revolutions. The course will consider communism both in theory and in practice.
AMH 3130 (HIS 327) THE AMERICAN REVOLUTION (5). An exploration of the nature of the Revolution from the beginning of the conflict in 1763 through the ratification of the Constitution in 1789. It will probe the political and economic differences between the colonists and England, along with the meaning that the war had to the different classes of Americans. [3]
AMH 3170 (HIS 328) CIVIL WAR AND RECONSTRUCTION (5). The course will examine the rise and sources of militant sectionalism in the United States, the war itself and the restoration of the nation. [3]
AMH 3354 (HIS 329) AMERICAN PRESIDENTS: WASHINGTON TO MCKINLEY (5). This course will examine the personalities, policies and politics of American presidents in the 18th and 19th centuries. [3]
AMH 3355 (HIS 330) TWENTIETH CENTURY AMERICAN PRESIDENTS (5) This course will examine the personalities, policies and politics of American presidents from Theodore Roosevelt to the present. [3]
AMH 3251 (HIS 331) THE GREAT DEPRESSION (5). This course deals with the experience of the American people in the Great Depression of the 1930s. It examines causes of the depression, government response, and effectiveness of response as well as looking at the actual daily experience of people with depression and the changes depression made in U.S. society. [3] AMH 3270 (HIS 332) CONTEMPORARY U.S. HISTORY (5). An examination of the major trends, forces and personalities that have shaped the recent American past. [3]
AMH 3275 (HIS 333) THE KENNEOY ERA (5). This course will explore the image and reality of the Kennedy family's impact on recent American history, within the context of recent American political and social history. [3]
AMH 3500 (HIS 334) UNITED STATES LABOR HISTORY (5). A history of the experience of working class people in the United States and of the trade union movement from colonial times to the present. [3]
WOH 3244 (HIS 336) THE WORLD SINCE HITLER, STALIN AND ROOSEVELT (5). An examination of the world wide political struggle between capitalism and communism. The course will stress domestic as well as international power-political rivalries. Special emphasis will be given to Japan, China, Cuba, France, the United States, India and Eastern Europe.
EUH 3601 (HIS 337) MEDIEVAL CULTURE (5). Selected topics in the cultural history of Europe from 500 to 1500: epic and knightly romance; Christian theology and spirituality; scholastic philosophy; Romanesque and Gothic arts; the rise of literature in the vernacular; the culture of the layman and the contribution of women. [1]
EUH 3611 (HIS 338) EUROPEAN CULTURAL HISTORY (10). An examination of changes in the social and political structure of Europe through film, art and literature. This is an introductory course to both European social history and cultural history in the last two hundred years. [2]
EUH 3203 (HIS 339) EUROPE IN THE 17TH CENTURY (5). An examination of the "radical century" which defined many of the values of the modern age: the work ethic, the scientific view of nature, the notion of market society, the modern state and bourgeois ideology. The course will emphasize the Puritan Revolution in England and rise of absolute monarchy in France. [2]
EUH 3570 (HIS 340) RUSSIAN HISTORY (5). 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]
WOH 3283 (HIS 342) JEWISH HISTORY (5). A survey of the major currents of Jewish history.
WOH 3280 (HIS 343) WOMEN'S HISTORY (5). A survey of the position of women in the major world civilizations. The course examines the position of women from the stone age to the present with particular attention to both women's actual function in society and the ideal definition of womanhood in different societies.

EUH 3576 (HIS 344) THE RUSSIAN REVOLUTION AND THE SOVIET UNION (5). 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]
AMH 3331 (HIS 345) AMERICAN INTELLECTUAL HISTORY I (5). 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 collation of dominant American national characteristics. [3] AMH 3332 (HIS 346) AMERICAN INTELLECTUAL HISTORY II (5). This course will emphasize the full-flowering of individualistic liberalism in the 19 th century American thought and trace the implications and reaction against this tradition down to the present. [3]
AMH 3317 (HIS 347) AMERICA AND THE MOVIES (5). An examination of the social and cultural history of the 20th century United States through its movies. [3]
AMH 3560 (HIS 348) HISTORY OF WOMEN IN THE UNITED STATES (5). A survey of the changing dimensions of women's lives from the colonial era of U.S. history to the present. The course will examine the changing economic, social and political position of women as well as the development of feminist movements and organizations. 13)
AMH 3420 (HIS 349) FLORIDA HISTORY (5). A history of Florida from the time of the Indian until today. The course covers political, economic, social and cultural developments, and gives special attention to the dependent position of Florida in the economy and the impact of this dependence on resources and people. (3]
HIS 3473 (HIS 350) THE HISTORY OF SCIENCE AND TECHNOLOGY (5). This course will examine the history of Western Civilization in terms of the development of science and technology. It will focus upon the invention of new techniques and productive processes and upon the way technology and science have shaped western society, particularly in regard to art and ideas.
AMH 3428 (HIS 351) MIAMI SOCIAL HISTORY (5). An examination of the history of South Florida and of the ethnic groups which make up the Miami population, particularly Blacks, Jews, Cubans and White Southerners. [3]
LAH 3482 (HIS 352) MODERN CUBA (5). An overview of the socio-conomic and political setting in Cuba since the mid-nineteenth century. [4]
LAH 3410 (HIS 353) MEXICO AND THE CARIBBEAN (5). An overview of the themes that have generated the histories of several nations in and around the Caribbean since the nineteenth century. [4]
HIS 3930 (HIS 397-398) SPECIAL TOPICS (VAR). An examination of specific themes or topics in history. The theme will vary from quarter to quarter. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule).
EUH 4121 (HIS 402) EUROPE IN THE EARLIER MIDDLE AGES (5) A history of Europe from the Fall of the Roman Empire in the West (ca. 500 AD ) to the First Crusade (1095). The formation of fedual society, the military upper class, the imperial papacy, the monastic order, the interplay between Christian and wordly ideals. [1]
EUH 4123 (HIS 403) EUROPE IN THE LATER MIDDLE AGES (5) Europe from the twelfth through the fifteenth centuries. The formation of territorial states and an aristocratic order of status: Romanesque and Gothic arts; courtly romance and chivalry; development of subjectivity and individual self-consciousness - the spiritual and cultural redemption of this world. Heresy, inquisition, social revolution. [1]
EUH 4200 (HIS 422) EARLY MODERN EUROPE, 1500-1650 (5) An examination of the major events and movements which signaled the beginning of modernization in Europe: the voyages of discovery, the new representations in art and the rise and triumph of religious dissent. [2]
EUH 4201 (HIS 423) EARLY MODERN EUROPE, 1650-1789 (5) An examination of European society as it developed between the English Civil War and the French Revolution. The consolidation of the "Old Regime". [2]
EUH 4205 (HIS 428) MODERN EUROPE, 1789-1900 (5) This course will examine the two major revolutions which have shaped our own time: the French Revolution and the Industrial Revolution beginning with Rousseau, the course will explore industrializing England and end with an analysis of European politics and culture on the eve of World War I. [2]
EUH 4206 (HIS 429) MODERN EUROPE, 1900-PRESENT (5) An examination of Europe from the First World War to the present. The course will explore the impact of industrialization, and the World Wars and the rise of fascism and communism. [2]
EUH 4286 (HIS 431 -434) TOPICS IN EUROPEAN HISTORY (5) An examination of selected topics or themes in Early Modern and Modern European history. The themes will vary from quarter to quarter. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). [2]
AMH 4110 (HIS 440) COLONIAL US HISTORY, $1600-1750$ (5) This course will examine the American colonial experience from the earliest settlements at Jamestown and Plymouth to the eve of the American Revolution. Particular emphasis wil be on religion, social structure, politics and slavery. [3]
AMH 4150 (HIS 441) THE US IN THE NATIONAL PERIOD, $1750-1830$ (5) An examination of American history from the American Revolution through the Age of Jackson. It will emphasize the growth of democratic politics and political parties, the spirit of nationalism, the problem of slavery, and the Westward Movement. [3]
AMH 4025 (HIS 442) THE UNITED STATES IN THE 19TH CENTURY (5) This course will cover the period characterized by "laissez faire" ideology from Jackson to McKinley. It will focus upon developments in national politics and how they reflect economic growth and changes in the social structure. [3]
AMH 4030 (HIS 443) TWENTIETH CENTURY UNITED STATES HISTORY (5) This course will cover the history of the US from the election of McKinley in 1896 to the Watergate crisis of the 1970s. [3]
AMH 4930 (HIS 451-459) TOPICS IN US HISTORY (5) An examination of selected topics or themes in US history. The themes will vary from quarter to quarter, with a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). [3]
LAH 4132 (HIS 461) COLONIAL LATIN AMERICA: THE FORMATIVE PERIOD (5) An examination of Latin America in the Formative Period, focusing upon the Iberian experiences, reconquest, conquest, ethnic amalgamation, the economy and social organization in the 15 th and 16 th centuries. [4]
LAH 4133 (HIS 462) COLONIAL LATIN AMERICA: THE MATURE PERIOD (5) An examination of Colonial Latin America in the 17 th and 18 th centuries. The course will focus upon the formation of the landed estate, urban functions, labor, and Indian relations, the Church and the Enlightenment. [4]

LAH 4201 (HIS 463) LATIN AMERICA: THE 19 Th CENTURY (5) A review of important issues of nation-building in the more influencial Latin American countries. Topics will include federalism, centralism, immigration, economic development and imperialism. [4]
LAH 4300 (HIS 464) LATIN AMERICA: THE MODERN PERIOD (5) A review of topics in the histories of selected Latin American nations that have developed since the late 19th century, including race relations, dictatorship, modernization, capitalism, and leftist and rightist solutions. [4]
EUH 4187 (HIS 465-469) TOPICS IN MEDIEVAL EUROPEAN HISTORY (5) An examination of selected topics or themes in Medieval history. The themes will vary from quarter to quarter. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). [1]
LAH 4932-EDF 4521 -HIS 4306 (HIS 472-474) TOPICS IN LATIN AMERICAN HISTORY (5) An examination of selected topics or themes in Latin American History. The themes will vary from quarter to quarter. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). [4]
LAH 4474 (HIS 480-485) TOPICS IN CARIBBEAN HISTORY (5) An examination of selected topics or themes in Caribbean History. The themes will vary from quarter to quarter. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). [4]
HIS 4930 (HIS 497-498) SPECIAL TOPICS (VAR) An examination of specific themes or topics in history. The theme will vary from quarter to quarter. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule).
HIS 4930 (HIS 499) INDEPENDENT STUDY (VAR) Individual conferences, assigned readings, reports on independent investigations with the consent of the Chairman.
HIS 5289 (HIS 500-508) COMPARATIVE HISTORY (5) A study of specific topics in history that cut across regional, national and chronological lines. The topics will change from quarter to quarter, and with a change in content, the course may be repeated. (The topic of the course will be announced in the yearly schedule).
HIS 5910 (HIS 520) ADVANCED RESEARCH AND SEMINAR (5) Small group sessions which will analyze particular subject areas in history. With the consent of the Chairman.
HIS 5934 (HIS 597-598) SPECIAL TOPICS (VAR) An examination of specific themes or topics in history. The theme will vary from quarter to quarter. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule).
HIS 5908 (HIS 599) INDEPENDENT STUDY (VAR) Individual conferences, assigned readings, reports on independent investigations with the consent of the Chairman.

## INTERNATIONAL RELATIONS MAJOR

Campus Location: Tamiami and North Miami Campuses
DEGREE: Bachelor or Arts
LOWER DIVISION PREPARATION:
Recommended Courses: Economics, foreign language, geography, history, international relations, introduction to statistics, political science, sociology.

## UPPER DIVISION PROGRAM: <br> Major:

Quarter Hours
Required Courses: 15
INR 3003 INR 301 Foundations of International Relations
GEA 3000 INR 334 World Regional Geography
INR 423 Approaches to International Relations

## Breadth Requirements:

At least one course in each of the following four fields: area studies (regional courses on Europe, the Caribbean, Latin America, Africa, Asia, or the Soviet Union); population studies or geography; international law; issues and problems in international relations.
Other Requirements:
Ten additional credits in international relations of which 5 must be taken within the department and 5 may be in approved internationally related courses from other departments or schools (for example: political science, economics, sociology, business, hotel, food, and travel)

## Electives:

Courses designed to meet particular professional goals. The student is encouraged to consider a double major in
related fields, to pursue courses in foreign languages and methodology, and to work toward appropriate academic certificates (i.e., Caribbean Studies, Latin American Studies)
Minor:
Required Courses: Any five lecture courses
THE DUAL MAJOR: The student is encouraged to pursue a dual major within the 90 quarter hour upper division requirement: the balance of 45 quarter hours between the 90 required to graduate and the 45 required for the major in International Relations is almost always sufficient to satisfy the requirements of a second major. The dual major program allows a student to add important international dimension (and certification) to other academic fields.

## COURSE OFFERINGS

INR 3003 (INR 301) FOUNDATIONS IN INTERNATIONAL RELATIONS (5) An examination of the international political, economic, and social systems. Emphasis is placed on basic approaches to the study of international relations.
INR 3004 (INR 302) PATTERNS OF INTERNATIONAL RELATIONS (5) 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 co-existence of the several concepts during the 20th century, and to provide an outline of modern diplomatic history.
INR 3081 (INR 312) ISSUES AND PROBLEMS IN INTERNATIONAL RELATIONS (5) Examines selected worid and regional issues and problems. Topics vary according to the instructor.
INR 3031 (INR 323) THE FUTURE OF THE INTERNATIONAL SYSTEM (5) Explores probable and improbable international futures through the use of simulations, gaming, and speculative literature. Focuses upon alternatives to present international arrangements.
INR 3502 (INR 324) INTERNATIONAL ORGANIZATIONS (5) The study of international political, economic, and social organizations and their impact upon the relations between nations. Emphasis upon the constitution, voting, membership, security and operation of such organizations, and the settling of international disputes through these bodies.
PUP 3206 (INR 325) INTERNATIONAL LAW AND THE ENVIRONMENT (5) 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 U.N. Environmental Agency.
INR 3274 (INR 333) INTERNATIONAL RELATIONS OF THE MIDDLE EAST (5) 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.
GEA 3000 (INR 334) WORLD REGIONAL GEOGRAPHY (5) 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.
CPO 3326 (INR 341) POPULATION AND GEOGRAPHY OF THE CARIBBEAN (5) Introduction to the physical, cultural and political geography of the Caribbean. Emphasis on population patterns, problems of population growth and ethnicity.
INR 3245 (INR 342) INTERNATIONAL RELATIONS OF LATIN AMERICA (5) An examination of international, social, economic, and political life of Latin America. Emphasis given to the role of international organizations, regionalism, and the trend toward economic integration.
INR 3214 (INR 343) INTERNATIONAL RELATIONS OF EUROPE (5) An examination of the international, social, economic, and political life of contemporary Europe. Emphasis given to international organizations and the trend toward economic and political integration.
INR 3246 (INR 344) INTERNATIONAL RELATIONS OF THE CARIBBEAN (5) An examination of the international social, economic, and political life of the Caribbean. Includes English, Spanish, and French speaking regions.
INR 3043 (INR 345) POPULATION AND SOCIETY (5) Introduction to basic demographic concepts: fertility, mortality, migration, urbanization. Economic development, modernization and population change. Sources of data and background information; censuses, vital statistics, and their utilization.
GEA 3554 (INR 351) POPULATION AND GEOGRAPHY OF THE SOVIET UNION (5) An analysis of the U.S.S.R. in terms of its resources, economic development, and aspects of population change such as migration, urbanization, and nationality groups.
GEA 3600 (INR 352) POPULATION AND GEOGRAPHY OF AFRICA (5) Introduction to the physical, cultural, and political geography of Africa. Emphasis on the evolution of independent states, and economic development.
INR 3226 (INR 353) INTERNATIONAL RELATIONS OF SOUTH ASIA (5) A study of South Asia as a regional international system with special emphasis on the period 1945-1975. Interaction between the regional and world systems. Role of the superpowers.
(INR 356) TOURISM AND INTERNATIONAL AFFAIRS (5) An introduction to basic elements of international tourism; an inquiry into the transnational influence of tourism as affected by its institutional organization, by the leisure traveler, and by the host national; and a review of opportunities for policy-making by the group, the State, international and global agencies.
GEA 3400 (INR 362) POPULATION AND GEOGRAPHY OF LATIN AMERICA (5) Introduction to the physical, cultural, and political geography of Latin America. Emphasis on population patterns and problems of population gruwiti, systems of land use and tenure, economic development, natural resources, and agriculture.
GEA 3630 (INR 373) POPULATION AND GEOGRAPHY OF THE MIDDLE EAST (5) Introduction to the physical, cultural, and political geography of the Middle East. Emphasis on population patterns, natural resources, and economic development.
INR 4283 (INR 401) INTERNATIONAL RELATIONS, DEVELOPMENT, AND THE THIRD WORLD (5) An examination of the
impact of the theory and practice of development and the relations between nations, with particular emphasis on the Third World. Attention given to the role of international political and economic organizations in the development process.
INR 4905 (INR 407) INDEPENDENT STUDY (VAR)
$\qquad$ (INR 423) APPROACHES TO INTERNATIONAL RELATIONS (5) Analysis and conceptualization od the forces and background conditions which influence the relations among nations. Emphasis is on the provision of an analytical basis for the study of international relations. Prerequisite: INR 301 or permission of instructor.
POS 4692 (INR 424) LAW AND THE PROCESS OF CHANGE (5) An exploration of the role of law and legal institutions in the process of modernization with particular emphasis on developing countries.
INR 4408 (INR 425-429) TOPICS IN INTERNATIONAL LAW (5) An intensive examination of selected topics in international law and the relations among nations. Topics will vary according to the interests of the instructor and the students.
INR 4417 (INR 439) INTERNATIONAL RELATIONS AND INTERNATIONAL LAW (5) World order and international relations. Current trends in the theory and practice of international law. Progressive development of international law through international institutions in such matters as intervention, use of force, human rights, and the law of the sea.
INR 4245 (INR 444) CARIBBEAN REGIONAL RELATIONS (5) An examination of the forces and institutions contributing to or inhibiting cooperation and integration in the Caribbean. Prerequisites: INR 344, POS 307, ECO 408, or ECO 409.
INR 4054 (INR 445) WORLD RESOURCES AND WORLD ORDER (5) 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, in addition to an assessment of the international economic and political implications deriving therefrom.
INR 4024 (INR 453) ETHNICITY AND NATIONALITY: WORLD PATTERNS AND PROBLEMS (5) A systematic survey of multinational states and their current political and socioeconomic situations. The concept of ethnicity and its correlates. Conceptual basis of ethnic integration, assimilation, and stratification. The macro and micro scales: country, region, city, neighborhood. The consequences of modernization and economic development.
INR 4044 (INR 456) WORLD POPULATION PROBLEMS (5) 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 345.
INR 4931 (INR 461-465) TOPICS IN INTERNATIONAL RELATIONS (5) Varies according to the instructor.

- (INR 467) ALTERNATE TOURISM SCENARIOS AND STRATEGIES (5) A course for the student familiar with tourism in the context of international affairs; tourism as migratory aspect, tourism as international medium, tourism and the export of technology, tourism and national dependency, the marketing of globalism through tourism; others. The course includes strategies laboratory.
INR 4033 (INR 471) INTERNATIONAL COMMUNICATION (5) The course will explore language as the medium of national and international communication, in its multiple and often conflicting roles of unifier and isolator of political and social entities.
INR 5906 (INR 518) INDEPENDENT STUDY (VAR)
- (INR 534) TOPICS IN SOCIAL GEOGRAPHY (5) Topics discussed include geographic aspects of population and ethnicity, with and emphasis on sources and analysis of data and pertinent concepts. Prerequisites: INR 334 or permission of instructor.
INR 5086 (INR 572-575) TOPICS IN INTERNATIONAL RELATIONS (5) Varies according to the instructor.


## LIBERAL STUDIES MAJOR

The purpose of the Liberal Studies Program is to expose students to the broadest range of courses offered in the College while at the same time giving them the opportunity to pursue individualized programs of studies under the Liberal Studies guidelines. These guidelines comprise four categories of course listings: (1) Periods: Ancient, Medieval, Modern, including courses which will present perspectives on the historical development of civilizations and disciplines; (2) Cultures: Western and Non-Western, including courses which will present social and cultural patterns and processes of cultural, ethnic and national groups world wide; (3) Ways of Knowing and Expression, including courses which give the student frameworks or paradigms with which to organize, interpret, and understand insights and data from many disciplines; and (4) Human Ecology, including courses concerned with social, cultural, psychological, and biological adaptations of human beings to their environments. Liberal Studies majors are also required to take 10 hours of interdisciplinary Colloquia or the approved equivalent.

Students are free to choose any combination of topics, courses, disciplines, and electives as long as the Liberal Studies requirements are met.

Under the advisement of the Director of Liberal Studies the student will be encouraged to pursue an individualized and focused program.
CAMPUS LOCATION: Tamiami Campus only
DEGREE: Bachelor of Arts
LOWER DIVISION PREPARATION:
Required courses: noneRecommended courses: Arts and Sciences concentration recommended
UPPER DIVISION PROGRAM:
Major: ..... Quarter Hours
Required courses:
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:
Periods: Ancient, Medieval, Modern ..... 10
Cultures: Western and Non-Western ..... 10
Methods: Knowledge and Communication ..... 10
Human Ecology: Natural and Social Systems ..... 10
Interdisciplinary courses offered by the Liberal Studies Pro- gram or equivalent College courses approved by the Pro- gram of Liberal Studies ..... 10
Electives: ..... 40

Remarks: If the student wishes to obtain a second major concurrently, no more than fifteen hour credits taken to meet the requirements of the major may be counted towards the requirements of Liberal Studies. If he wishes to obtain a minor concurrently no more than ten hour credits taken to meet the requirements of the minor may be counted towards the requirements of Liberal Studies.

## COURSE OFFERINGS

IDS 4920 (LIS 450-59) LIBERAL STUDIES COLLOQUIA (5) Individual sections will study, from an interdisciplinary perspective, issues selected and presented jointly by College faculty. Specific topics will be announced in advance.
IDS 4905 (LIS 490-99) INDEPENDENT LIBERAL STUDY (VAR) Cross-disciplinary topics for individual study and research to be chosen by the student in consultation with his faculty advisor.

## MATHEMATICS MAJORS

MATHEMATICS, STATISTICS, COMPUTER SCIENCE, MATHEMATICAL SCIENCE
DEGREE: Master of Science in Mathematical Sciences. Contact the Chairman of the Mathematical Sciences Department for further information.
DEGREE: Bachelor of Science

## MATHEMATICS

Location: Tamiami Campus only
LOWER DIVISION PREPARATION
Required Courses: calculus including multivariable calculus; introductory course in computer programming; linear algebra; differential equations.
Remarks: If an entering mathematics major student has not met a lower division requirement, the equivalent course must be taken at the University, and will be counted as a nonmajor elective. The equivalent courses are: MAS 301-302-303 (Calculus), MAS 311 (Programming), MAS 345 (Linear Algebra), and MAS 325 (Differential Equations).
UPPER DIVISION PROGRAM:
Major:
Quarter Hours
Required Courses:
MAS 4301 (MAS 480) Algebraic Structures 5
MAA 4211 -MAA 4212 (MAS 451-452) Advanced Calculus 10
At least two of the following two-term sequences: ..... 10
STA 3321-STA 3322 (MAS 331-332) Introduction to Mathematical Statistics ..... 10
MAP 4401-MAP 4402 (MAS 425-426) Mathematical Methods in the Physical Sciences ..... 10
MAP 3103-MAP 3104 (MAS 361-362) Mathematical Models and Applications ..... 10
MAS 4301-MAS 4302 (MAS 480-481) Algebraic Structures ..... 10STA 5446-STA 5447 (MAS 521-522) Probability TheoryAdditional MAS courses20 or 25
Electives:45

Remarks: (1) If MAS 331-332 is not completed, MAS 335 must be taken as a non-major elective. (2) The student must consult his or her advisor at the University to determine which MAS courses, in addition to required courses specified above, satisfy the requirements for a mathematics major. (3) The student whose interests are more directly in statistics or computer science should consult those programs of study below.
Minor:
Quarter Hours
Required Courses:
MAC 3411 (MAS 301) MAC 3412 (MAS 302) MAC 3413
(MAS 303) Calculus I, II, III (Unless previously taken) 15
MAS courses approved for the Mathematics Major program 20

Remarks: No MAS courses can be applied to more than one minor nor can courses used to satisfy major requirements be used towards minor requirements. In the case where an MAS 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 requirements of the minor.

## STATISTICS

LOCATION: Tamiami Campus only LOWER DIVISION PREPARATION:

Required Courses: calculus including multivariable calculus; introductory course in computer programming; linear algebra.
Remarks: If an entering statistics major student has not met a lower division requirement, the equivalent course must be taken at the University, and will be counted as a non-major elective. The equivalent courses are: MAS 301-302-303 (Calculus); MAS 311 (Programming); MAS 345 (Linear Algebra).

## UPPER DIVISION PROGRAM: <br> Major:

Quarter Hours
Required Courses: 45
STA 3321 (MAS 331) Introduction to Mathematical Statistics I 5
STA 3322 (MAS 332) Introduction to Mathematical Statistics II

5
STA 3163 (MAS 335) Introduction to Statistical Analysis I 5
STA 3164 (MAS 336) Introduction to Statistical Analysis
II 5
MAA 4211 (MAS 451) Advanced Calculus I 5
MAA 4212 (MAS 452) Advanced Calculus II 5
Additional MAS courses with at least two statistical courses 15
Electives:

Remarks: Statistics courses are listed under mathematical sciences (MAS). The student must consult his or her advisor at the University to determine which MAS courses, in addition to the required courses listed above, satisfy the requirements for a statistics major. Minor:

Quarter Hours
Required Courses:
STA 3321-STA 3322 (MAS 331-332) Introduction to
Mathematical Statistics I and II
STA 3163-STA 3164 (MAS 335-336) Introduction to
Statistical Analysis I and II

20
Remarks: No MAS courses can be applied to more than one minor nor can courses used to satisfy major requirements be used towards minor requirements. In the case where an MAS 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 requirements of the minor.

## COMPUTER SCIENCE

Campus Location: Tamiami and North Miami Campuses
LOWER DIVISION PREPARATION: As a part of the 90 quarter hours ( 60 semester hours) of lower division coursework necessary to enter this upper division major, note the following recommendations and/or course requirements.

Required Courses: Computer Programming in assembly language and in some high level language.
Students entering without equivalent background are required to take some or all of the following courses as non-major electives.

Introduction to Computer Programming: COP 3210 (MAS 311)
Assembly Language Programming: (MAS 312 or 324)
COBOL and Data Processing: COP 3200 (MAS 315)
Recommended Courses: College Algebra
Students who have not taken College Algebra should elect MAC 3142 (MAS 317) (Pre-Calculus Mathematics) as their first mathematics course at FIU.
UPPER DIVISION PREPARATION:
Required Courses:
Quarter Hours
MAC 3233 (MAS 321) Calculus for Management and Social Sciences

5
or
MAC 3411 (MAS 301) MAC 3412 (MAS 302) Calculus I-II 10
STA 3161 (MAS 322) Statistics for Management and Social Sciences 5

## or

STA 3163 (MAS 335) Introduction to Statistical Analysis I
5
MAD 3104 (MAS 375) Discrete Mathematics 5
(MAS 313) Programming Methodology 5
COP 3530 (MAS 377) Data Structures 5
(MAS 403) Structured Computer Organization 5
COP 4610 (MAS 415) Operating Systems Principles 5
Plus one course each from the following two lists:
List 1
MAD 3305 (MAS 351) Graph Theory
MAD 3401 (MAS 365) Numerical Analysis
MHF 4302 (MAS 405) Mathematical Logic
COT 4320 (MAS 475) Theory of Computations
List 2
CDA 3110 (MAS 314) Computer Hardware Fundamentals
CDA 4213 (MAS 416) Data Communications

CDA 4300 (MAS 417) Minicomputer Architecture and Applications
CAP 4721 (MAS 418) Computer Graphics
COP 5545 (MAS 516) Data Base and File Organization
COP 5640 (MAS 518) Programming Systems
Electives:

Remarks: Computer Science Courses are listed under Mathematical Sciences. The student must consult his advisor at FIU concerning those MAS courses which can be used to satisfy the requirements for a Computer Science Major.
Minor:
Quarter Hours
Required Courses: 25
COP 3210 (MAS 311)*, (312)* or (324)* Introduction to Computers I-II 10
$\qquad$
COP 320
(MAS 313) Programming Methodology 5
(MAS 315)* Introduction to Data Processing \& COBOL

5
Elective: One other course in Computer Science at the 300 or 400 level acceptable for the major program

25
*This course may be replaced by equivalent lower division coursework. However, a minimum of 20 quarter hours must be taken in computer science at the University, and must be selected from those courses approved for the computer science major program.

Remarks: No MAS courses can be applied to more than one minor nor can courses used to satisfy major requirements be used towards minor requirements. In the case where an MAS 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 requirements of the minor.

## MATHEMATICAL SCIENCES

Campus Location: Tamiami Campus only
LOWER DIVISION PREPARATION:
Required Courses: calculus including multivariable calculus; introductory courses in computer programming and assembly language; linear algebra; differential equations
Remarks: If an entering major student has not met a lower division requirement, the equivalent course must be taken at the University, and will be counted as a non-major elective. The equivalent courses are MAC 3411 (MAS 301) MAC 3412 (MAS 302) MAC 3413 (MAS 303) (Calculus), COP 3210 (MAS 311-312) (introductory programming and assembly language), MAS 3101 (MAS 345) (Linear Algebra), and MAP 3302 (MAS 325) (Differential Equations).

UPPER DIVISION PROGRAM:
Major:

## Quarter Hours

Required Courses: 45

STA 3163 (MAS 335) STA 3164 (MAS 336) Introduction
to Statistical Analysis

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10
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MAP 3103 (MAS 361) MAP 3104 (MAS 362)
Mathematical Models and Applications 10
MAD 3401 (MAS 365) Numerical Analysis 5


Remarks: No MAS courses can be applied to more than one minor nor can courses used to satisfy major requirements be used towards minor requirements. In the case where an MAS 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.

## COURSE OFFERINGS

COP 3170 (MAS 300) INTRODUCTION TO COMPUTER PROGRAMMING (3) (F,W,S,SS) An introduction to the BASIC computer language and to the use of the interactive and batch facilities of the computer.
MAC 3411 (MAS 301), MAC 3412 (MAS 302) CALCULUS - 11 (5-5) (F,W,S,SS) An introduction to the basic concepts, computations, and applications in the calculus. The first course deals with basic concepts, techniques and applications of the derivative and an introduction to the integral. The second course deals with integration techniques and applications of the integral, an introduction to multivariable calculus, infinite series, and Taylor series. Prerequisite: Trigonometry or MAS 317.
MAC 3413 (MAS 303) MULTIVARIABLE CALCULUS (5) (F,S,SS) 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: MAS 302 (or equivalent).
STA 3132 (MAS 304), STA 3133 (MAS 305), QMB 3150 (BUA 305) QUANTITATIVE METHODS FOR ADMINISTRATION I and II (5-5) (F,W,S,SS) The use of statistical tools in management. Starting with an introduction to probability, the course provides an introduction to a wide range of statistical techniques used in management sciences. It includes descriptive statistics, statistical inference, testing of hypotheses, regression and correlation analyses, and special topics such as construction of index numbers and time series analysis. The use of quantitative tools in management. Statistical methods, testing, and other quantitative applications to management are drawn together to provide tools for management efficiency.
STA 3013 (MAS 306) STATISTICS FOR HEALTH AND SOCIAL SCIENCES (5) (F,W,S,SS) 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 how to analyze experimental data.
STA 3122-STA 3123 (MAS 307-308) INTRODUCTION TO STATISTICS I-II (5-3) (F,W,S,SS) 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.
MGF 3113 (MAS 309) THE SIGNIFICANCE OF MATHEMATICS (5) (W) A course for non-science majors directed toward students with little or no assumed background in mathematics. The objective is to convince the student that mathematics is fun, interesting and useful. Topics may include: logical reasoning, unsolved problems of arithmetic, probability and statistics, geometry, topology, computers.
COC 3400 (MAS 310) COMPUTERS AND SOCIETY (5) (S) A course for the citizen who is interested in the effects of computers upon our society. The major focus will be upon social, political and ethical considerations: what computers are; how they work; applications, such as data banks, government uses, simulation; considerations such as privacy and the police state, the cashiess society, computers and business, computers and the quality of life, systems analysis and the planned society. The course is oriented toward the non-scientist and requires no background in mathematics, computer science, or social science. As part of the course, students will learn to write and run a simple computer program.
COP 3110 (MAS 311) INTRODUCTION TO COMPUTERS I (5) (F,W,S,SS) A course in the fundamentals of digital computer programming. The concept of an algorithm; flow charting; programming; testing and debugging. Numerical and non-numerical techniques. The syntax and semantics of FORTRAN IV.

COP 3100 (MAS 312) INTRODUCTION TO COMPUTERS II (5) (W,S) Principles and techniques of digital computers, with emphasis on machine language and assembly language programming. Internal representation of numeric and non-numeric information; registers, indexing and computer structure; arithmetic, logical and input-output instructions; fixed and floating arithmetic. Prerequisite: MAS 311 or equivalent.
COP 3550 (MAS 313) PROGRAMMING METHODOLOGY (5) (F,S) This course covers BNF, ALGOL, structuring of programs, program documentation, debugging and testing, top down design, and a project for practical experience in these techniques. Prerequisite: MAS 312 or equivalent.
CDA 3040 (MAS 314) ETE 3650 (COT 302) COMPUTER HARDWARE FUNDAMENTALS (5) (W,SS) This course concentrates on two major areas. The first considers computer number systems, logic gates and Boolean algebra. The second treats the arithmetic element, computer memories, input-output and computer organization. Emphasis is placed on the latter topics. Prerequisite: MAS 375.
COP 3201 (MAS 315) INTRODUCTION TO DATA PROCESSING AND COBOL (5) (F,S) A second course in programming oriented toward data processing applications. Various techniques for organizing and processing files: sequential random-access, indexed and inverted files. File sorting and maintenance. Program documentation. Instruction in the COBOL programming language. Applications of computers and data processing in business. Prerequisite: MAS 300 or MAS 311.
COC 3300 (MAS 316) INTRODUCTION TO COMPUTERS AND COMPUTER APPLICATIONS (5) (W,SS) A survey of computers and their applications: hardware, software, computer system, operation, advanced computer systems, acquiring and using computer power, systems analysis, computer impact on society. Not acceptable for credit to Mathematical Science majors (mathematics, computer science, statistics).
MAC 3132 (MAS 317) PRE-CALCULUS MATHEMATICS (5) (F,W,S,SS) Topics to be covered include a review of exponents and logarithms; trigonometry; analytic geometry; complex numbers. Prerequisite: Two years of High School Algebra.
MTG 3212 (MAS 318) GEOMETRY (5) (W) A study of the basic structure of Euclidean Geometry together with topics from advanced Euclidean Geometry and non-Euclidean Geometry. Prerequisite: None.
COP 3120 (MAS 319) INTRODUCTION TO COBOL PROGRAMMING (5) (F,W,S) Introduction to the basic notions of computer programming with emphasis on data processing applications. The syntax and semantics of basic COBOL are examined. Concepts in file organization and techniques for processing are introduced.
MAC 3233 (MAS 321) CALCULUS FOR MANAGEMENT AND SOCIAL SCIENCES (5) (F,S) An elementary introduction to the basic notions of calculus that are used to study problems in the management and social sciences. Specific topics include: differential calculus and its applicaton to optimization problems; integral calculus with area and probability applications. Prerequisite: MAS 317 or working knowledge of algebra.
STA 3161 (MAS 322) STATISTICS FOR MANAGEMENT AND SOCIAL SCIENCES (5) (W,SS) Introduction to the basic notions of probability and statistics that are used to study problems in the management and social sciences. Topics include: basic probability, random variables, sampling, estimation, hypothesis testing. Prerequisite: A course in college algebra or calculus.
COP 3172 (MAS 323) BASIC PROGRAMMING FOR BUSINESS (5) (F,W,S,SS) Introduction to the BASIC computer language with emphasis on business data processing applications. Using the interactive and batch facilities of the machine, concepts on file organization and techniques for processing are examined. Prerequisites: None
COP 3401 (MAS 324) COMPUTER ASSEMBLY LANGUAGE (2) ( $F$,S) Assembly language for the UNIVAC 1100 series: Instruction set, register usage, internal data representation, Assembler pseudo-operations, PROC's. Basic elements of EXEC-8 Prerequisites: Course in assembly language for a computer other than UNIVAC 1106.
MAP 3302 (MAS 325) DIFFERENTIAL EQUATIONS (5) (W,S) An introduction to differential equations and their applications based upon a knowledge of the calculus. Topics to include initial value problems of the first order, numerical solutions, systems of differential equations, linear differential equations of the second order, Laplace transforms, series solutions. Prerequisite: MAS 302. Corequisite: MAS 300 or MAS 311.
STA $3321-S T A 3322$ (MAS 331-332) INTRODUCTION TO MATHEMATICAL STATISTICS 1-11 (5-5) (W,S) 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: MAS 303.
STA 3163-STA 3164 (MAS 335-336) INTRODUCTION TO STATISTICAL ANALYSIS I-II (5-5) (F,W) This course presents a wide range of statistical tools which are useful in the analysis of data. Stress is placed on where, when, and how these techniques are used. Computer and laboratory work is an integral part of the course. It is assumed that the student has had an introductory course in statistics or has had some exposure to calculus. Specific topics include: use of normal distribution, tests of means, variances and proportions, the analysis of variance and covariance (including orthogonal contrasts, components of variance models and analysis of experiments), regression, correlation, probability plotting, sequential analysis, nonparametric statistics and transformation techniques. Prerequisite: First course in calculus or first course in statistics.
STA 3182 (MAS 338) STATISTICAL MODELS IN SCIENCE ANO BUSINESS (5) (S) This course 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 a nalyst 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, ard testing distritutional assumptions. Prerequisite: MAS 303 and first course in statistics.
MAS 3103 (MAS 345) LINEAR ALGEBRA (5) (F,S) 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: MAS 302.
MAD 3305 (MAS 351) GRAPH THEORY (5) (W,SS) 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. Prerequisite: MAS 311

MAP 3103-MAP 3104 (MAS 361-362) MATHEMATICAL MODELS AND APPLICATIONS I-II (5-5) (W.S) A course to provide an understanding of the use of the role of mathematical models in the description of the real world. In addition to considering basic principles in philosophy of formal model building, specific models will be considered, such as Markov Chain models, models for linear optimization, models involving stochastic processes, graphs and models, models for growth processes, and ecologica! models. Evaluation of models and computer simulation will also be discussed. Prerequisite: MAS 345 and MAS 303 or 325.
MAD 3401 (MAS 365) NUMERICAL ANALYSIS (5) (W,SS) Basic ideas and techniques of numerical analysis. Topics include finite differences, interpolation, solution of equations, numerical integration and differentiation, applications, introduction to applied linear algebra. This course will make extensive laboratory use of the computer facility. Prerequisites: MAS 300 or MAS 311 and MAS 302 or MAS 321.
MAD 3104 (MAS 375) DISCRETE MATHEMATICS (5) (F,W,S) An introduction to abstract mathematical structures with special emphasis on theories and methods which are relevant to the study of computer science. Topics include; introduction to formal systems and techniques of proof; combinatorial vs. relational structures; groups and graphs; Boolean algebras; abstract languages and machines. Prerequisite: MAS 311.
COP 3530 (MAS 377 ) DATA STRUCTURES (5) (W,S,SS) Basic concepts of data organization and associated techniques. Arrays, stacks, singly and multiply linked lists, binary and n-ary trees, graphs. Both internal and external storage structures. Accessing, searching and sorting, Recursive and non-recursive processing. Dynamic allocation and garbage collection. Prerequisite: MAS 375. Corequisite: MAS 312
MAT 3905 (MAS 395) INDEPENDENT STUDY (1-5) (F,W,S,SS) Individual conferences, assigned reading, reports on independent investigation.
MAT 3930 (MAS 398) SPECIAL TOPICS (1-5) (F,W,S,SS) A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.
MAE $4810-$ MAE 4811 (MAS 401-402) FOUNDATIONS OF MATHEMATICS I-11 (5-5) (F, W) An integrated course designed for teachers of Elementary and Early Junior High students. Emphasis will be placed on inductive and rudimentary deductive approaches to number systems, algebra, geometry, probability, statistics, and mathematical systems. The relationship between these fields and their applications will be stressed. Intuitive aspects of synthetic, analytic and transformation geometry will serve to relate geometry, algebra and mathematical systems. Prerequisite: None.
CDA 4101 (MAS 403) STRUCTURED COMPUTER ORGANIZATION (5) (F,W,S) This course investıgates the analysis of the levels of organization of computer systems, including the conventional, microprogramming and operating systems level. A number of major computer systems are analyzed. Prerequisites: MAS 312 or equivalent.
MHF 4302 (MAS 405) MATHEMATICAL LOGIC (5) (W) A study of formal logical systems and their applications to the foundations of mathematics. Topics to be selected from the following: definition of mathematical proofs; set theory; analysis formalized with the predicate calculus; theorems of Godel and Church; recursive function theory, and idealized digital computers.
COP 4610 (MAS 415 ) OPERATING SYSTEMS PRINCIPLES (5) (W,S,SS) A study of the basic principles of modern multiprogramming and time-sharing systems. Interrupts and data channels, multiprocessor system, memory management, virtual memory, segmentation, process communication, deadlock and interlock handling. Prerequisites MAS 377 and MAS 403.
CDA 4163 (MAS 416) DATA COMMUNICATIONS (5) (F) 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. Prerequiste: MAS 403.
CDA 4171 (MAS 417) MINICOMPUTER ARCHITECTURE AND APPLICATIONS (5) (W,SS) An introduction to minicomputers, in which students will have direct access to a general purpose minicomputer system. Study of the architecture of a particular minicomputer (including hands-on experience) followed by a comparison study of other minicomputer systems. Selected minicomputer applications in business, industry and science. Prerequisites: MAS 403
CAP 4721 (MAS 418 ) COMPUTER GRAPHICS (5) (F,S) The principles and techniques of interactive computer graphics. Characteristics of graphical devices, representation and manipulation of graphical data, light pens and other graphical input devices, data structures for interactive graphics, graphical languages, applications of computer graphics. Prerequisites: MAS 321, MAS 377, and MAS 403.
HCA $4711 /$ HES 4723 (HCM/MAS 419 ) QUANTITATIVE ANALYSIS FOR HEALTH CARE (5) (F,S) This course covers various techniques of health data analysis. Topics covered are chosen for and related to their practical and potential applications in the health area.
MAP 4401 -MAP 4402 (MAS 425-426) MATHEMATICAL METHODS IN THE PHYSICAL SCIENCES I \& 11 (5-5) (S,SS) A study of those topics in mathematics most often used in applications in the physical sciences. A prerequisite knowledge of 0 .dinary differential equations is required. Topics to be discussed include the following: solutions to ordinary differential equations about singular points; Fourier Analysis; Sturm-Liouville Problems; Bessel Functions; Legendre Polynomials; boundary value problems; Laplace equations; applications to problems in the physical sciences. Prerequisite: MAS 325 or equivalent.
STA 4664 (MAS 435) STATISTICAL QUALITY CONTROL (5) (SS) This course presents the simple but powerful statistical techniques employed by industry to improve product quality and to reduce the cost of scrap. The course includes the use and construction of control charts (means, percentages, number defectives, ranges) and acceptance sampling plans (single and double). Standard sampling techniques such as MIL STD plans will be reviewed.
STA 4502 (MAS 437) PRACTICAL NONPARAMETRIC STATISTICS (5) (W or S) This course deals primarily with test of hypotheses for situations where standard parametric procedures (t-test, F-test, etc.) cannot be applied. Topics include binomial, multinomial and Poisson tests, permutation test, sign test, Mann-Whitney $U$ test, Wilcoxon signed rank test, rank correlation, contingency chi-square, Kauskal-Wallis one-way ANOVA by ranks, Friedman Test and other non parametric tests. Prerequisite: First course in statistics.
MAA 4211 -MAA 4212 (MAS 451-452) ADVANCED CALCULUS I-II (5-5) (W,S) An intensive study of the basic ideas of calculus. Topics include the following: real number sequences, series power, series expansion, continuity differentiability, integration and functions of several variables. Prerequisites: MAS 303 and MAS 345.
MAA 4402 (MAS 453) COMPLEX VARIABLES (5) (SS) 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. Prerequisite: MAS 303.

MTG 4302 (MAS 465) TOPOLOGY (5) (F) An introductory course in topology requiring a prerequisite knowledge of the calculus. Topics to be discussed will be selected from the following: topological spaces, metric spaces, continuity, completeness, compactness, separation axioms, products spaces, subspaces, convergence, and homotopy theory. Prerequisite: MAS 303.
STA 4603 -STA 4604 (MAS 471 -472) MATHEMATICAL TECHNIQUES OF OPERATIONS RESEARCH I-II (5-5) (S,SS) 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 345 and MAS 322 or MAS 332.
COT 4320 (MAS 475) THEORY OF COMPUTATIONS (5) (S) An introduction to abstract machine theory, combinatorial systems, and computable functions. Topics include; finite-state machines, regular sets, Turing machines, the halting problem, phrase-structure grammars and languages, and Post's correspondence problem. Emphasis is on surveying basic topics and developing an intuitive understanding of the theory of computation. Prerequisite: MAS 375.
MAS 4301-MAS 4302 (MAS 480-481) ALGEBRAIC STRUCTURES I-II (5-5) (F,W) A course based on the knowledge of the calculus and linear algebra that is concerned with the fundamental concepts of algebraic structures. Topics include elementary number theory, groups, rings, fileds. Concrete examples are used to introduce concepts of modern algebra. Special emphasis is placed on the ring of integers, congruences, polynomial domains and permutation groups. Prerequisite: MAS 345 or MAS 375.
CIS 4906 (MAS 495) INDEPENOENT STUDY (5) (F,W,S,SS) Individual conferences, assigned readings, reports on independent investigations.
MAT 4943 (MAS 496) MATHEMATICAL SCIENCES INTERNSHIP (VAR) (F,W,S,SS) A special program to encourage students to get guided on-the-job experience in computer sciences, statistics, or mathematics in an industrial enterprise, governmental agency or other organization. Requirements: minimum grade of $B$ or higher in all courses in the major area and approval by Departmental Internship Committee. Application is required at least one term in advance of registration for this course.
MAT 4930 (MAS 498) SPECIAL TOPICS (1-5) (F,W,S,SS) A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.
MAP 5117 (MAS 501) MATHEMATICAL AND STATISTICAL MODELING (5) (F) Topics to be covered include regression models, forecasting and time series models, differential equation models and various statistical models. Computer solutions of these models will be included. Prerequisites: MAS 303, MAS 312, MAS 345, and MAS 332 or MAS 336.
APB $5933 / C A P 5202$ (BSC 502/MAS 502) APPLICATIONS OF COMPUTERS IN BIOLOGY (5) Introduction to computer techniques of great relevance to modern Biology and their application to the study of a representative group of biological problems. Prerequisite: MAS 311 or permisson of instructor.
STA- 5126 (MAS 507/PSY 507) DESIGN OF EXPERIMENTS IN PSYCHOLOGICAL RESEARCH (4) (F) Reviews the Analysis of Variance, introduces student to randomized and blocking designs, factorial designs, fractional factorial, main effects and other plans as they are used in psychological research. Main emphasis is on the rationale behind the several designs and the techniques for applying these to psychological experiments. Prerequisite: MAS 307 and 308 or their equivalent.
STA 5707 (MAS 508/PSY 508) MULTIVARIATE ANALYSIS IN APPLIEO PSYCHOLOGICAL RESEARCH (4) (W) Covers basic techniques of multivariate analysis, emphasizing the rationale and applications to psychological research. Includes multiple regression, Hotellings T2, MANOVA, principle component analysis and factor analysis. Prerequisite: MAS 308 or equivalent, linear algebra recommended.
COP 5540 (MAS 516) DATA BASE AND FILE ORGANIZATION (5) (W,S) This course deals with the need for formal data organization, the system requirements, effects of storage, devices, file attributes, file organization, search strategies, privacy and security. Prerequisites: MAS 377 and MAS 403.
COP 5640 (MAS 518) PROGRAMMING SYSTEMS (5) (S or SS) Assemblers, loaders, MACRO systems, basic techniques of compilation, self-compilers, syntax encoding and recognition, code generation and optimization. Prerequisites: MAS 313 , MAS 375, and MAS 377.
STA 5446-STA 5447 (MAS 521-522) PRO8ABILITY THEORY I-II (5-5) (S,SS) 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 the iterated logarithm. Prerequisite: MAS 303.
STA 5826 (MAS 523) STOCHASTIC PROCESSES (5) (F) 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. Subects include Markov Processes, queuing theory, renewal processes, birth and death processes, Poisson and Normal Processes. Applications to system reliability analysis behavior science and natural sciences will be stressed. Prerequisite: MAS 522.
STA 5676 (MAS 531) RELIABILITY ENGINEERING I (5) (SS) The course material is designed to give the student a basic understanding of the statistical and mathematical techniques which are used in engineerng reliability analysis. A review will be made of the basic fundamental statistical techniques required. Subjects covered include: distributions used in reliability (exponential, binomial, extreme value, etc.), tests of hypotheses of failure rates, prediction of component reliability, system reliability prediction and reliability apportionment. Prerequisite: MAS 332.
STA 5677 (MAS 532) RELIABILITY ENGINEERING II (5) (F) The course is designed for those interested in using probability models such as Markov matrices to analyze the reliability of systems. The use of transition matrices to represent the state of repairable and non-repairable systems will be stressed. Series and parallel constructed systems will be covered. Topics such as the reliability and availability of systems, average down time, required repairmen pool sizes, and number and compsition of spare parts pools will be covered. Prerequisites: MAS 345 and MAS 531.
STA 5206 (MAS 541 ) DESIGN OF EXPERIMENTS (5) (F) This is an applied course dealing with the design and analysis of experiments employed in scientific and industrial research. A knowledge of the basic fundamentals of hypothesis testing and analysis of variance is assumed. Topics include multiple comparison tests, completely randomized design, randomized blocks, latin square and related designs, nested and factorial experiments. Prerequisite: MAS 332 or MAS 336.
STA 5207 (MAS 542) TOPICS IN DESIGN OF EXPERIMENTS (5) (W or S) 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: MAS 541
STA 5236-STA 5237 (MAS 543-544) REGRESSION ANALYSIS I-11 (5-5) (SS,F) A comprehensive review of the role of linear models in statistics. Extensive use is made of matrix notation and a prior course in linear algebra is imperative. The fundamen-
tal theorems underlying regression analysis and the analysis of variance will be covered. Such topics as the Gauss-Markov Theorem, generalized least squares, estimation and testing of hypotheses will be covered. Prerequisites: MAS 332 and MAS 345.
STA 5606 (MAS 571) MATHEMATICAL TECHNIQUES OF OPERATIONS RESEARCH (5) (W) This course surveys the mathematical methods used in operations research. Topics will be chosen from linear programming, dynamic programming, integer programming, network analysis, classical optimization techniques, and applications such as inventory theory. Prerequisite: MAS 501. Corequisite: MAS 377.
MAS 5215 (MAS 580) NUMBER THEORY (5) (SS) This course takes up topics in number theory. Topics to be discussed selected from the following: congruences, Diophantine Equations, p-adic numbers, algebraic number theory, class numbers, distribution of primes, continued fractions, and number theoretical explorations using the computer.
MAT 5907 (MAS 595) INDEPENDENT STUOY (1-5) (F,W,S,SS) Individual conferences, assigned reading, reports on inde. pendent investigations
CIS 5934 (MAS 598) SPECIAL TOPICS (1-5) (F,W,S,SS) A course designed to give groups of students an opportunity to pursue special sludies not otherwise offered
MAP 6127 (MAS 601) SIMULATION AND MODELING (5) (S) Two areas are covered in this course: Advanced queueing models and simulation techniques. The relationships between these two areas, applications and simulation languages will be among the topics covered. Prerequisites: MAS 571.

## MODERN LANGUAGE MAJORS

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Arts

## LOWER DIVISION PREPARATION:

Required Courses: four semesters of elementary and intermediate foreign language or equivalent proficiency.
UPPER DIVISION PROGRAM:
Quarter Hours
Required Courses:*
Foreign language
Electives: *

* Students in the Teacher Preparation Program carry two majors: Modern Language and Modern Language Education. They must request admission to both programs. Students interested in teacher certification see note on page 5.
REQUIREMENTS FOR ALL MODERN LANGUAGE MAJORS: All majors must have a designated faculty advisor and all required to take 45 credits in the department of Modern Languages.
REQUIREMENTS FOR SPANISH MAJORS: There is no fixed sequence of courses required (e.g. 325, 326,327) but a major in Spanish is expected to demonstrate proficiency in the target language at the level of 325 or 326 before attempting other advanced courses. He must take a minimum of 10 credits in Linguistics - of which 5 should be History of the Language or Introduction to Linguistics - and a minimum of 10 credits in literature.
REQUIREMENTS FOR FRENCH MAJORS: The requirements for a major in French are: 3 or 4 literature courses, 1 Civilization course, 1 Linguistics course. The remaining credits should be taken in language courses such as: $305,307,315,325,326,328$, unless the student can demonstrate proficiency in that area. A student is also generally expected to take an introductory course to literature, such as 306 before registering for upper level literature courses.
REQUIREMENTS FOR OTHER LANGUAGE MAJORS: A major in another language than Spanish or French may only take 30 credits in the major target language but completion of at least three quarters of a second foreign language is recommended. There is no fixed sequence of courses required and a student may enroll in any course for majors offered provided he or she meets the course prerequisites (e.g. "Seniors", "Juniors", "Non-native speakers", etc.)


## LANGUAGE INSTRUCTION PROGRAMS

The Department offers a four-quarter and/or a five-quarter sequence of instruction in French, German, Hebrew, Italian, Portuguese and Spanish.

Courses numbered 301,302,303, 304 and 305 are open to any student, faculty or staff of Florida International University on a credit ( 5 quarter hours per course) or non-credit basis. The courses of the Language Instruction Program are designed primarily for persons wishing to acquire basic conversational ability in a foreign language, but they also provide training in all four language skills: listening, speaking, reading and writing. Students are advised to consult the Departmental Course Listing for specific sections of French, German, Hebrew, Italian, Portuguese, and Spanish. Contingent upon demand, the Department of Modern Languages will offer courses in Chinese, Japanese, Latin and Russian.

## LANGUAGE INSTRUCTION PROGRAM COURSES

Campus Location: Tamiami and North Miami Campuses

301 BEGINNING LANGUAGE INSTRUCTION (5) Provides training in the acquisition and application of basic language skills. The student selects the language prefix appropriate to his or her needs: FRE 301, GER 301, HEB 301, ITA 301, POR 301, SPA 301
302 INTERMEDIATE LANGUAGE INSTRUCTION I (5) Continuation of 301 . Course emphasis is on comprehension, reading, and vocabulary. The student selects the language prefix appropriate to his or her needs. FRE 302, GER 302, HEB 302, ITA 302, POR 302, SPA 302.
303 INTERMEDIATE LANGUAGE INSTRUCTION II (5) Course emphasis in on communication and language refinement. The student selects the language prefix appropriate to his or her needs. FRE 303, GER 303, HEB 303, ITA 303, POR 303, SPA 303.

304 ADVANCED LANGUAGE INSTRUCTION (5) Open to the student with advanced intermediate ability in the foreign language. Course emphasis is on verbal skills, reading, and writing. The student selects the language prefix appropriate to his or her needs. FRE 304, GER 304, HEB 304, ITA 304, POR 304, SPA 304.
305 REVIEW GRAMMAR/WRITING (5) Open to non-native speakers with some previous knowledge of the language. Prerequisite: 304 or the equivalent. The student selects the language prefix appropriate to his or her needs: FRE $305, G E R 305$, HEB 305, ITA 305, POR 305, SPA 305.

## MAJOR COURSE OFFERINGS

Note: Courses do not have fixed content. FRE 406 - Genre Studies, may deal with the Modern Novel in the Fall Quarter and with the Seventeenth-Century Theatre in a subsequent academic quarter. Therefore, a student may repeat a course number at any time. The student is advised to consult the departmental Quarter Listing of Courses for specific sub-titles and descriptions.

The following courses, numbered 306-579, may be offered in French, German, Italian, Portuguese or Spanish towards fulfillment of the Upper Division Major, or may be taken as electives by qualified students. If a course using the MOL prefix is offered in more than one language in a given quarter, it will bear the appropriate prefix; e.g., FRE 325, SPA 325. Unless otherwise indicated MOL courses will be taught in the foreign language.

- (MOL 306) STYLISTICS/EXPLICATION DE TEXTE (5) Close reading and analysis of prose and poetry. Introduction to the methods of literary criticism. Selected readings in international sources.
LIN 3200 (MOL 307) PHONETICS (5) The application of phonetic theory and practice for speech refinement. Study of sound patterns in communication and creative activity.
LIN 3400 (MOL 308) APPLIED LINGUISTICS (5) Examination of available linguistic materials for self-instruction. Problemsolving in syntax and phonetics through the application of modern/traditional methods. (In English)
LIN 3010 (MOL 309) INTRODUCTION TO GENERAL LINGUISTICS (5) Examination and synthesis of the concepts and perspectives of major contributions to language theory. (In English)
(MOL 315) CREATIVE WRITING/TRANSLATION (5) Training through non-structured writing. Examination of various approaches to the problems and objectives of creative translation.
$\qquad$ (MOL 325) INTERMEDIATE SYNTAX/COMPOSITION (5) 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.
(MOL 326) ADVANCED SYNTAXICOMPOSITION (5) Examination of grammatical theory; discussion of the modern essay. Practice in the detection and correction of errors in usage. The course will focus on current international events as content for informal talks and composition.
(MOL 327) COMMUNICATION ARTS (5) 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.
FOT 3800 (MOL 328) TRANSLATION SKILLS (5) Emphasis on basic principles and practice application.
(MOL 335) HISTORY OF THE LANGUAGE (5) The internal and external history of language development. Examination of model texts from key periods of evolution.
LIN 3610 (MOL 336) DIALECJOLOGY (5) Definitıon and analysis. Problem-solving in dialect classification.
FOL 3732 (MOL 337) ROMANCE LINGUISTICS (5) The common and distinctive romance features. Survey of linguistic geography and internal/external influences.
FOW 3580 (MOL 355) INTELLECTUAL HISTORY (5) The interaction or dissociation among writers in a critical historical period. Study of primary sources and their contemporary evaluations.

FOW 3582 (MOL 356) LITERATURE OF REFORM (5) The consciousness of change in verbal art.
FOW 3584 (MOL 357) LITERATURE OF REPRESSION (5) The consciousness of constraints, their adoption and/or rejection in verbal art.
FOW 3540 (MOL 358) 8I-CULTURAL WRITINGS (5) Experiment in linguistic pluralism. Content and focus to be determined by the international community.
FOW 3520 (MOL 359) PROSE AND SOCIETY (5) The dynamics of participation and alienation among prose writers and their environment.
-.- (MOL 360) CIVILIZATION I (5) Open to any student who understands the target language (French, Spanish, Portuguese, etc.) The development of a particular civilization. Emphasis on the evolution of a society, its ideas and its values.
FOT 3110 (MOL 365) LITERATURE IN TRANSLATION (5) Masterpieces of world literature in English. Comparative use of the original text. Discussion and interpretation.
FOL 3930 (MOL 397) SPECIAL TOPICS (5) Readings and discussion of literary/linguistic topics to be determined by students and teacher.
FOL 3905 (MOL 398) INDEPENDENT STUDY (5) Project, field experience, readings, or apprenticeship.
FOL 3955 (MOL 399) FOREIGN STUDY (15) Intermediate level. One quarter full-time credit in foreign residence and study. Individual cases will be evaluated for approval.
FOW 4590 (MOL 405) CREATIVE MODES (5) 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 4390 (MOL 406) GENRE STUDIES (5) 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 4790 (MOL 407) THE LITERARY GENERATION (5) The real and apparent shared ideals of an artistic generation; its influence and range.
——.- (MOL 411) LANGUAGE SKILLS FOR PROFESSIONAL PERSONNEL (5) The course is geared to the special linguistic needs of community groups (medical, business, technical, etc.).
FOT 4801 (MOL 428) PROFESSIONAL TRANSLATION (5) Techniques and resources for protessional translation. Prerequisite: MOL 328.
FOW 4810 (MOL 438) PROBLEMS IN READING AND INTERPRETATION (5) The identification and appreciation of techniques for sensitive reading and discussion of literary texts.
FOL 4935 (MOL 455) SENIOR SEMINAR (5) Topic and approach to be determined by students and instructor.

- (MOL 460) CIVILIZATION II (5) Open to any student who understands the target language (French, German, Spanish, etc.) The making of a modern culture. The ideological, political and economic background of contemporary culture. FOT 4130 (MOL 465) EUROPEAN LITERATURE IN TRANSLATION (5) For students proficient in more than one foreign language. Content and focus to be determined by student and teacher.
LIN 4226 (MOL 475) CONTRASTIVE PHONOLOGY (5) For students proficient in more than one foreign language. Choice of languages to be determined by students and teacher.
LIN 4333 (MOL 476) CONTRASTIVE MORPHOLOGY (5) For students proficient in more than one foreign language. Content and emphasis to be determined by students and teacher.
LIN 4418 (MOL 478) PROBLEMS IN LANGUAGE LEARNING (5) Primarily designed for prospective teachers but open to all interested students. The course will aim to devise an approach to difficulties in syntax, usage, reading and comprehension commonly experienced.
LIN 4620 (MOL 479) STUDIES IN BI-LINGUALISM (5) Readings and analysis of bi-lingual programs and bi-national goals. FOL 4930 (MOL 497) SPECIAL TOPICS (5) (S) Independent readings, research, or project.
FOL 4905 (MOL 498) INDEPENDENT STUDY (VAR) (F,W,S,SS) Project, field experience, readings or research.
FOL 4958 (MOL 499) FOREIGN STUDY: ADVANCED LANGUAGE/LITERATURE (15) Full-quarter credit for foreign residence and study/work. (Approval of Department)
(MOL 501) LANGUAGE FOR READING KNOWLEDGE (5) Designed primarily for graduate students who wish to attain proficiency for M.A. and Ph.D. requirements. Open to any student who has no prior knowledge of the language.
- (MOL 502) LANGUAGE FOR READING KNOWLEDGE (5) Emphasis on translation of materials from the student's field of specialization. Prerequisite: MOL 501 or the equivalent.
LIN 5934 (MOL 505) SPECIAL TOPICS IN LINGUISTICS (5) Content to be determined by students and teacher. (Approval of Department).
FOW 5395 (MOL 506) GENRE STUDIES (5) 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 5587 (MOL 510) COMPARATIVE STUDIES (5) Cross-over and distinctiveness in a multi-language problem, period, or esthetic.
FOW 5934 (MOL 515) SPECIAL TOPICS IN LANGUAGE/LITERATURE (5) Content and objectives to be determined by students and teacher.
(MOL 527) COMMUNICATION ARTS (5) 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.
FOT 5802 (MOL 528) TRANSLATION ARTS (5) Prerequisite: MOL 428. Techniques of professional translation.
FOL 5735 (MOL 537) ROMANCE LINGUISTICS (5) The common and distinctive romance features. Survey of linguistic geography and internal/external influences:
FOT 5131 (MOL 556) LITERATURE IN TRANSLATION (5) Masterpieces of world literature. Open to students who are proficient in more than one language.
FOW 5545 (MOL 558) BI-CULTURAL WRITINGS (5) Experiment in linguistic pluralism. Content and focus to be determined by the international community.


# PHILOSOPHY MAJOR, RELIGIOUS STUDIES MAJOR 

Philosophy Major
Campus Location: Tamiami Campus only
DEGREE: Bachelor of Arts
LOWER DIVISION PREPARATION:
Required Courses: None.
Recommended Courses: Philosophy, Religion.
UPPER DIVISION PROGRAM:

Quarter Hours

Remarks: A more detailed description of the Philosophy Program and the identification of "systematic," "historical," and "other" philosophy courses together with course selection guidelines are contained in a brochure available at the Department of Philosophy and Religion. Students select their required courses in philosophy with the approval of a faculty member of the department.
Students are also encouraged to consider a "dual-major," and thus simultaneously meet the requirements of two academic majors. In this case, the twenty quarter hour credits required in one other academic discipline (as part of the philosophy major) would be met by courses taken towards the second major.
The College of Arts and Sciences requires for the bachelors degree that the student take a minimum of 10 quarter hours outside the department sponsoring their major program. For the different ways of meeting this requirement, please consult the department.
The Department is planning to offer graduate courses in Philosophy during the academic year. Also, consult the Department about the possibility of a Master's Program in Philosophy.
The Department offers many of its courses at the North Miami Campus and also participates in the Humanities Major.
Religious Studies Major
DEGREE: Bachelor of Arts
LOWER DIVISION PREPARATION:
Required Courses: None
Recommended Courses: Religion, Philosophy
UPPER DIVISION PROGRAM:

| Required Courses: | Quarter Hours |
| :--- | ---: |
| Systematic Courses | 20 |
| Scriptural Courses | 50 |

$$
\text { Other Religious Studies Courses } 10
$$

Courses in One Other Discipline
Electives

Remarks: A more detailed description of the Religious Studies Program and the identification of "systematic," "scriptural," "historical," and "other" religious studies courses together with course selection guidelines are contained in a brochure available at the Department of Philosophy and Religion. Students select their required courses in religious studies with the approval of a faculty member of the department.
Students are also encouraged to consider a "dual-major" i.e. simultaneously meet the requirements of two academic majors. In this case, the twenty quarter hour credits required in one other academic discipline (as part of the religious studies major) would be met by courses taken towards the second major.
The College of Arts and Sciences requires for the bachelors degree that the student take a minimum of 10 quarter hours outside the department sponsoring their major program. For the different ways of meeting this requirement please consult the department.
The Department offers many of its courses at the North Miami Campus and also participates in the Humanities Major.

## Minor in Philosopy:

A student majoring in another academic discipline would earn an academic minor in philosophy by taking a pattern of at least four PHI courses ( 20 quarter hours), based upon an academic rationale or unifying study theme; approved by the chairperson of the department. An acceptable minor in philosophy would be four courses in one of the areas of systematic courses of four historical courses as designated in the course lists of the Philosophy Program. A student may propose still other patterns of four philosophy courses for a minor provided the selection is based upon an acceptable academic rationale.

## Minor in Philosophy-Religion:

A student majoring in another academic discipline would earn an academic minor in philosophy-religion by taking a pattern of at least four PHR courses as follows: (1) Life Issues: PHR 300, PHR 310, PHR 400, PHR 401, PHR 426, or (2) Eastern Thought and Practice: PHR 300, PHR 310, PHR 311, PHR 315, or (3) a combination of four other courses from the PHI/REL/PHR series that is based upon a unifying study theme, and approved by the chairperson of the department.
Minor in Religious Studies:
A student majoring in another academic discipline would earn an academic minor in religious studies by taking a pattern of at least four REL courses ( 20 quarter hours), based on an academic rationale or unifying study theme, approved by the chairperson of the department. An acceptable minor in religious studies would be four systematic courses, or four scriptural courses, or four historical courses, as designated in the Religious Studies Program. A student may propose still other patterns of four religious studies courses for a minor provided the selection is based upon an acceptable academic rationale.

## COURSE OFFERINGS

PHI 3010 (PHI 300) INTRODUCTION TO PHILOSOPHICAL THINKING (5) This introductory course examines the presence of philosophy and the role of philosophizing in man's search for understanding of himself and of his world. It includes the study of the basic structure, the many applications and some basic issues of philosophical thinking, through a dialogue with those original sources more accessible for a first learning experience in philosophy and which represent basic events in the history of philosophizing.
PHI 3100 (PHI 301 ) LOGIC AND PROBLEM SOLVING (5) This introductory course in logical thinking and argumentation will treat both practical and theoretical approaches to understanding human communications and solving problems. Students will be introduced to inductive and deductive logic, fallacies, and the role of logic in scientific explanation and popular expression.
PHI 3300 (PHI 302) KNOWLEDGE, THINKING, AND CREATIVITY (5) The viewpoints of various philosophers and schools of thought regarding types of knowledge, certitude, and creativity are the main emphasis of this introductory course. The meaning of truth and truthfulness is analyzed from both the classical and the contemporary perspectives.
PHI 3500 (PHI 303) WHAT IS REALITY? (5) This introductory course examines basic metaphysical questions regarding the nature of reality, as well as the meaning of these questions for man's concept of himself and his world. Fundamental texts from classical and contemporary philosophers will be considered.

PHI 3630 (PHI 304) ETHICS (5) The nature and principles of ethical knowledge are examined in this introductory course. Questions such as "What is intrinsically good", "What ought one to do", and "How are ethical statements justified" will be investigated by considering readings trom Aristotle, Augustine, Mill, Hobbes, and Kant.
PHI 3302 (PHI 310) MYTH AND PHILOSOPHY (5) The course will be concerned with how Western myth and philosophy represent human life. This topic will be explored through a study of the emergence of philosophy out of myth, the relation of myth to science as the myth of science or the science of myth, and the possible submergence of philosophy back into myth.
(PHI 311) ANCIENT PHILOSOPHIES (5) 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 (PHI 312) MEDIEVAL PHILOSOPHIES (5) 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 3300 (PHI 313) RENAISSANCE PHILOSOPHIES (5) The basic concerns and teachings of representative philosophers and schools of thought in the cultural settings of the Renaissance, and linkages to their past and future are emphasized in this course
PHH 3420 (PHI 314) MODERN PHILOSOPHIES (5) The basic concerns and teachings of representative philosophers and schools of thought in the cultural settings of the 17 th and 18 th centuries, and linkages to their past and future are emphasized in this course.
PHP 3840 (PHI 316) CHINESE AND JAPANESE PHILOSOPHIES (5) This course will examine the main currents of Chinese and Japanese thought, with special focus on the quest of the Chinese people toward a more harmonious adjustment to their environment. The investigation will include consideration of the Confucian, Mohist, Taohist, Legalist and Zen Buddhist philosophies.
(PHI 317) INDIAN THOUGHT (5) Major schools and works will be examined showing the development of Indian thought from Hinduism through Buddhism. Emphasis will be placed on metaphysical and epistemological problems in Buddhism. Some historical relationships between the basic values of Buddhism and the diverse cultural, social and political forms in which they have been expressed will also be studied.
PHH 3042 (PHI 318) LATIN AMERICAN PHILOSOPHIES (5) This course will examine the development of Latin American thought, with particular attention to the 19 th and 20 th centuries. It will consider the traditions and initiatives of prominent Latin American philosophers in the light of problems such as personal and cultural identity.
PHH 3700 (PHI 319) AMERICAN PHILOSOPHIES (5) This Course will examine the development of American philosophical thought, with particular attention to the 19 th and 20 th 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 3420 (PHI 320) HUMANISTIC AND SCIENTIFIC PERSPECTIVES (5) After a review of several basic philosophical notions, the assumptions, methodologies and consequences of the humanities and the social and natural sciences will be discussed. Topics will be selected from current issues.

- (PHI 324) PHILOSOPHIES OF RELIGION (5) This course will involve a study of the phenomena of religion as a means of identifying and evaluating its essential and universal element. Consideration will also be given to the relations between the enterprises of philosophy and religion. The result of these investigations will then be applied to specific topics examined by both disciplines.
PHI 3401 (PHI 325) PHILOSOPHIES OF SOCIETY (5) After an introduction to the various dimensions of social philosophy, in its relationship to other philosophical disciplines, to the social sciences and to social ideologies, this course will examine some of the fundamental questions raised by human experience regarding the origins, the purposes and types of society. The readings will be chosen from the works of contrasting major social thinkers.
EDF 3542 (PHI 326) PHILOSOPHIES OF EDUCATION (5) Notions of philosophy and education will be applied in the review of prominent philosophies of education. Special attention will be given to the development of the student's own philosophy of education, and to the importance of philosophical assumptions in curriculum designs and teaching strategies.
PHM 3500 (PHI 327) PHILOSOPHIES OF HISTORY (5) After exploring the definitions, dimensions and interrelations of philosophy and history, students will examine major philosophies of history. Discussions about the social responsibility of the historical narrative and the philosophical assumptions of historiographies will be provided.
PHI 3400 (PHI 328) PHILOSOPHIES OF SCIENCE (5) The philosophic background of scientific method will be examined. Attention will be given to the philosophical consequences of conceptual change in the sciences. Such topics as the growth and unity of science, explanation and prediction, and the role of science in society will be explored.
PHI 3800 (PHI 329) PHILOSOPHIES OF BEAUTY AND ART (5) An introduction to problems in aesthetics, with emphasis on those problems which are especially relevant to appreciation and criticism in the arts. Typical problems include the relation between form and content, truth and falsity in art, the nature of emotion in art and of the aesthetic response, as well as the nature of art itself. This course will include a study of selections from the writings of major thinkers and the consideration of those works of art which are relevant to this study.
PHI 4133 (PHI 401) FORMAL LOGIC (5) The emphasis of this course is on the theoretical properties of logical systems rather than on their use. The student will be introduced to a selection of advanced logical topics, including some of the chief results of modern logic (e.g. completeness of quantification logic). Prerequisite: An introduction to Logic such as PHI 301.
PHI 4680 (PHI 4O4) VALUE THEORIES (5) Several questions will be examined in this course in the context of classical and contemporary value theories. What is value? How are values known? What are the determinants of value? How do values differ from beliefs and attitudes? Are values relative?
PHH 4500 (PHI 410) NINETEENTH CENTURY PHILOSOPHIES (5) The basic concerns and teachings of representative philosophers and schools of thought in the cultural settings of the 19 th century, and linkages to their past and future are emphasized in this course
PHH 4600 (PHI 411) CONTEMPORARY PHILOSOPHIES (5) 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

PHP 4784 (PHI 414) ANALYTICAL PHILOSOPHY (5) This course examines the 20th century Anglo-American tradition whose aim is to solve philosophic problems by the methods of linguistic analysis. It will include study of techniques of linguistic analysis and an evaluation of their adequacy in dealing with meaning and truth, the mind-body problem, and free will.
PHP 4786 (PHI 415) MODERN EXISTENTIALISM (5) This course examines the origin, the basic philosophical insights, and the influence of the mainstreams (French, German, Russian, Spanish) of modern existentialism.
PHP 4782 (PHI 416) PHENOMENOLOGY (5) This course analyzes the method, the basic philosophical insights and the applications of contemporary (German and French) phenomenological thinking. It will include both the experiencing of phenomenological awareness (of freedom, of knowledge, of encounter) and the study of original texts.
PHP 4510 (PHI 418) MARXISM (5) 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.
(PHI 420) ETHICAL ISSUES IN BUSINESS (5) After a review of basic questions regarding ethical knowledge, norms and systems, students will consider the ethical dimensions of current problems and issues facing the business manager or worker: corporate decisions, personal responsibility, product quality and performance, production, marketing and advertising, management and in general economic rationality.
PHI 4632 (PHI 421) ETHICAL ISSUES IN POLITICS (5) After a review of basic questions regarding ethics, politics and their relationship, students will consider with historical perspective some fundamental currents and alternatives in the field of political ethics, and then will examine the ethical dimension of some contemporary issues facing the citizen, the public servant and the political leader, such as credibility, technocracy, conflict of interest and violence.
(PHI 422) BIOMEDICAL ETHICS (5) 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 counselling professions.
(PHI 423) CONTEMPORARY ETHICAL ISSUES (5) 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.
PHM 4220 (PHI 427) CHANGE AND ORDER IN SOCIETY (5) This course will examine the dimensions of change and order in contemporary societies, developed and underdeveloped, with particular attention to the human values involved, in the light of different philosophical theories and socio-political ideologies.

- (PHI 428) PHILOSOPHY OF LAW - 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.
PHI 4221 (PHI 430) PHILOSOPHY OF LANGUAGE (5) This course examines the phenomenon of language as an integral part of human cuiture and as the way of human encounter. It includes the contemporary structural and phenomenological analysis of the meaning of language, the power and limitations of speech, the relationship between thought and language, the non-rational thought process and its influence upon rational thought and language and the power and magic of the word.
PHI 4222 (PHI 431) PHILOSOPHY OF DIALOGUE (5) This course examines the meaning, the foundations, and the limitations of dialogue and the dialogical structure of the phenomena of expression, communication, education and human relationships. It includes a contemporary philosophical analysis of the dialogical principle and the application of its insights to the problems of human living and knowing.
$\qquad$ (PHI 434) LOVE AND SEXUALITY (5) This course examines the different philosophical approaches to love and sexuality and studies the basic problems in human sexual living, such as love and the man-woman relationship, the formation of sexual union, and attitudes toward love and sexuality in contemporary society.
PHM 4050 (PHI 435) PHILOSOPHY OF DEATH (5) (S) This course analyzes the meaning of death and man's attitude towards death and the dying. It examines how philosophy can share in the new confrontation between man and his death, and shows the ways philosophical thinking contributes to the discovery of an authentic attitude towards the phenomenon of death as part of human living.
PHI 4882 (PHI 440) PHILOSOPHY IN LITERATURE (5) This course will examine modern philosophical currents as seen in the works of pertinent literary figures, such as Tolstoy, Dostoevsky, Conrad, Kafka, Koestler, Camus and Mann. Certain basic themes resulting from the merging of aesthetic value and philosophic reflection will be examined: the self, alienation, history, the absurd, time and death.
PHI 4460 (PHI 445) PHILOSOPHIC PROBLEMS IN THE SCIENCES (5) Selected philosophic problems will be explored, drawn either from the natural sciences or from the social sciences. In the latter case the course will be considered as equivalent of SOC 493-Basic Assumptions of Sociology, for students majoring in programs of Sociology and Anthropology. PHI 4910 (PHI 490) INDEPENDENT RESEARCH (VAR) Topics will be selected to meet the academic needs of the individual student.
PHI 4935 (PHI 495) PHILOSOPHY SEMINAR (5) This seminar is designed for majors and other qualified students approved by the Department, and will be guided by one or more faculty members. The specific topic will be selected and announced in advance. The number of participants will be limited.
PHI 5934 (PHI 591) SPECIAL TOPICS (5) Topics will be selected to meet the academic needs of groups of students.


## RELIGIOUS STUDIES

REL 3020 (REL 300) RELIGION AND LIFE STORIES (5) An explanation of the nature of religious experience as it appears in the life stories of individuals. The course will include the life stories of the initiators of the great world religions as well as those of contemporary persons. The student will be encouraged to explore his own life story in the light of this prior discussion. REL 3410 (REL 301) WHO IS GOD? (5) This course will trace the idea of God from primitive culture through Greek, Hebrew and Christian thought to the contemporary situation. The various responses to the question of God given by particular groups in modern society will be examined in order to see the relevance of these responses for current issues and life styles.
REL 3160 (REL 302) ECSTACY AND CELEBRATION (5) The course will examine the dynamic aspects of celebration, dance, ecstasy, play, and other expressions of joyous self-abandonment in retigious experience. Lectures, student participation, guest speakers, and field trips will be employed.

REL 3161 (REL 303) HUMAN RELIGIOUS EXPERIENCE (5) A phenomenological comparison between the religious experiences of primitive man and modern man will cover the first part of this course. The second part will investigate the psychological motivations in the religious experience of contemporary man. Finally, the inner dynamics in the development of a mature religious attitude will be examined.
REL 3442 (REL 304) BASIC DILEMMAS IN FAITH AND REASON (5) This course examines the nature and boundaries of faith and reason, contemporary atheism, and the religion-science relationship, from the religious perspective. It deals with the need to achieve a coherent and human grasp of personal living and reality.
REL 3464 (REL 305) REVELATION AND SCIENCE (5) This course will explore science and revelation as basic avenues to knowledge of ultimate significance in an effort to discover their respective underlying assumptions. In response to those who raise questions about religious beliefs in ways that demand evidence and reasons, it will then discuss such sources of revelation as scripture, prophecy, incarnation, miracle, natural order, religious experience and mysticism.
REL 3172 (REL 306) FAITH AND ETHICS (5) This course will examine the nature of ethics in its relationship to faith orientation. After considering the various religious foundations of ethics in the thought of influential ethical thinkers, attention will be given to the application of these perspectives to pressing ethical problems in contemporary society.
(REL 309) MAN: THE SYMBOL MAKER (5) The meaning of human language, myth, symbols and rites in connection with the religious experience of man will be explored in this course. Special emphasis will be placed on the existential, social, and religious values of the rites of initiation, communion, and marriage.
REL 3210 (REL 310) BIBLICAL WRITINGS AND THOUGHT (5) An introductory survey of the Old Testament from the points of view of historical background, the cultures in which the works were written and the ideas they contain. Emphasis will be given to the relevance of biblical themes for the contemporary situation.
REL 3224 (REL 312) THE PROPHETS (5) What is a prophet? This course will attempt to answer this question both in terms of the classic Hebrew prophets, whose acts and words are preserved in the Old Testament, and the nature of the prophetic vocation in the contemporary world.
REL 3250 (REL 315) JESUS IN HIS AND OUR TIMES (5) This course is a study of the life of Jesus through an examination of his acts and words as recorded by his contemporaries in the New Testament. Attention will also be given to the interpretation of Jesus' message by theologians and others as they seek to relate him to the modern world.
REL 3252 (REL 317) THEOLOGY OF PAUL (5) This course will survey the life and times of Paul as a prelude to an indepth study of this primary Christian thinker. Attention will be given both to the sources of his thought and to its contemporary relevance.
REL 3300 (REL 320) RELIGIONS OF THE WORLD (5) Introduction to the major faiths of mankind. Included in the discussion will be Hinduism, Buddhism, Taoism, Islam, Judaism and Christianity. The course will involve a comparison of common elements in these major religions while respecting their distinctive features.
REL 3600 (REL 323) JUDAISM (5) This course is an introduction to this major world religion. Following a survey of the history of Judaism, major themes in jewish religious thought will be highlighted, especially as they relate to modern movements of this faith.
REL 3510 (REL 326) EARLY CHRISTIANITY (5) This course will survey the development of Christian thought and practice from its beginnings as a primitive church to its establishment as a major faith in the Middle Ages. It will then consider the relevance of this early experience for modern movements of this faith.
REL 3532 (REL 328) REFORMATION (5) 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 perennial personal experiences and theological perspectives which directed the actions of such persons as Luther, Calvin, Zwingli and the movements they founded.
REL 3540 (REL 329) MODERN CHRISTIANITY (5) This course will survey the basic beliefs of Christian doctrine in its more modern and existential insights. And for this purpose will take into consideration the social, cultural and scientific revolution associated with the thinking of Hume, Darwin, Marx and Freud and other thinkers who furnish the background for the emerging newer understanding of Christian faith.
(REL 330) ISLAM AND ISLAMIC MYSTICISM (5) The study of Islam as a major world religion in terms of its history, scripture, and practice. Emphasis will also be given to the various types of mysticism associated with Islam and to modern movements of this faith.
REL 3665 (REL 340) JUDAIC PRAYER (5) This course will examine the nature and place of prayer in modern Judaism. After a survey of the place of prayer in the life and history of ancient Israel as reflected in Hebrew Scriptures and Rabbinic writings, attention will be focused on the teachings concerning prayer and its practice in contemporary Jewish worship and spirituality.
REL 3270 (REL 341) BIBLICAL THEOLOGY (VAR) This course will examine the thought and heritage of the Bible, especially as it discloses the history of the Hebrew people, the role of the prophets, the life and times of Jesus, and the thought of Paul. Major themes will be related to modern movements in Judaism and Christianity.
REL 3175 (REL 350) MARRIAGE AND DIVORCE (5) This course will explore what resources for a renewed contemporary understanding of marriage may be found in the religious biblical perspectives. In addition, considerable attention will be given to the crisis of divorce.
REL 4485 (REL 400) NEW OPTIONS IN RELIGIOUS EXPERIENCE (5) An examination of the methods for studying religious experience will be followed by an application of the results to the numerous types of religious phenomena currently being promoted in our culture. These include Witchcraft, Zen, pentecostalism, drug experience, revivals, Jesus people, Hare Krishna, and spiritualism.
REL 4461 (REL 403) WHY SUFFERING ANO EVIL? The problem of evil is as perennial as it is perplexing in religious thought.
This course will examine the major theological responses to the problem of evil and the fact of suffering in order to ascertain their adequacy and relevance of these responses for today.
REL 4463 (REL 405) ISSUES IN RELIGION AND SCIENCE (5) An examination of the relationships between the perspectives of religion and science and the consequences of these relationships for our time. A different major topic will be selected and announced each time the course is offered.
REL 4185 (REL 406) RELIGIOUS VALUES AND TECHNOLOGY (5) A study of religious value systems of modern programs of technology will be undertaken for the purpose of evaluating these systems and using them most fully in constructing a human world.

REL 4493 (REL 407) RELIGION AND MODERN MAN (VAR.) An examination of relevant issues in religion concerning Modern Man. Behavioral as well as conceptual expressions are analyzed.
REL 4411 (REL 409) WHAT IS MAN? (5) What is the image of man in religious thought? How does this image compare and contra with man as understood by science and the humanities? This course will attempt to speak to these questions in an effort to establish constructive dialogue between religious and other perspectives.
REL 4420 (REL 420) CONTEMPORARY JUDAIC-CHRISTIAN RELIGIOUS THOUGHT (5) This course will examine contemporary issues facing Judaism and Christianity, such as formulation of faith, institutional identity, liturgical prayer, ecumenism, marriage and social commitment. It will consider comparatively the manner in which Jewish and Christian theologians of today meet these issues.
REL 4481 (REL 426) CONTEMPORARY LATIN AMERICAN RELIGIOUS THOUGHT 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 If theology and to very recent theologies of liberation.
REL 4430 (REL 429) STUDIES IN RELIGIOUS THINKERS (5) A major religious thinker or school of thought will be examined in depth or compared with another major perspective. Possible figures include Augustine, Aquinas, Luther, Calvin, Kierkegaard, Buber, Heschel, Barth, Tillich, Teilhard and Altizer. The specific thinkers or school of thought will be selected and announced in advance.
$\qquad$ (REL 435) INSTITUTIONAL RELIGION IN NORTH AMERICA (5) This course will examine the patterns and development of organized religion in North America. Of special interest will be an assessment of emerging changes in religious institutions with regard to their norms and social relevance. For example, the contrast between the more spontaneous and less structured movements and the more established institutional forms will be pursued.
REL 4183 (REL 445) WESTERN MYSTICS (5) The course considers the roots and development of western mysticism, including contemporary expressions of the same, through a direct analysis of selected works of major mystics. On this basis, the course will attempt to identify synthetically the essential characteristics of mystical experience.
REL 4496 (REL 450) THE END? (5) What happens after death? This course will explore the various answers to this question given by contemporary theologians and thinkers.
REL 4808 (REL 460) APPLIED THEOLOGY (VAR.) The study of contemporary problems and methodologies of pastoral theology in a practical-theoretical context.
REL 4910 (REL 490) INDEPENDENT RESEARCH (VAR.) Topics will be selected to meet the academic needs of the individual student.
REL 4931 (REL 495) RELIGIOUS STUDIES SEMINAR (5) This seminar is designed for majors and other qualified students approved by the Department, and will be guided by one or more faculty members. The specific topic will be selected and announced in advance. The number of participants will be limited.
REL 5937 (REL 591) SPECIAL TOPICS (5) Topics will be selected to meet the academic needs of groups of students.

## INTERDISCIPLINARY: PHILOSOPHY AND RELIGIOUS STUDIES

PHI 3710 (PHR 300) MEANING OF LIFE (5) This introductory course examines the convergent and divergent views of philosophies and religions regarding the meaning of life. Special emphasis is given to the variety of strategies available to the individual in the personal search for such meaning.
PHI 3762 (PHR 310) EASTERN PHILOSOPHICAL AND RELIGIOUS THOUGHT (5) 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.
PHH 3843 (PHR 315) YOGA (5) The ancient techniques of "Hatha Yoga", relaxation and breathing, leading to meditation, mastership of self and inner peace will be the content of this course. The course will be both theoretical and practical, with major emphasis on the latter.
PHM 4000 (PHR 401) HUMAN IDENTITY (5) This interdisciplinary course will explore the philosophical, religious and psychological views on personhood. Several questions will be examined: What constitutes personhood? What is the self-concept? What does it mean to be an authentic person? How free is any person?
PHI 4764 (PHR 410) PERSPECTIVES ON SOCIAL ISSUES (5) This course will examine contemporary issues that have a religious philosophical dimension. The specific topic(s) and perspective(s) will be selected and announced in advance.
PHM 4030 (PHR 426) MAN AND NATURE (5) This course examines the philosophical understanding of nature and of man's relation to nature as his environment. It will explore the humanistic perspectives of both the scientific and the philosophical interpretations of nature and environment. It will also deal with the diverse influence of technology and social organizations on the quality of human living through their impact on man's environment.

- (PHR 435) PEACE AND SOCIETY (5) Students will survey several cogent international questions and issues from the point of view of philosophical and religious thought: socio-political forces underlying peace/unrest, impact of social protest upon the ethical and political values of various cultures, the ideology and efficacy of non-violence, the economic and social costs of national defense/war/peace. Major Eastern and Western peace documents will be examined.
PHI 4910 (PHR 490) INDEPENDENT RESEARCH (VAR.) Topics will be selected to meet the academic needs of the individual student.
PHI 4936 (PHR 495) INTERDISCIPLINARY SEMINAR (5) This seminar is designed for majors and other qualified students approved by the Department, and will be guided by one or more faculty members. The specific topic will be selected and announced in advance. The number of participants will be limited.
PHI 5934 (PHR 591) SPECIAL TOPICS (5) Topics will be selected to meet the academic needs of groups of students.
The Department of Philosophy and Religion also participates in the Continuing Education Program of the University and thus serves the community and professional groups by offering several courses off-campus. For further information concerning these courses (e.g. credit hours, courses not listed in the catalog) consult the Department.


## PHYSICAL SCIENCES

# PHYSICS, CHEMISTRY, EARTH SCIENCES, ENVIRONMENTAL STUDIES MAJORS <br> <br> PHYSICS 

 <br> <br> PHYSICS}

## Campus Location: Tamiami Campus only


#### Abstract

DEGREE: Bachelor of Science. *Students Interested in teacher certification see note on page 5.


LOWER DIVISION PREPARATION:
Required Courses: part of the 90 quarter hours ( 60 semester hours) of lower division coursework should be in the sciences.

Recommended Courses: algebra and trigonometry; chemistry (10 quarter hours); physics with or without calculus; calculus ( 10 quarter hours). These courses may be taken at the University.
UPPER DIVISION PROGRAM:
Major:

## Quarter Hours

Required Courses: 55
PHY 3123 (PHY 340) Modern Physics
5
PHY 4323, PHY 4324 (PHY 415, 416) Electromagnetism 10
PHY 4223 (PHY 410) Classical Mechanics 5
PHY 4526 (PHY 411) Statistical Thermodynamics 5
PHY 4810 (PHY 407) Senior Physics Laboratory 5
PHY 4604 (PHY 420) Quantum Mechanics 5
Electives in experimental or theoretical physics 15
Math elective beyond 10 quarter hours of calculus 5
Electives:

Must include PHY 301-303 and Laboratory if the equivalent is not taken in the lower division.
Minor: Two minors are available to students. Track A is designed for the student who plans to take the introductory physics sequence PHY 301-302-303 or its equivalent. Track B is designed for the student who plans to take the introductory sequence PHY 305-306 or its equivalent.

Quarter Hours
Track A: 30
PHY 3040C (PHY 301)-PHY 3041C (PHY 302)-PHY 3042C
(PHY 303) Physics with Calculus
15
PHY 3040L (PHY 301L) Junior Physics Laboratory 2
PHY 3123 (PHY 340) Modern Physics 5
Additional approved courses $8^{*}$

Track B: 32
PHY 3050C (PHY 305)-PHY 3051C (PHY 306) Physics without Calculus

10
PHY 3040 (PHY 301L) Junior Physics Laboratory 2
PHY 3123 (PHY 340) Modern Physics 5
Additional approved courses 15*
*approval of physics advisor


#### Abstract

Remarks: No D grades will be allowed in the courses required for the major. This rule includes required courses outside the discipline. Masters Program: A cooperative Master of Science in Physics with a state university of Florida is pending and is expected to become available in the near future. Inquiries concerning this program are welcomed.


## COOPERATIVE EDUCATION

Students seeking the Baccalaureate degree in physics may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Division of Student Services. The student spends several quarters fully employed in an industrial or governmental physics laboratory. For further information consult the Department of Physical Sciences or the Department of Cooperative Education.

## COURSE OFFERINGS

PHY 3040C (PHY 301)-PHY 3041C (PHY 302)-PHY 3042C (PHY 303) PHYSICS WITH CALCULUS (5-5-5) (F-W-S; W-S-SS) Basic physics sequence for students that have had mathematics through calculus. PHY 301 will cover kinematics, Newton's laws, conservation of linear and angular momentum and gravitation. PHY 302 continues with fluid dynamics, sound, thermodynamics, and optics. PHY 303 covers electric fields, magnetic fields, and electromagnetic waves. Calculus may be taken concurrently.
PHY 3040L (PHY 301L)-PHY 3041 L (PHY 302L)-PHY 3042 (PHY 303L) JUNIOR PHYSICS LABORATORY (2-2-2) (F-W-S) Laboratory section of Physics 301-303. This may be taken separately.
PHY 3050C (PHY 305)-PHY 3051C (PHY 306) PHYSICS WITHOUT CALCULUS (5-5) (F-W; S-SS) Introductory physics for students without calculus. The same material is presented as in PHY 301-303, but with less mathematical sophistication. Not for physical sciences majors.
AST 3025L (PHY 307) OBSERVATIONAL ASTRONOMY (2 Variable) (F) A study of astronomical objects visible from Miami: stars and their constellations, planets, binary stars, star clusters, variable stars, nebulae and galaxies will be among the objects discussed and observed.
AST 3002 (PHY 309/EAS 309) MODERN ASTRONOMY (5) (F) The structure and evolution of our solar system is studied with particular emphasis on physical concepts. Topics will include astronomical coordinate systems, celestial mechanics, the earth's motions and a description of the solar system. Prerequisites: college algebra and geometry.
AST 3050 (PHY 310/EAS 310) MODERN ASTROPHYSICS (5) (W) 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 301-303, Calculus I and II, and PHY 309.
PSC 3001 (PHY 315) CONCEPTS IN PHYSICS (5) (S) Self contained course for liberal arts majors covering the major concepts in physics; necessary concepts of elementary algebra and geometry will be covered in the beginning of the course and used to discuss Newtonian, relativistic, and quantum mechanics and their applications to atoms, stars and the universe as a whole. Throughout the course the dynamic nature of scientific laws will be stressed as new, more general laws are first hypothesized and then used to predict and eventually cross new frontiers of physics.
PHY 3503/CHM 3410 (PHY 321/CHE 321) THERMODYNAMICS (5)(F) Same as CHE 321. Fundamental principles of thermodynamics; the first, second, and third laws, free energy, entropy, the chemical potential, phase rule and its applications. The first in a three-quarter physical chemistry sequence. Prerequisites: general chemistry, general physics, and mathematics through Calculus II. Calculus II may be taken concurrently.
PHY 3424 (PHY 322) OPTICS (5) (W) General formulation of geometrical optics including matrix techniques, interference phenomena, and the theory of Fraunhofer and Fresnel diffraction will be among the topics covered.
PHY 3123-PHY 3124 (PHY 340)-(PHY 341) MODERN PHYSICS (5-5) (W-S) Recent developments in physics are discussed. Subject matter includes: review of classical physics, special relativity, four-vectors, particle aspects of waves, wave aspects of particles, the hydrogen atom, many electron atoms, nuclear instrumentation, nuclear structure, nuclear reactions, elementary particles, introduction to quantum mechanics and solid state physics.
PSC 3351 (PHY 351) EARTH PHYSICS (5) The planet earth treated as a physical system. The formation and structure of the earth will be discussed, as well as current dynamic changes.
PHY 3722C (PHY 352) ELECTRONICS (5) (SS) Including solid state theory and the theory of circuits. Circuit operation and design in lecture and laboratory sessions.
PHY 4750L (PHY 356L) INTRODUCTION TO SCIENTIFIC INSTRUMENTATION (5) (W) The student learns to set up and operate such standard pieces of laboratory apparatus as bridges, amplifiers, oscilloscopes, frequency counters, flowmeters, and thermocouple circuits utilizing chart recorders. A background in general physics is recommended.
PSC 3810 (PHY 361) FRONTIERS OF PHYSICS (5) (F) An introduction on an elementary level to deve'opments in physics in the 20th century. The subjects covered will include relativity, atomic and molecular structure, solid state physics, the laser, nuclear structure, particle physics and astrophysics.
PHY 3033 (PHY 362) PHYSICAL ASPECTS OF UNSOLVED MYSTERIES (5) (W) Topics peripheral to orthodox science such as UFO's, attempts to communicate with alien beings, the theories of Velikovsky, Stonehenge, and psychic phenomena are presented for discussion. Emphasis is on physical ideas, scientific reasoning, and the interplay between theory and experiment.
PHY 4810 L (PHY 407), PHY 4811 L (PHY 408L), PHY 4812L (PHY 409L) SENIOR PHYSICS LABORATORY (5-5-5) (F-W. S) Advanced laboratory topics are treated. Modern physics laboratory equipment is used, and the studerii is intioduced to current laboratory practice.

PHY 4221 (PHY 410) SEMINAR IN CLASSICAL MECHANICS (5) (W) Newtonian mechanics including statics of particles, cables and rigid bodies, dynamics of particles and groups of particles in three dimensions and motion of a rigid body in a plane. A background in general physics is advisable.
PHY $4523 /$ CHM 4460 (PHY $411 /$ CHE 406) STATISTICAL THERMODYNAMICS (5) (F) Review of the fundamental laws of thermodynamics applied to simple systems. Elementary kinetic theory of gases applied to diffusion, viscosity, thermal and electrical conductivity. Boltzmann, Fermi-Dirac and Bose-Einstein distribution functions applied in the Boltzmann limit to the calculation of thermodynamic variables. Prerequisites: general chemistry, general physics, and mathematics through Calculus II.

PHY $4323-$ PHY 4324 (PHY 415, PHY 416) SEMINAR IN ELECTROMAGNETISM (5-5) (F-W) 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 scalar potential, Faraday's law, magnetic materials, Maxwell's equations and propagation of waves in space and various media are discussed. Prerequisite: Calculus.
PHY 4604 (PHY 420) QUANTUM MECHANICS I (5) (S) An introduction to the basic postulates of quantum mechanics. Solutions to the time independent Schrodinger equation are obtained for particles in one dimensional potential wells, the hydrogen atom solutions and the harmonic oscillator problem. Prerequisites: general chemistry, general physics, and mathematics through Calculus 11 .
PHY 4905 (PHY 491), PHY 4906 (PHY 492), PHY 4907 (PHY 493) INDEPENDENT STUDY (VAR) (F-W-S-SS) The student will work under the supervision of a faculty member on subject materials of mutual interest.
PHY 4930 (PHY 471), PHY 4931 (PHY 472), PHY 4932 (PHY 473) SPECIAL TOPICS (VAR) In-depth study of topics of special interest to physics.
(PHY 521) SEMINAR IN ADVANCED THEORETICAL MECHANICS (5) (SS) A continuation course in classical mechanics which leads naturally into quantum mechanics. Topics to be covered will include Lagrangian and Hamiltonian methods, variational techniques, Poisson brackets, symmetries, algebra of quantum mechanics, representations, Dirac ladder operations, spin, and the hydrogen atom.
PHY 5250 (PHY 530) PHYSICS OF FLUIDS (5) (S) Introduction to the constitutive equations of Fluid Mechanics. Topics in steady compressible and incompressible flows. Prerequisites: Classical Mechanics and Thermodynamics or consent of instructor.
PHS 5400 (PHY 540/CHE 540) SOLID STATE PHYSICS (5) (S) Crystalline form of solids, lattice dynamics, metals, insulators, semi-conductors, and dielectric materials. Prerequisites: general chemistry, general physics, and mathematics through Calculus II.
PHS 4303 (PHY 451 ) NUCLEAR PHYSICS (5) (S) A treatment of the current state of the nuclear theory problem and a discussion of modern experimental methods.
$\qquad$ (PHY 581, PHY 582, PHY 583) INTRODUCTION TO PHYSICS RESEARCH (5-5-5) (F-W-S-SS) Students are introduced to research techniques by assisting with an original investigation in experimental or theoretical physics.
PHS 5125 (PHY 501) SEMINAR IN THEQRETICAL PHYSICS (5) (S) The theoretical foundation of classical mechanics, relativity, fields, quantum mechanics, group theory and relativity.
PHY 5936 (PHY 591), PHY 5937 (PHY 592), PHY 5938 (PHY 593) SEMINAR IN SPECIAL TOPICS (VAR) The student will work under the supervision of a faculty member of subject material of mutual interest.
ISC 3949-ISC 4949 (COE 311, COE 41 1) COOPERATIVE EDUCATION IN PHYSICAL SCIENCE (5-5) One quarter of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Coop Program. A written report and supervisor evaluations will be required of each student.

## CHEMISTRY

The student may choose a Bachelor of Arts program or a Bachelor of Science program of study in Chemistry.
Campus Location: Tamiami Campus only

## DEGREE: Bachelor of Arts

This program is for students preparing for careers in medicine, dentistry, environmental studies, veterinary medicine, or secondary science education. Students interested in teacher certification see note on page 5 .

## LOWER DIVISION PREPARATION:

Required Courses: one year of general chemistry with lab, algebra and trigonometry; one year of general biology with lab.
Lower or Upper Division Preparation: required courses which may be taken at the University MAC 3411-MAC 3412 (MAS 301-MAS 302) Differential and Integral Calculus CHM 3210, 3210L-CHM 3211, 3211 (CHE 301, 301L-CHE 302, 302L) Organic Chemistry I-II with lab, PHY 3040C-PHY 3041 C -PHY 3042 C (PHY 301-PHY 302-PHY 303) Physics with Calculus or PHY 3050C-PHY 3051C (PHY 305-PHY 306) Physics without calculus.
Required Courses: ..... 26CHM 4220 (CHE 403) Advanced Organic Chemistry 5CHM 4230L (CHE 427L) Organic Structure Determination 2orCHM 4320L (CHE 428L) Research Techniques in OrganicChemistry2
CHM 3400 (CHE 311) Physical Chemistry for Life Sciences ..... 5
CHM 3400L (CHE 311 L) Physical Chemistry for the Life Sciences Laboratory ..... 2
CHM 3120 (CHE 312) Quantitative Analysis ..... 5
CHM 3120L (CHE 312L) Quantitative Analysis Laboratory ..... 2
One additional chemistry course ..... 5
64
Electives:52 or

## OR

## DEGREE: Bachelor of Science

This program is according to the guidelines of the American Chemical Society and prepares the student for graduate study or a professional career as a chemist in industry, government service, or secondary school teaching.

## LOWER DIVISION PREPARATION:

Required Courses: One year of general chemistry with lab; algebra and trigonometry.
Lower or Upper Division Preparation: required courses which may be taken at the University MAC 3411 -MAC 3412 (MAS 301-MAS 302) Differential and Integral Calculus CHM 3210, 3210L-CHM 3211, 3211L (CHE 301, 301L-CHE 302, 302L) Organic Chemistry I-II with lab, PHY 3040C (PHY 301), PHY 3041C (PHY 302), PHY 3042C (PHY 303) Physics with Calculus.

## UPPER DIVISION PROGRAM:

Required Courses:
CHM 4220 (CHE 403) Advanced Organic Chemistry Quarter Hours

CHM 4230L (CHE 427L) Organic Structure Determination or
CHM 4320L (CHE 428L) Research Techniques in Organic Chemistry2
CHM 3410 (CHE 321) Physical Chemistry I - Thermodynamics ..... 5
CHM 3411 (CHE 322) Physical Chemistry II - Equilibrium and Properties of Solutions ..... 5
CHM 3412 (CHE 323) Physical Chemistry III - Quantum Mechanics ..... 5
CHM 3410L-CHM 3411L-CHM 3412L (CHE 325L-326L- 327L) Physical Chemistry Laboratory I-II-III ..... 2-2-1
CHM 3120 (CHE 312) Quantitative Analysis ..... 5
CHM 3120L (CHE 312L) Quantitative Analysis Laboratory ..... 2
CHM 4130 (CHE 412) Modern Analytical Chemistry ..... 5
CHM 4130L (CHE 412L) Modern Analytical Chemistry Laboratory ..... 2
CHM 4610 (CHE 431) Advanced Inorganic Chemistry ..... 5
Senior Seminar and/or Independent Study ..... 5
One additional senior-level chemistry course ..... 5
Other Required Courses; at least one of the
following:
MAP 3302 (MAS 325) Differential Equations
MAP 4401
(MAS 425) Math Methods in the Physical

COP 3210 | Sciences |
| :--- |

## Electives:

Remarks: No $D$ grades will be allowed in courses required for the major. This rule includes required courses outside the discipline.
Minor in Chemistry:
Required Courses:
CHM 3045, 3045L-CHM 3046, 3046L (CHE 305, 305L-
CHE 306, 306L) Contemporary Chemistry with Laboratory

14
CHM 3210, 3210L-CHM 3211, 3211 L (CHE 301, 301LCHE 306, 306L) Organic Chemistry with Laboratory

14
CHM 3120, 3120 L (CHE 312, 312L) Quantitative Analysis with Laboratory

7

## MASTER OF SCIENCE IN CHEMISTRY

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

## COOPERATIVE EDUCATION

Students seeking the Baccalaureate degree in chemistry may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Division of Student Services. The student spends several quarters fully employed in an industrial or governmental chemistry laboratory. For further information consult the Department of Physical Sciences or the Department of Cooperative Education.

## COURSE OFFERINGS

CHM 3210 (CHE 301) ORGANIC CHEMISTRY (5) (F-S) 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. Prerequisite: general chemistry.
CHM 3210 L (CHE 301L) ORGANIC CHEMISTRY LABORATORY (2) (F-S) An introduction to the basic experimental techniques of the organic chemist. Corequisite: CHE 301
CHM 3211 (CHE 302) ORGANIC CHEMISTRY II (5) (W-SS) Continuation of CHE 301
CHM 3211 L (CHE 302L) ORGANIC CHEMISTRY LABORATORY II (2) (W-SS) Synthesis and qualitative analysis of organic compounds. Corequisite: CHE 302
CHM $3045-$ CHM 3046 (CHE 305-CHE 306) CONTEMPORARY CHEMISTRY I-II (5-5) (F-W,S-SS) Fundamental principles of modern chemistry atomic structure, stoichiometry, chemical bonding, states of matter, thermodynamics, solutions, kinetics, equilibrium, electrochemistry. This course is primarily designed for the student who feels that his/her background in general chemistry is somewhat weak and who would like to go on to organic chemistry or more advanced biology courses. Familiarity with algebraic manipulations is required. Should be accompanied by CHE 305L-306L.
CHM 3045L-CHM 3046L (CHE 305L-CHE 306L) CONTEMPORARY CHEMISTRY LABORATORY I-II (2-2) (F-W,S-SS) Laboratory to accompany CHE 305-306. Basic laboratory techniques are introduced and experiments performed on material relating to CHE 305-306

CHM 3030 (CHE 308) SURVEY OF GENERAL CHEMISTRY (5) (F) A basic one-quarter survey course in inorganic chemistry for nonmajors. Topics include atomic structure, stoichiometry, bonding, equilibrium, electrochemistry. Does not fulfill requirements for chemistry, biology, or premed majors. Familiarity with algebraic manipulations is required. Should be accompanied by CHE 308 L.
CHM 3030L (CHE 308L) SURVEY OF GENERAL CHEMISTRY LABORATORY (2) (F) Laboratory to accompany CHE 308. Basic laboratory techniques are introduced. Experiments performed related to material covered in CHE 308 .
CHM 3200 (CHE 309) SURVEY OF ORGANIC CHEMISTRY (5) (W) A basic one-quarter 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. Should be accompanied by CHE 309L. Prerequisite: general chemistry.
CHM 3200L (CHE 309L) SURVEY OF ORGANIC CHEMISTRY LABORATORY (2) (W) An introduction to the basic experimental techniques of organic chemistry Corequisite: CHE 309.
CHM 3400 (CHE 311) PHYSICAL CHEMISTRY FOR THE LIFE SCIENCES (5) (S) Principles of physical chemistry with particular reference to the life sciences. Topics include thermodynamics, equilibria, electrochemistry, and reaction kinetics, Prerequisites: Differential and Integral Calculus and General Physics. A background in Quantitative Analysis is also helpful.
CHM 3400L (CHE 311L) PHYSICAL CHEMISTRY FOR THE LIFE SCIENCES LABORATORY (2) (S) Projects in physical properties of solutions, equilibrium, reaction kinetics, and equations of state of interest to students in life sciences. Taken concurrently with CHE 311.
CHM 3120 (CHE 312) QUANTITATIVE ANALYSIS (5) (W-S-SS) Fundamentals of classical quantitative analysis. Topics include theory of precipitation, acid-base, and oxidation-reduction reactions, as well as an introduction to spectrophotometric methods of analysis, ion-exchange techniques and complex formation titrations. Must be taken concurrently with CHE 312L. Prerequisite: CHE 305-306 or equivalent.
CHM 3120L (CHE 312L) QUANTITATIVE ANALYSIS LABORATORY (2) (W-S-SS) Laboratory to accompany CHE 312. Must be taken concurrently with CHE 312.
CHM 3410/PHY 3503 (CHE 321/PHY 321) PHYSICAL CHEMISTRY I - THERMODYNAMICS (5) (F) Fundamental principles of thermodynamics; the first, second, and third laws, free energy, entropy, in addition to the chemical potential, phase rule and its applications, concepts of activation energy. The first in a three-quarter physical chemistry sequence. Prerequisites: general chemistry, general physics, and mathematics through Calculus II. Calculus II may be taken concurrently.
CHM 3411 (CHE 322) PHYSICAL CHEMISTRY II - EQUILIBRIUM, KINETICS AND PROPERTIES OF SOLUTIONS (5) (W) The second in the series of physical chemistry courses: equilibrium, the relationship of the equilibrium constant to the chemical potential, catalyzed reactions, colligative properties of solutions, osmotic pressure, dipole moments and conductivity. Prerequisite: CHE 321.
CHM 3412/PHY 4604 (CHE 323/PHY 420) PHYSICAL CHEMISTRY III - QUANTUM MECHANICS (5) (S) The third in the physical chemistry series: simple quantum mechanical calculations, solutions to the Schroedinger wave equation, simple harmonic oscillator, particle in a square well, the hydrogen atom, structure of atomic and molecular orbitals. Prerequisites: general chemistry, general physics, and mathematics through Calculus II.
CHM 3410 (CHE 325L) PHYSICAL CHEMISTRY LABORATORY I (1) (F) Equation of state and transport experiments. Taken concurrently with CHE 321.
CHM 3411 L (CHE 326L) PHYSICAL CHEMISTRY LABORATORY II (2) (W) Projects in thermochemistry, physical properties of solutions, and homogeneous equilibria. Taken concurrently with CHE 322.
CHM 3412 (CHE 327L) PHYSICAL CHEMISTRY LABORATORY III (1) (S) Heterogeneous equilibria, reaction kinetics in solution; requires some knowledge of chemical reaction mechanisms in solution.
CHM 4090 (CHE 332L) INTRODUCTION TO SCIENTIFIC GLASSBLOWING (2 (F) Basic glassblowing operations with glass tubing and rod are taught. Emphasis is on making and repair of scientific glassware, but some decorative work is included.
CHM 4220 (CHE 403) ADVANCED ORGANIC CHEMISTRY (5) (F-S) A look into specialized areas of organic chemistry including such topics as molecular rearrangements, photochemistry, pericyclic reactions and heterocyclic chemistry, as well as more detailed examination of synthesis, etc. Should be accompanied by a laboratory (CHE 427 L or CHE 428 L ).
CHM 4300 (CHE 404) BIO-ORGANIC CHEMISTRY (5) (S) Chemistry of naturally occurring organic compounds of biological importance. The relationship between organic chemistry and the chemical reactions which constitute the living organism.
CHM 4490 (CHE 405) SPECTROSCOPY AND MOLECULAR STRUCTURE (5) (W) Molecular structure and its relationship to spectroscopy. Introduction to theory and practical use of uv/visible, infrared, nmr, and mass spectroscopy. Prerequisite: Competency in organic chemistry is required. Physical chemistry is recommended.
CHM 4460/PHY 4523 (CHE 406/PHY 411) STATISTICAL THERMODYNAMICS (5) (F) Review of the fundamental laws of thermodynamics applied to simple systems. Elementary kinetic theory of gases applied to diffusion, viscosity, thermal and electrical conductivity. Boltzmann, Fermi-Dirac and Bose-Einstein distribution functions applied in the Boltzmann limit to the calculation of thermodynamic variables. Prerequisites: General chemistry, general physics and mathematics through Calculus II.
$\qquad$ (CHE 409L/BSC 409L) SCIENTIFIC LITERATURE (2) (W) 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.
CHM 4130 (CHE 412) MODERN ANALYTICAL CHEMISTRY (5) (W) A lecture-laboratory course designed to introduce instrumental methods of chemical analysis including spectrophotometry, potentiometry, gas chromatography, atomic absorption, and polarography. Specific instrumental techniques will be covered. Must be taken concurrently with CHE 412L. Prerequisites: Quantitative analysis, organic chemistry, and general physics.
CHM 4130 (CHE 412L) MODERN ANALYTICAL CHEMISTRY LABORATORY (2) (W) Laboratory to accompany CHE 412. Must be taken concurrently with CHE 412 .
CHM 4230L (CHE 427L) ORGANIC STRUCTURE DETERMINATION (2) (F-S) The qualitative analysis of organic compounds using modern spectroscopic and chemical methods.
CHM 4320L (CHE 428L) RESEARCH TECHNIQUES IN ORGANIC CHEMISTRY (2) (F-S) Practical instruction in the more advanced manipulations and procedures of the modern organic laboratory. This course is designed to prepare a student for research in organic chemistry and is a prerequisite for independent study (CHE 491) in organic chemistry.

CHM 4610 (CHE 431) ADVANCEO INORGANIC CHEMISTRY (5) (F) Molecular structure of inorganic compounds, periodicity, introduction to nonaqueous solvents, ligand field theory, organometallic compounds.
CHS 4110 (CHE 436) RADIOCHEMISTRY AND NUCLEAR CHEMISTRY (5) (S) Production, isolation, methods of detection, counting statistics and estimation of radioisotopes, Applications to chemical, physical and biological problems. Prerequisites: CHE 305-306 or equivalent and CHE 312.
CHS 4100 L (CHE 437L) RADIOCHEMICAL TECHNIQUES LABORATORY (2) (S) Experiments involving handling, detection, chemical separation and use of radioisotopes. Students must have concurrent enrollment in either CHE 436 or EVR 536.
CHM 4310 (CHE 481) SPECIAL TOPICS IN ORGANIC CHEMISTRY (VAR) (F) An intensive examination of one or more areas selected by instructor and students.
CHM 4580 (CHE 483) SPECIAL TOPICS IN PHYSICAL CHEMISTRY (VAR) (W) An intensive examination of one or more areas selected by the instructor and students.
CHM 4680 (CHE 485) SPECIAL TOPICS IN INORGANIC CHEMISTRY (VAR) (S) An intensive examination of one or more areas selected by instructor and students.
CHM 4180 (CHE 487) SPECIAL TOPICS IN ANALYTICAL CHEMISTRY (VAR) An intensive examination of one or more areas selected by instructor and students.
CHM 4910 -CHM 4911 -CHM 4912 (CHE 491)-(CHE 492)-(CHE 493) RESEARCH AND INDEPENDENT STUDY IN CHEMISTRY (VAR CREDIT) (F-W-S-SS) At any time the student chooses, from the beginning of his/her junior year on, he/she may work with a professor in a research area. The student should have a good grounding in general chemistry and preferably in organic chemistry and physics as well. The student is encouraged to talk to a number of professors in the department and select that area with which he/she is most comfortable. It is anticipated that several actual publications will result. Variable credit with a maximum of 15 credits.
CHM 4930 (CHE 495) SENIOR SEMINAR (3) (W) During the senior year, the student will present a total of two topics, prepared from current journal articles in the field of chemistry, to other chemistry major students, environmental science students, chemistry and other science faculty.
CHM 5440 (CHE 507) KINETICS AND CATALYSIS (5) (F) Theory of elementary reactions, activated complex theory, mechanisms of complex reactions. Competence in fundamental calculus, including differential equations is required.
CHM 5250 (CHE 521) ORGANIC SYNTHESIS (5) (F) Use of classical and modern reactions in the design and construction of complex organic molecules, including natural products. Some topics covered will be construction reactions, refunctionalization, stereochemistry and conformational analysis.
CHM 5280 (CHE 524) NATURAL PRODUCTS CHEMISTRY AND BIOSYNTHESIS (5) (F) Studies of the chemical origins (biosynthesis), properties, and synthesis of the various classes of naturally occurring compounds: terpenes, steroids, alkaloids, acetogenins.
CHM 5260 (CHE 526) PHYSICAL ORGANIC CHEMISTRY (5) (S) 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.
CHM 5650 (CHE 532) PHYSICAL INORGANIC CHEMISTRY (5) (W) Introduction to use of physical methods to determine structure of inorganic compounds.
PHS 5400 (CHE 540) (PHY 540) SOLID STATE (W) Crystalline form of solids, lattice dynamics, metals, insulators, semi-conductors, and dielectric materials. Prerequisites: General chemistry, general physics, and mathematics through Calculus II. CHM 5380 (CHE 581) SPECIAL TOPICS IN ORGANIC CHEMISTRY (VAR) (F) An intensive examination of one or more areas selected by instructor and students.
CHM 5581 (CHE 583) SPECIAL TOPICS IN PHYSICAL CHEMISTRY (VAR) (W) An intensive examination of one or more areas selected by instructor and students.
CHM 5681 (CHE 585) SPECIAL TOPICS IN INORGANIC CHEMISTRY (VAR) (S) An intensive examination of one or more areas selected by instructor and students.
CHM 5180 (CHE 587) SPECIAL TOPICS IN ANALYTICAL CHEMISTRY (VAR) An intensive examination of one or more areas selected by instructor and students.
ISC 3949-ISC 4949 (COE 311-COE 411) COOPERATIVE EDUCATION IN PHYSICAL SCIENCES (5) One quarter of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Coop Program. A written report and supervisor evaluations will be required of each student.

## EARTH SCIENCES

This program is interdisciplinary in nature and provides the background the student will need in professional work or graduate study. While thoroughly preparing the student in the basic sciences, the program also provides a sound knowledge of Caribbean earth sciences. Student and faculty exchanges will be promoted with their counterparts in the Caribbean. The student may choose either a Bachelor of Arts program or a Bachelor of Science program in earth sciences.

## Campus Location: Tamiami Campus only <br> DEGREE: Bachelor of Arts

This program is for the student who desires a significant background in the earth sciences for a career in science education, or in a public or private agency dealing with problems in the framework of the earth sciences.

## LOWER DIVISION PREPARATION:

Required Courses: general biology; physical geology or the equivalent; college algebra, trigonometry, and analytical geometry; general physics; general chemistry.

## UPPER DIVISION PROGRAM:

| Required Courses: |  | Quarter Hours |
| :---: | :---: | :---: |
| AST 3002 | (EAS 309) Modern Astronomy | 5 |
| MET 4701 | (EAS 410) Meteorology | 5 |
| GLY 4650 | (EAS 461) Paleobiology | 5 |
| GEO 3200C | (EAS 311) Physical Geography | 5 |
| OCE 3014 | (EAS 331) Physical Oceanography | 5 |
| $\begin{aligned} & \text { EVS } 4108 \\ & \text { or } \end{aligned}$ | (EAS 401) Applied Environmental Geology |  |
| EVS 4935C | (EUS 352/EVR 421) Water Resources | 5 |
| OCB 3010 | (BSC 308) Biological Oceanography | 5 |
| Possible Natural | Science Electives: | 10 |
| PCB 3033 | (BSC 360) Fundamentals of Ecology | 5 |
| GLY 4791 | (EAS 481) Cartography and Geologic Surveying | 3 |
| AST 3022L | (PHY 307) Observational Astronomy | 2 |
| Social Science Electives: |  | (45) |
| ANT 4340 | (ANT 420) Cultures of the Caribbean | 5 |
| ECS 4433 | (ECO 409) Economics of the Caribbean | 5 |
| ECS 5025 | (ECO 510) Economic Problems of Emerging Nations <br> (POS 307) Government and Politics of the | 5 |
|  | Caribbean | 5 |
| CPO 4327 | (POS 409) Topics in Caribbean Politics | 5 |
|  | (POS 429) Conflict and Cooperation in the |  |
|  | Caribbean | 5 |

## OR

Campus Location: Tamiami Campus Only
DEGREE: Bachelor of Science
This program provides a thorough scientific understanding of the basic sciences required for graduate study or a career in earth, marine, and atmospheric sciences.
LOWER DIVISION PREPARATION:
Required Courses: 4 semester hours of general biology; 4 semester hours of physical geology or the equivalent; 4 semester hours of historical geology; mathematics (calculus I and 11); 15 quarter hours or the equivalent, including laboratory, of general physics; 14 quarter hours or the equivalent, including laboratory, of general chemistry.
Remarks: The mathematics, physics, and chemistry requirements may be taken at the University.
UPPER DIVISION PROGRAM:
Quarter Hours
Required Courses: a minimum of 55 quarter hours of earth sci-
ence courses is required including at least 35 quarter hours from the following courses:
AST 3002 (EAS 309) Modern Astronomy 5
GEO 3200C (EAS 311) Physical Geography 5
GLY 3220 (EAS 313) Optical Mineralogy 5
OCE 3014 (EAS 331) Physical Oceanography 5
MET 4701 (EAS 410) Meteorology 5
GLY 4450 (EAS 412) Geophysics 5
GLY 4401 (EAS 421) Structural Geology ..... 5
GLY 4650 (EAS 461) Paleobiology ..... 5
GLY 4555 (EAS 471) Sedimentology ..... 5
Other Required Courses:
GLY 4910 (EAS 491) Independent Study ..... 5
8
GLY 4791 (EAS 481) Cartography and Geologic Surveying or the equivalent ..... 3
Electives: select courses to meet particular professional goals Suggestions: ..... 27
Natural Sciences:
OCB 3010 (BSC 308) Biological Oceanography ..... 5
PCB 3033 (BSC 360) Fundamentals of Ecology ..... 5
OCB 5635 (BSC 560) Marine Ecology ..... 5
EVS 4935C (EUS 352/EVR 421) Water Resources ..... 5
EVS 4932 (EVR 441) Energy Resources ..... 5
Social Sciences:
ANT 4340 (ANT 420) Cultures of the Caribbean ..... 5
ECS 4433 (ECO 409) Economics of the Caribbean ..... 5
ECS 5025 (ECO 510) Economic Problems of Emerging Nations ..... 5
(POS 307) Government and Politics of the Caribbean ..... 5
CPO 4327 (POS 409) Topics in Caribbean Politics ..... 5(POS 429) Conflict and Cooperation in theCaribbean5

Remarks: No D grades will be allowed in the courses required for the major. This rule includes required courses outside the discipline.
Minor in Earth Sciences
jsm1.4
Required Courses: 30 quarter hours minimum; the following courses are recommended:

|  |  | 5 |
| :--- | :--- | :--- | :--- |
| GLY 3157 |  | (EAS 301) Environmental Geology |
| (EAS 302) Elements of Caribbean Geology | 5 |  |
| (EAS 309) Modern Astronomy | 5 |  |
| GEO 3200C | (EAS 311) Physical Geography | 5 |
| OCE 3014 | (EAS 331) Physical Oceanography | 5 |
| MET 4701 | (EAS 410) Meteorology | 5 |
| GLY 4650 | (EAS 461) Paleobiology | 5 |
| GLY 4791 | (EAS 481) Cartography and Geologic Surveying | 5 |

## Certificate in Caribbean Studies

A student may earn a Certificate in Caribbean Studies by successfully completing the 30 quarter hours of social sciences coursework listed above for the Bachelor of Science Program in Earth Sciences, or by completing six other Caribbean related courses from at least two departments.

The social science major student in the Caribbean Certificate Program may elect up to five Caribbean related earth science courses toward the six courses required for the certificate.

Recommended Courses: in sequence:

| GLY 3157 | (EAS 302) Elements of Caribbean Geology | 5 |  |  |
| :--- | :--- | :--- | :---: | :---: |
| GLY 4190 | (EAS 495) Caribbean Earth Sciences Seminar | 5 |  |  |
| GLY 4792 | (EAS 496) Caribbean Mineral Resources Field |  |  |  |
|  | Trip |  |  | 5 |

## Cooperative Education

Students seeking the Baccalaureate degree in earth sciences may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative

Education in the Division of Student Services. The student spends several quarters fully employed in industry or a government agency. For further information consult the Department of Physical Sciences or the Department of Cooperative Education.

## COURSE OFFERINGS

(EAS 301) ENVIRONMENTAL EARTH SCIENCES (5) A course for nonscience majors and those desiring a cultural understanding of the earth sciences. Origin of the earth. Processes taking place in the earth's lithosphere, hydrosphere, and atmosphere which bear on man in his environment. Earthquake prediction, pollution control, weather modification on global scales. No prerequisites.
GLY 3157 (EAS 302) ELEMENTS OF CARIBBEAN GEOLOGY (5) A survey of the geology of the Caribbean and neighboring regions in view of current data and modern coricepts of global tectonics. The course summarizes the important points of Caribbean and Central American geology in their relation to mineral and energy resources, natural environmental disasters, especially seismic zones, agriculture and the geologic potentials for future development and industrialization.
(EAS 305) ENVIRONMENTAL GEOLOGY (5) 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.
(EAS 305L) ENVIRONMENTAL GEOLOGY LABORATORY (1) Study of common rocks and minerals. Study of the various rocks found in South Florida and their environmental importance concerning the availability of fresh ground-water to the region. Study of contour and geologic maps. Optional for nonscience majors. Corequisite of EAS 305 for science majors.
AST 3002 (EAS 309/PHY 309) MODERN ASTRONOMY (5) The structure and evolution of our solar system is studied with particular emphasis on physical concepts. Topics will include astronomical coordinate systems, celestial mechanics, the earth's motions and a description of our solar system. Prerequisites: College Algebra and Geometry.

- (EAS 310/PHY 310) MODERN ASTROPHYSICS (5) 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 301-303, Calculus I and II and PHY 309.
GEO 3200C (EAS 311) PHYSICAL GEOGRAPHY (5) Survey of the physical environment relevant to studies in regional geography, and earth sciences. Natural evolution of landforms and the interacting processes responsible for these features. Environmental modifications and deteriorations caused by human interactions, their socio-economic impacts and geographic problems. Case studies illustrated from South Florida and the Caribbean region.
GEO 3200L (EAS 311L) PHYSICAL GEOGRAPHY LAB (1) The use of maps as means of depicting the earth's morphology. The processes responsible for the landforms and to infer the subsurface structure of the earth's crust. Photogrammetry and use of aerial photographs in land evaluation, mapping, and as map supplements. Optional for nonscience majors. Corequisite of EAS 311 for science majors.
- (EAS 312) MINERALOGY (5) Elementary crystallography; fundamentals of crystal chemistry and physical mineralogy. Classification of common economic and rock forming minerals; structure and classification of silicate minerals. Study of geometric and atomic crystal models and principles and interpretation of $x$-ray diffraction and fluorescence techniques. Prerequisites: Physical Geology or equivalent and General Chemistry.
(EAS 312L) MINERALOGY LABORATORY (1) Identification of more than 100 common economic and rock forming minerals based on their physical properties. Crystal symmetry, symmetry operations, crystallographic calculations, stereographic projections.
GLY 3220 (EAS 313) OPTICAL MINERALOGY (5) 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. Prerequisites: EAS 312 or equivalent.
(EAS $313 L$ ) OPTICAL MINERALOGY LABORATORY (1) Identification of nonopaque minerals under the microscope based on their optical and crystallographic properties, determined from oil immersion/permanent mount methods.
GEO 3510 (EAS 320) EARTH RESOURCES (5) Distribution of mineral resources with special emphasis on metallic deposits. Problems of exploitation and depletion on a world-wide scale; their relationships to environment, social, economic, and political impacts; international control and trade. One or two field trips to a mining region expected. No prerequisites.
OCE 3014 (EAS 331) PHYSICAL OCEANOGRAPHY (5) A survey of the ocean as a physico-chemical environment. Properties of sea water, and the influence of sea-air interactions on the ocean structure. Water masses and oceanic circulation patterns. Diffusion and advection and their relation to oceanic properties. Heat budget and climatic control. Impact of oceanic properties on man's environment and economy. Case study of a mediterranean sea illustrated from the Caribbean Sea. One field trip to be expected.
EVS 4108 (EAS 401) APPLIED ENVIRONMENTAL GEOLOGY (5) A survey of the geological and geographical factors critical to man's attempt to contend with natural processes. Construction problems, sewers, waste disposal, dams, ground water, 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 geologic factors involved in future development and growth of these areas and conservation methods in relation to the geology of these areas. Prerequisites: EAS 301, EAS 311, and a sound background in mathematics, physics, and chemistry.
EVS 4108 (EAS 401L) APPLIED ENVIRONMENTAL GEOLOGY LABORATORY (1) Analysis of physical and physico-chemical geologic processes. Identification, control and correction techniques of landslides, rockfall, subsidence, quicksand, piping and flooding hazards. Corequisite of EAS 401.
MET 4701 (EAS $410 / E V R 412$ ) METEOROLOGY (5) The earth's atmosphere and its physical properties. General circulation and thermal structure of the atmosphere on a global and local scale. Physics and dynamics of clouds. Weather analysis and forecasting including temperate and tropical areas with emphasis on the Caribbean and neighbouring areas, birth place of major Atlantic tropical storms. Reading of weather maps, introduction to meteorologic instruments, transmission and plotting of meteorological data. Recommended: EAS 309, EAS 311, and competence in physics and calculus.
GLY 4450 (EAS 412) GEOPHYSICS (5) A survey of the different principles and methods of measurements of the physical properties of the earth and the moon seismic, magnetic, electrical, thermal and gravitational. The implications of the results
in terms of the earth's structure, composition, evolution and present state. Case studies illustrated from recent geophysical data from the Caribbean area and Central America. Prerequisites: EAS 301 and EAS 331.
(EAS 414) IGNEOUS AND METAMORPHIC PETROLOGY (5) Genesis, composition and classification of igneous and metamorphic rocks. Includes studies of experimental solid-liquid phase equilibria and mineral stabilities of silicate systems. Prerequisites: EAS 313.
- (EAS 414L) IGNEOUS AND METAMORPHIC PETROLOGY LABORATORY (1) Lab techniques concern the description and identification of igneous and metamorphic rocks in hand specimens and thin sections.
(EAS 420) MINERAL DEPOSITS (5) Morphology and genetic processes involved in known occurrences of mineral deposits; structural factors governing their size, location and shape. Exploration, detection, and exploitation methods. Emphasis is placed on known and potential mineral deposits of the Caribbean and neighbouring areas. Prerequisites: Physical Geology or equivalent, EAS 331, EAS 313, and chemistry.
(EAS 420L) MINERAL DEPOSITS LABORATORY (1) Microscopic petrology and petrography of ore samples and interpretation of geologic maps bearing on mineral deposits. Special emphasis is put on the Caribbean region. Corequisite of EAS 340.
GLY 4401 (EAS 421) STRUCTURAL GEOLOGY (5) Nature and origin of rock structures and deformations, primary structures, geometry and description of folds, faults, minor structures, cleavage, jointing, lineations, polyphase deformation and structural petrology. Topic in geotectonics and global tectonics with special reference to Caribbean. Prerequisites: Physical Geology or equivalent and a sound background in mathematics.
GLY 4401L (EAS 421L) STRUCTURAL GEOLOGY LABORATORY (1) Interpretation of geologic maps, folds, faults, outcrop patterns and three points problems. Graphic resolutions with stereographic net and structural analysis.
(EAS 430) DYNAMIC GEOGRAPHY (5) Theories and techniques used in modern geographic analyses. Simple correlation and regression. Multiple regression. Surfaces and regions, and the analysis of variance. Non parametric statistics. Factorial analysis and spatial allocation models. Examples emphasize aspects of economic, urban, transportation and social geography in South Florida and the Caribbean area. Prerequisites: EAS 311 and a sound background in mathematics.
GLY 4730 (EAS 432) MARINE GEOLOGY (5) Survey of the main physiographic provinces of the ocean floor. Modern theories concerning the evolution of the crust; continental drift, sea-floor 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 neighbouring region. Prerequisites: EAS 331, EAS 471, or instructor's permission.
GLY 4730L (EAS 432L) MARINE GEOLOGY LABORATORY (1) Training in the analysis and interpretation of marine geophysical data. Corequisite of EAS 432.
GLY 4240 (EAS 440) GEOCHEMISTRY (5) Origin of the chemical elements of common rock-forming minerals. Atomic theory, bond theory, lattice types, the interaction of electromagnetic waves and solids. Crystal chemistry of common oxides, sulfides, and rock-forming minerals. Geochemical cycles presently operating in the earth's atmosphere, hydrosphere, and lithosphere. Case studies in the Caribbean. Prerequisites: Chemistry, physics and mathematics, and a sound background in the earth sciences.
MET 4301 (EAS 452) DYNAMIC METEOROLOGY (5) Dynamical processes in the atmosphere. Meteorological thermodynamics and atmospheric statics. Scientific bases for modern quantitative and analytical meteorology. Variation of the wind and pressure fields in the vertical. Mechanism of pressure change; behavior of cyclones and anticyclones. Dynamic forecasting by numerical methods. Prerequisites: EAS 309, EAS 311, and EAS 410.
GLY 4650 (EAS 461) PALEOBIOLOGY (5) Development of life as traced through the fossil record. Survey of the main groups of animals commonly found as fossils. Theories of evolution and extinction. Study of the major microfossil groups used in biostratigraphic zonation, and as paleoecologic indicators. Prerequisites: Physical and Historical Geology, General Biology, or the instructor's permission.
GLY 4650 L (EAS 461L) PALEOBIOLOGY LABORATORY (1) Microscopic study of foraminifera, radiolaria and the diatoms. Study of invertebrate fossils, and osteology of the vertebrates. Corequisite of EAS 461.
GLY 4555 (EAS 471 ) SEDIMENTOLOGY (5) Sedimentary processes in the geological cycles as illustrated in recent environments. Different groups of sedimentary rocks. Primary and secondary sedimentary structures. Physico-chemical properties and diagenetic processes. Analytical techniques applied to modern sedimentology of both loose and lithified sediments. Prerequisites: Physical Geology or equivalent; Mineralogy, Optical Mineralogy, Paleontology, and a sound background in mathematics and chemistry.
GLY 4555L (EAS 471L) SEDIMENTOLOGY LABORATORY (1) Mechanical analyses, coloration techniques, and heavy mineral separation techniques. Macroscopic and microscopic study of sediments and rocks.
GLY 4791 (EAS 481) CARTOGRAPHY AND GEOLOGIC SURVEYING (3) A three-week course to be offered in the United States or in one of the Caribbean islands. The course is designed for Earth Science majors. Methods in cartographic drafting, compilation, design and evaluation. Methods of geologic surveying. Use of plane table. topographic maps and air photographs. Students unable to attend this course at FIU are encouraged to take a similar field course given at other institutions as a substitute. Prerequisites: EAS 311 and EAS 421.
GLY 4910, GLY 4911 (EAS 491-EAS 492) INDEPENDENT STUDY (5-5) 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. Varibale credit with a maximum of 10 credits. Prerequisite: Permission of the student's advisor.
GLY 4190 (EAS 495) CARIBBEAN EARTH SCIENCES SEMINAR (5) Discussion of various topics dealing with geograhic and geologic problems involving local, national, and international influence on economic life. Similar discussion will be held on oceanographic problems related to both the aquatic and sea-bed resources. Guest speakers in the Earth and Social Sciences will present lectures pertinent to their respective fields. Prerequisite: EAS 302 or instructor's permission.
GLY 4792 (EAS 496) CARIBBEAN MINERAL RESOURCES FIELD TRIP (5) A three-week field course in at least two Caribbean islands. Cursory review of the geologic factors governing the occurrence, size, and economic value of mineral deposits. Emphasis is on bauxite, copper, and energy resources. Visit to selected regions of active exploitation and processing plants, as well as abandoned mines. and potential sites of future exploitations. Prerequisite: EAS 302, or instructor's permission. GLY 5793 (EAS 501) CARIBBEAN SHALLOW-MARINE ENVIRONMENTS (5) Four-week field study of multiple tropical envi-


#### Abstract

ronments as illustrated in the Caribbean. Physico-chemical processes in the near-shore arenaceous, argillaceous and calcareous environments. Coral reef morphology, ecology and distribution patterns. Dynamnical processes acting on the nearshore environments and their effects on reef growth and distribution. Reef bioerosions. Coastal evolution in response to natural processes. In-site study of some similar emerged environments in the Caribbean islands. Economic importance of tropical shallow-marine environments in world's 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. GLY 5620 (EAS 561) CARIBBEAN STRATIGRAPHIC MICROPALEONTOLOGY (5) Survey of the stratigraphy of biostratigraphic type-sections described in the Caribbean area. Deep-sea stratigraphy from both piston-cores and deep-sea drilling samples. Emphasis is placed on planktonic foraminifera and radiolaria species used as index-species in the equatorial-tropical biozonation typified in Cretaceous and Cenozoic Caribbean sediments. Paleobiogeographic and paleoecologic considerations. Considerable amount of time will be devoted to the study and identification of speciments under the microscope. Prerequisite: GEO 461 or the instructor's permission. EVR $3949-E V R 4949$ (COE 311 ) (COE 411 ) COOPERATIVE EDUCATION IN PHYSICAL SCIENCES (5) One quarter of fulltime 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.


## ENVIRONMENTAL STUDIES

This program prepares environmentalists in such fields as political science, economics, sociology, and the humanities and scientists with environmental awareness, who desire to work in areas dealing with the natural environment. The student may choose either a Bachelor of Arts (non-science) program or a Bachelor of Science (science) program of study in environmental studies.

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Arts
LOWER DIVISION PREPARATION:
Recommended Courses: natural history of South Florida, conservation of natural resources, man and environment, college algebra (for economics and political science concentration only).
Remarks: recommended courses which may be taken at the University: POS 3423 (POS 321) The Legislative Process or PAD 3003 (POS 314) Politics in Public Bureaucracy; ECO 3003 (ECO 301) Economics, Man, and Society.
UPPER DIVISION PROGRAM:
Required Courses:
APB 3130 APB 3131-APB 3135 (EVR 301)-(EVR 302)-
(EVR 303) Environmental Science 15
PCB 3033 (BSC 360) Fundamentals of Ecology 5
ECP 3303 (ECO 319) Introduction to Environmental Economics 5
CDC 3400 (MAS 310) Computers and Society
or
MAT 3930 (MAS 398) Mathematical Ecology
5
PUP 4203 (POS 439) Environmental Politics and Policy 5
EVR 4905 (EVR 491) Independent Study 5
EVR 5061 (EVR 515) Environmental Field Studies of So. Florida 3
Additional Courses: the student may elect one of the following areas of concentration:
General Environmental Studies: select four courses from the following:
EVR 4211 (EVR 421) Water Resources 5
EVR 4231 (EVR 431) Air Resources 5
EVR 4311 (EVR 441) Energy Resources 5
GLY 3850 (EAS 301) Environmental Earth Science 5
(EAS 305) Environmental Geology 5
GEO 3510 (EAS 320) Earth Resources 5
PUP 5934 (POS 552) Environmental Planning and Law 5
ECP 4314 (ECO 421) Land and Resource Economics ..... 5
PHM 4030 (PHR 426) Man and Nature ..... 5
SOP 4712 (PSY 410) Environmental Psychology ..... 5
(INR 325) International Law and the
Environment ..... 5
INR 3043 (INR 345) Population and Society ..... 5
INR 4054 (INR 445) World Resources and World Order ..... 5
INR 4044 (INR 456) World Population Problems ..... 5
BOT 3663 (BSC 320) Tropical Botany ..... 5
Economics - Political Science:
ECO 3101 (ECO 307) Theory of Price ..... 5
ECP 4314 (ECO 421) Land and Resource Economics ..... 5
POS 4044 (POS 421) Government and Politics of the U.S. ..... 5
PUP 5934 (POS 552) Environmental Planning and Law ..... 5
Electives
Remarks: in special cases, equivalent courses may be substituted with the consent of a faculty advisor.
No $D$ grades will be allowed in the courses required for the major. This rule includes required courses outside the discipline.
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Recommended Courses: college algebra, conservation of natural resources, general biology, general chemistry, man and environment, natural history of South Florida, physical geology.
Remarks: recommended courses which may be taken at the University: MAS 301-302 Calculus (except for environmental biology); ECO 301 Economics, Man, and Society; PHY 301-303 or PHY 305-306 Physics; POS 301 or 321 The Legislative Process.
UPPER DIVISION PROGRAM:
Required Courses:
Quarter Hours
PCB 3033 (BSC 360) General Ecology 5
ECP 3303 (ECO 319) Introduction to Environmental Economics
5

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\begin{aligned}
& \text { EVR 4021-EVR } 4022 \text { (EVR 401)-(EVR 402) Survey of } \\
& \text { Environmental Problems }
\end{aligned}
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COP 3210 (MAS 311) Introduction to Computers
or
MAT 3930 (MAS 398) Mathematical Ecology 5
PUP 4203 (POS 439) Environmental Politics and Policy 5
EVR 4905 (EVR 491) Independent Study 5
At least one course from the electives listed under the particu-
lar concentration
Additional Courses: the student may then select one of the following areas of concentration:

## 1. AIR QUALITY:

Required:
CHM 3120 (CHE 312) Quantitative Analysis 7
CHM 3200 (CHE 309) Survey of Organic Chemistry 5
EVR 4231 (EVR 431) Air Resources 5
MET 4701 (EVR 412/EAS 410) Meteorology 5
Electives:
CHM 4130 (CHE 412) Modern Analytical Chemistry 5
CHM 3400 (CHE 311) Physical Chemistry for Life Sciences 5
EVR 4311 (EVR 441) Energy Resources 5
CHM 3410 (CHE 321) Thermodynamics 5
2. WATER QUALITY:
Required:
CHM 3120 (CHE 312) Quantitative Analysis ..... 7
CHM 3400 (CHE 311) Physical Chemistry for Life Sciences ..... 5
EVR 4211 (EVR 421) Water Resources ..... 5
EAS 305 Environmental Geology ..... 5
Electives:
CHM 4130 (CHE 412) Modern Analytical Chemistry ..... 7
GLY 4555 (EAS 471) Sedimentology ..... 5
(PHY 430) Fluid Mechanics ..... 5
OCE 3014 (EAS 331) Physical Oceanography ..... 5
GLY 4240 (EAS 440) Geochemistry ..... 5
3. ENERGY AND RESOURCES:
Required:PHY 3040-PHY 3041-PHY 3042 (PHY 301-303) Physicswith Calculus (if not completed in the lowerdivision)15
CHM 3410 (CHE 321) Thermodynamics
GLY 4240 (EAS 440) Geochemistry
or
CHM 3400 (CHE 311) Physical Chemistry for Life Sciences ..... 5
PSC 3351 (PHY 351) Earth Physics ..... 5
EVR 4311 (EVR 441) Energy Resources ..... 5
GLY 3816 (EAS 340) Mineral Resources ..... 5
Electives:
EVR 4231 (EVR 431) Air Resources 5
GLY 3200 (EAS 312) Mineralogy 5
EVR 4211 (EVR 421) Water Resources 5
GLY 4240 (EAS 440) Geochemistry 5
CHS 4100 (CHE 436) Nuclear Chemistry 5
4. MARINE ECOLOGY:
Required:
EVR 4211 (EVR 421) Water Resources 5
OCE 3014 (EAS 331) Physical Oceanography 5
OCB 3010 (BSC 308) Biological Oceanography 5
ZOO 3203 (BSC 331) Invertebrate Zoology 5
Electives:
BOT 3663 (BSC 320) Tropical Botany 5
MCB 3013 (BSC 310) General Microbiology 5
CHM 3120 (CHE 312) Quantitative Analysis 7
OCB 5635 (BSC 560) Marine Ecology 5
5. GENERAL ENVIRONMENTAL SCIENCE
Required:
EVR 4211 (EVR 421) Water Resources 5
EVR 4231 (EVR 431) Air Resources 5
EVR 4311 (EVR 441) Energy Resources 5
CHM 3120 (CHE 312) Quantitative Analysis 7
Electives: select from any of the courses in the other concentrations above.
Electives:

Remarks. No $D$ grades will be allowed in the courses required for the major. This rule includes required courses outside the discipline.

Minor in Environmental Studies The minor in Environmental Studies consists of the following 25 credit program:

EVR 3011 (EVR 301), EVR 3012 (EVR 302), EVR 3013 (EVR 303) Introduction to Environmental Science

Note: These courses need not be taken in sequence. No science background is required.
ECP 3303 (ECO 319) Introduction to Environmental Economics 5
PUP 4203 (POS 439) Environmental Politics and Policy 5

## 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 Services. The student spends several quarters fully employed in industry or a governmental agency. For further information consult the Department of Physical Sciences or the Department of Cooperative Education.

## COURSE OFFERINGS

EVR 3011 (EVR 301) ENVIRONMENTAL SCIENCE I (5) A course for non-science majors offering an introduction to the fundamental principles and concepts of ecology and to air pollution and water resources. No prerequisites.
EVR 3012 (EVR 302) ENVIRONMENTAL SCIENCE II (5) A course for nonscience majors offering an introduction to energy rescurces and conservation, agricultural pollution, noise pollution and solid waste problems.
EVR 3013 (EVR 303) ENVIRONMENTAL SCIENCE III (5) 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 and ecology, and population dynamics.
EVR 3931 (EVR 312) TOPICS IN ENVIRONMENTAL STUDIES (5) An intensive analysis of several current environmental topics. Recommended for primary and secondary school teachers.
EVR 4021 (EVR 401) SURVEY OF ENVIRONMENTAL PROBLEMS I (5) (W) An in-depth study of four or five environmental problems of current interest and continuing significance. The course requires competency at the college introductory level in at least three of the following: biology, chemistry, geology, physics.
EVR 4022 (EVR 402) SURVEY OF ENVIRONMENTAL PROBLEMS II (5) (S) A continuation of EVR 401.
MET 4701 (EVR 412/EAS 410) METEOROLOGY (5) The earth's atmosphere and its physical properties. General circulation and thermal structure of the atmosphere on a global and local scale. Physics and dynamics of clouds. Weather analysis and forecasting including temperate and tropical areas with emphasis on the Caribbean and neighboring areas. Reading of weather maps. Introduction to meteorological instruments, transmission and plotting of meteorological data. Competence in physics and calculus is required.
EVR 4211 (EVR 421) WATER RESOURCES (5) A seminar dealing with various aspects of water use, water pollution problems, chemistry and ecology of South Florida's waters. General biology is a prerequisite. General chemistry and general ecology are recommended.
EVR 4231 (EVR 431) AIR RESOURCES (5) Common air pollutants and their sources and methods of control. Different legislative and administrative approaches will be studied. Prerequisite: General Chemistry.
EVR 4311 (EVR 441) ENERGY RESOURCES (5) Seminar dealing with power and energy production in modern society, fundamental energy relationships of industrial and domestic processes.
EVR 4905 (EVR 491-492) RESEARCH AND INDEPENDENT STUDY (VAR) The student works with a professor on a research project.
EVR 5236 (EVR 511 ) AIR POLLUTION DYNAMICS (5) A course designed to give an understanding of the fates of atmospheric pollutants. Scavenging processes in the atmosphere. Radiation. Residence times. Chemical reactions. Global transport process. Point source dispersion and modeling calculations. Prerequisites: AQT 351 or EVR 431.
EVR 5936 (EVR 512) TOPICS IN ENVIRONMENTAL STUDIES (5) An analysis of several current environmental topics. Recommended for primary and secondary school teachers.
EVR 5061 (EVR 515) SOUTH FLORIDA ECOLOGY: FIELD STUDIES (3) (W,S) An introduction to the ecology of South Florida through a series of field trips into several unique ecosystems, such as the Everglades, hardwood hammocks, and coastal regions. No science background required.
EVR 5141 (EVR 536) ENVIRONMENTAL NUCLEAR CHEMISTRY (5) 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 5935 (EVR 581) SPECIAL TOPICS (VAR) (W) A graduate-level course dealing with selected environmental topics. The content will not necessarily be the same each time the course is offered.
EVR 5907 (EVR 591) RESEARCH AND INDEPENDENT STUDY (VAR) The student works with a professor on a research project. Variable credit.
EVR 3949 -EVR 4949 (COE 311)-(COE 411) COOPERATIVE EDUCATION IN PHYSICAL SCIENCES (5.5) One quarter of fulltıme supervised work in an outside laboratory takıng 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.

## POLITICAL SCIENCE MAJOR

A major in political science provides students with the opportunity to acquire a broad education that will equip them to adapt to a wide variety of careers. The program for majors is designed to encourage the student to analyze the theories, institutions, and processes of political systems in the context provided by the social sciences; to stimulate the student to attain 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 student with 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.

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Arts
LOWER DIVISION PREPARATION:
Recommended Courses: American government, anthropology, ecology, economics, foreign language, history, international relations, statistics, psychology, sociology, and state and local government.
UPPER DIVISION PROGRAM: Major:
Breadth Requirements:
One 5 credit course in each of the following fields:

1. American Politics (AP)-this Breadth area can be met only
by one of the following courses:
PUP 3004 (POS 303)
PAD 3003 (POS 314)
POS 3424 (POS 321)
POS 3153 (POS 323)
POS 3453 (POS 341)
POS 4413 (POS 411)
2. Judicial Politics (JP)
3. Comparative Politics (CP)
4. International Politics (IP)
5. Political Theory and Methodology (PT)

Depth Requirements 25
Five courses from any one of the following areas:
American/Judicial
Comparative/International
Theory
Remarks
One course from Politics and the Arts may be substituted for one course in the depth requirement.
Electives
(These courses may be taken outside of the Major.)

Campus Location: Tamiami and North Miami Campus
Minor in Political Science
Prescribed Courses:

1. No required courses
2. A minimum of 25 credits each in Political Science
3. A maximum of 5 credits each in Political Science Internships and Independent Studies may apply to the 25 -credit requirement.

PRE-LAW STUDENTS - The Department of Political Science recognizes the interests and needs of the political science major who plans to attend law school. The basic skills important to a pre-law student include: (1) how to think logically, (2) how to read intelligently, and (3) how to express oneself clearly. These skills are developed in any discipline or field. Beyond these basic skills, the department encourages the student to acquire a broad background in political science rather than to select only courses which deal with public law. Thus the requirements for the major allow the pre-law student to develop a wide comprehension of five major areas within political science and then to achieve greater depth of understanding on one broad area. For most pre-law students, that area may be American and judicial politics. The department will counsel a student on pre-law school concerns and preparation as an integral part of its overall advising program. In addition, special opportunities will be available to a student who is interested in participating in judicial internships.

Public-Affairs Internship -The department provides the student with opportunities for work-study experiences in governmental and non-governmental agencies. Five categories of internships are available to students: (1) judicial internships, (2) administrative internships, (3) legislative internships, (4) urban internships and (5) international internships. Standards for enrollment as an intern student include:

1. Enrollment is by permission of instructor only. A student wishing to enroll as a public affairs intern should consult with the appropriate faculty member and receive written permission to enroll. Ordinarily, specified courses must be taken prior to or concurrent with the internship.
2. A Political Science major may count a maximum of 10 credit hours in internships toward his major. Five additional hours may be counted as electives for a maximum of 15 credit hours in internship in Political Science.
3. All public affairs internships in Political Science will be on a "Credit-No Credit" basis. For further information, contact the Department of Political Science.
Evaluation of Student Records and Transcripts - As a general rule, students will receive transfer credits for junior and senior level courses in political science with a grade of C or better. These courses may then be applied to the 50 credit hour requirement for majors in political science.

Major Advising Program: All new majors meet with the Departmental Chairperson prior to being assigned an advisor. All advisors are members of the Political Science faculty, and meet with students on a regular basis to discuss program design and scheduling matters.

## COURSE OFFERINGS

POS 3001 (POS 301) FOUNDATIONS OF POLITICAL SCIENCE (5) Introduces the student to the major fields of political science. Attention is given to the concepts, definitions, and terminology used in the discipline. Intended for the non-major. Elective credit only for political science majors.
POS 3705 (POS 302) METHODS OF POLITICAL ANALYSIS (5) Introduction to methods of collecting, analyzing and evaluating information to answer questions about politics. Includes formulation of research problems, ways to collect and summarize information, measures of relationship and of risk, and interpretation of research findings. Strongly recommended for students planning graduate study. (PT)
PUP 3004 (POS 303) THEORY AND ANALYSIS OF PUBLIC POLICY (5) An intensive examination of the theory and practice of formulating, legitimizing, administering, and evaluating public policy. Includes a discussion of the role of administrators, legislators, courts, interest groups and political parties in their processes. Gives the student an analytical basis for understanding and participating in the making of public policy in a variety of policy areas (AP)
CPO 3303 (POS 304) GOVERNMENT AND POLITICS OF SOUTH AMERICA (5) A cross-national discussion of the political systems and cultures of the Latn American nations, with special emphasis on the larger countries. Attention is given to the role of the military and to the problem of violence in the area. Desibned to give the student an overview of the political life of the nations with whom we share this hemisphere. (CP)
CPO 3002 (POS 305) INTROOUCTION TO COMPARATIVE POLITICS (5) This course introduces students to research strategies, concepts, and theories of comparative politics. There will be a focus on the three predominant types of modern political systems, democracy, authoritarianism, and totalitarianism, followed by an examination of the current theoretical approaches to studying cross-national political behavior. (CP)
INR 3002 (POS 306) DYNAMICS OF INTERNATIONAL POLITICS (5) An examination of the nation-state system. Attention is given to the use of force in international affairs, as well as those organizations, such as the United Nations, which have an international dimension. The course should aid the student in understanding the complexities of world politics. (IP)
CPO 3323 (POS 307) GOVERNMENT AND POLITICS OF THE CARIBBEAN (5) Studies the political system of the major British, French, Dutch, and Spanish areas in the Caribbean basin. Although attention is focused on such factors as political party democracies in a nonindustrial setting. Discusses the paradoxes between modernity and tradition throughout the developing Caribbean and the relationship between politics, economics, and culture. Helps the student to understand the dynamics of change in an important area of the world and to compare those dynamics with change in his own country. (CP)

- (POS 308) GOVERNMENT AND POLITICS OF CHINA (5) An intensive examination of the major political institutions of China. A critical analysis of changing aspects of traditional relationships in Chinese political culture and major reform movements in contemporary Chinese politics. (CP)
CPO 3553 (POS 309) GOVERNMENT AND POLITICS OF JAPAN (5) An intensive examination of the major political institutions of Japan. A critical analysis of changing aspects of traditional relations in Japanese political culture and major reform movements in contemporary Japanese politics. (CP)
CPO 3514 (POS 310) GOVERNMENT ANO POLITICS OF KOREA (5) An intensive examination of th major political institutions of South and North Korea. A critical ahalysis of changing aspects of traditional relations in Korean political culture and major reform movements in contemporary Korea. (CP)
POT 3013 (POS 311 ) ANCIENT AND MEDIEVAL POLITICAL THEORY (5) A study of the major political philosophers of the Ancient and Medieval periods. Primary emphasis will be given to the Greek experience. The nature of political theory as a tradition of discourse will be examined. (PT)
POS 3122 (POS 312) STATE GOVERNMENT AND POLITICS (5) A study of the political processes, structure, and development of state political systems. This course attempts to provide the student with an understanding of the basic structure of state government and political processes. (AP)
CPO 3643 (POS 313) GOVERNMENT AND POLITICS OF THE SOVIET UNION AND EASTERN EUROPE (5) An intensive examination of the political structures and institutions of the Soviet Union and East European Communist states. Particular attention will be paid to the historical and cultural underpinnings of the Soviet regime. The role of Marxist-Leninist ideology in shaping policy processes and content will be given careful analysis (CP).
PAD 3003 (POS 314) POLITICS OF PUBLIC BUREAUCRACY (5) An introduction to the political environment of administrative decision-making in public agencies. Special emphasis is placed upon the politics of budgeting, personnel management, organizational requirements, and policy making. (AP)
CPO 3333 (POS 316) GOVERNMENT AND POLITICS OF CENTRAL AMERICA (5) Examines the political systems of the countries of Central America. 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 should develop a better understanding of a region which has close ties to the United States. (CP)
INR 3603 (POS 317) THEORY AND METHODOLOGY OF INTERNATIONAL POLITICS (5) An intensive examination of the varied approaches to the consideration of international relations. Gives the student an analytical basis for the understanding of relations among states. (IP, PT)
POS 3424 (POS 321) THE LEGISLATIVE PROCESS (5) Examines the context and process of legisiative decision-making, including the impact of elections, groups, bureaucracies and the norms of legislative behavior on legislative decisions. Evaluates legislatures in light of various theories of representation and conflict-management. (AP)
POT 3054 (POS 322) MODERN POLITICAL THEORY I (5) An analysis of the political 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. (PT)
POS 3153 (POS 323) URBAN POLITICS (5) 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 proposed solutions are formulated, legitimized, and administered by urban policy-making processes. Includes a discussion of urban political culture. Enables the student to understand major problems confronting communities in urban areas. (AP)
CPO 3304 (POS 326) THEORIES OF LATIN AMERICAN POLITICS (5) Studies the dynamics of Latin American politics with an emphasis on the role of the military and the church. Also considers alternative strategies for modernizing the region. (IP,PT) - (POS 331) THE JUDICIAL PROCESS (5) 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 policymaking system and evaluates its strengths and weaknesses from a policy-making perspective. (JP)
POT 3064 (POS 333) CONTEMPORARY POLITICAL THEORY (5) An overview of the major conceptual frameworks used by political theorists to describe, to explain, and to evaluate political behavior and processes. Stress is placed upon political theory not only as a basis for inquiry but also as a base for political action. Will enable the student to develop analytical abilities with which he can interpret the political events of his time. (PT)
INR 3403 (POS 339) INTERNATIONAL LAW (5) The law of nations, including the laws of war. Includes a discussion of the development of legal norms applicable to the international arena from both Western and non-Western perspectives. Examines the emerging body of transnational law in social, economic, and technological areas of international relations. Enables the student to appreciate the problems involved in structuring conflict in international relations. (IP, JP)
-. (POS 341) POLITICAL PARTIES (5) Studies the internal structure, political functions, and behavior of modern political parties. Attention is given to the relationships between political parties and various economic, military, ethnic, and regional interests. Enables the student to understand the problems of expressing and structuring political demands to facilitate or obstruct governmental decision making. (AP)
POS 3603 (POS 343) CONSTITUTIONAL LAW: POWERS (5) An examination of the basic principles of American government as defined through constitutional law. Focus will be upon the nature of the union, federalism, national government powers, separation of powers, state government powers, and the powers of the respective branches of government. (JP)
POS 3604 (POS 344) CONSTITUTIONAL LAW: LIMITATIONS (5) An examination of the limitations upon government as defined by the Supreme Court through constitutional law. Focus will be on the limitations of government with respect to the rights of the individual, of groups, and of the states. Particular attention will be paid to civil rights, civil liberties, the rights of the accused, political rights, and economic liberties. (JP)
PAD 3803 (POS 345) URBAN GOVERNMENT AND ADMINISTRATION (5) A study of the organization, administrative decision-making, and process of urban government; interaction with the political process. This course attempts to provide students with an understanding of the basic structure of urban government and administrative decision-making processes. The interaction of bureaucracy with political parties, interest groups, and voluntary citizen association groups will be examined. (AP)
INR 3502 (POS 348) INTERNATIONAL ORGANIZATION (5) An analysis of the factors and problems involved in administering change on a transnational basis. Stress is placed on the difficulty of applying legal norms to the international arena. Attention is given to those organizations, especially the United Nations, which are entrusted with implementing international agreements. Enables the student to understand the difficulties involved in maintaining world peace. (IP)

CPO 4360 (POS 403) CUBAN POLITICS (5) Examines the course of Twentieth Century Cuban politics. It is subdivided into five parts, involving the three periods of relatively stable politics and the two major revolutions which took place. (CP) CPO 4034 (POS 404) THE POLITICS OF DEVELOPMENT AND UNDERDEVELOPMENT (5) This course is an analysis of the causes of development and underdevelopment in Third and Fourth World countries. There will be an analysis of major theoretical approaches to the understanding of development problems, as well as an analysis of the roles of major national and nonnational actors. (CP/IP)
CPO 4103 (POS 405) GOVERNMENT AND POLITICS OF WESTERN EUROPE (5) Studies the 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 student to better understand the nations which have supplied many of the theoretical foundations of modern politics. (CP)
POS 4905 (POS 407) INDEPENDENT STUDY (VAR) By arrangement with the instructor, permission of instructor required. POT 4123 (POS 408) ALTERNATIVE POLITICAL FUTURES (5) Explores the political dimensions of the future. Examines alternative political systems and institutions from the perspective of political ideas. Special attention will be given to assessing and extrapolating current political trends into the future (AP, PT)
CPO 4327 (POS 409) TOPICS IN CARIBBEAN POLITICS (5) An intensive examination of selected topics dealing with the Caribbean area. The subjects will vary, depending upon the desires of both students and faculty. (CP)
POS 4413 (POS 411) THE PRESIDENCY (5) An examination of the various interpretations of the Presidency. Attention is directed to the role of the President in a technocratic society. Enables the student to understand one of the most visible political institutions. (AP)
INR 4102 (POS 413 ) AMERICAN FOREIGN POLICY (5) 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, socialeconomic, and ideological areas. Enables the student to understand the procedures by which foreign policy is made and implemented in the United States. (IP, AP)
PUP 4056 (POS 417) ISSUES IN THE ADMINISTRATION OF PUBLIC POLICY (5) An analysis of the policy consequences of major issues facing political executives and administrators, including planning for the year 2000, bringing government closer to the people, the pathologies of bureaucratization, technology assessment, quantification aids in decision making, needs for policy advice, and experiments in organizational forms. (AP)
CPO 4364 (POS 419) POLITICS IN THE AFRO-LATIN CARIBBEAN ISLAND-NATIONS (5) The purpose of this course is to present the student with an analytical framework with which to understand the political development principally of Cuba, the Dominican Republic and Haiti, in a comparative framework and to anticipate future courses of development in the next generation. (CP)
POS 4044 (POS 421) GOVERNMENT ANO POLITICS OF THE UNITED STATES (5) An examination of the origin and development, structure and operation of the government of the United States, with an emphasis on the characteristics and political consequences of federalism. Allows the student to have a better understanding of the political system in which he lives. (AP) POT 4055 (POS 422) MODERN POLITICAL THEORY II (5) An analysis of the political thought of the great political thinkers of the late Eighteenth, Nineteenth, and early Twentieth Centuries. Primary emphasis will be given to the important Nineteenth Century Theorists such as J. S. Mill, Marx, and de Tocqueville. Their theoretical treatment of such modern political phenomena as the masses, bureaucracy, democracy, liberty, and violence will be extensively analyzed. (PT)
POS 4154 (POS 423) TOPICS IN URBAN POLITICS AND POLICY (5) 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 proposed solutions are formulated, legitimized, and administered by urban policy-making processes. Includes a discussion of urban political culture. Enables the student to understand the major problems confronting communities in urban areas. (AP) POT 4204 (POS 427) AMERICAN POLITICAL THOUGHT (5) An examination of American political thought from its 17 th Century origins to the contemporary period. The continuities and discontinuities in the development of American political ideas since colonial times will receive special attention. (PT)
POS 4253 (POS 431) POLITICAL VIOLENCE AND REVOLUTION (5) An examination of political violence and revolution in coping with and solving political problems. Includes a comparative discussion of the role of violence and revolution in other countries. Enables the student more clearly to understand the manifestations of political violence and revolution in the political events of his own time. (PT)
INR 4244 (POS 438 ) LATIN AMERICA IN INTERNATIONAL POLITICS (5) 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 will be selected for study, including the Panama Canal. (CP/IP)
PUP 4203 (POS 439) ENVIRONMENTAL POLITICS AND POLICY (5) A systematic examination of environmental policy making which emphasizes the various steps involved in transforming private preferences into authoritative public policies. Special attention is directed at the unique political problems posed by pollution, preservation of natural areas, natural resource management, population dynamics, and ecological imperatives. Designed to enable the student, particularly the environmental studies student, to understand the overlapping policy matrices which constrain environmental action. Should enable student to identify critical decision points in the environmental policy-making process (AP)
CPO 4055 (POS 441 ) POLITICS OF AUTHORITARIANISM (5) The course is designed to analyze the circumstances giving rise to non-totalitarian modern dictatorships, their political dynamics and their survival capability. (CP)
POS 4284 (POS 442) JUOICIAL BEHAVIOR (5) An examination of the various approaches, theories, and findings on how judicial actors behave, particularly as it relates to judicial decision-making. The focus of the course will be on judges, lawyers, prosecutors, and other relevant actors in the judicial process (JP)
POT 4302 (POS 444) POLITICAL IOEOLOGIES (5) An analysis of modern political ideologies since the French Revolution, including liberalism, conservatism, and socialism. Particular emphasis will be given to Marxism. The contemporary link between ideology and totalitarianism will be examined. (PT)
POS 4145 (POS 445) URBAN POLITICAL LEADERSHIP (5) A theoretical analysis and interpretation of urban political leadership with a special emphasis on the structure of political power and the decision-making process. This course attempts to pro-
vide students with an understanding of the basic structure of urban political leadership. The attitudes and values of urban political elite will also be examined. (AP)
POS 4463 (POS 452) INTEREST GROUP POLITICS (5) An examination of the various types of voluntary associations which seek to influence the political process. Special attention is given to the role of private power in a pluralist system. Enables the student to understand the ambivalent American attitude towards pressure groups and lobbying activities in the legislative and administrative arenas. (AP)
POT 4113 (POS 455) POLITICS AND THE ARTS (5) Employs the arts as a tool of analysis for political science. Includes literature, painting, music and film. Special attention is given to the relationship between popular culture and political systems. (PT)
POS 4933 (POS 461) TOPICS IN POLITICS (VAR) Subject matter varies according to instructor.
POS 4496 (POS 462) COMPARATIVE JUDICIAL POLITICS (5) An examination of the various modes of dispute settlement and rule adjudication cross-culturally. Emphasis will be upon the similarities and differences of judicial behavior, judicial decision-making, judicial recruitment and iudicicial powers in cross-national analysis. (JP,CP)
PUP 4314 (POS 463) ETHNIC POLITICS (5) An examination of the influence of major ethnic groups on American politics. Special attention will be given to Black, Cuban-American and Puerto Rican interest groups. (AP)
PUP 4323 (POS 465) WOMEN IN POLITICS (5) Examines role of women in the political system, as they act within and are affected by, politics. Special attention to the current and enduring political issues which particularly affect women. (AP)
POT 4930 (POS 466) TOPICS IN POLITICAL THEORY (VAR) An intensive examination of selected topics dealing with political theory. Subjects will vary, depending upon the desires of both students and faculty.
INR 4407 (POS 469) POLITICAL FOUNDATIUNS OF INTERNATIONAL LAW (5) An examination of the interaction between politics and international law with particular emphasis upon such interaction during the present century. The role of international institutions in the modifying of existing international law concepts and the developing of such concepts is also examined. (IP, JP)

- (POS 470) TOPICS IN COMPARATIVE POLITICS (VAR) An intensive examination of selected political topics from a cross-national point of view. The subjects will vary, depending upon the desires of both students and faculty. Allows the student to choose topics of particular interest to him. (CP)
- (POS 471-472-473-474) PUBLIC AFFAIRS INTERSHIPS (VAR) An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between student and advisor.
- (POS 471) - LEGISLATIVE INTERNSHIP
(POS 472) - JUDICIAL INTERSHIP
PAD 4944 (POS 473) - ADMINISTRATIVE INTERNSHIP
INR 4942 (POS 474) - INTERNATIONAL INTERNSHIP
-_ (POS 476) TOPICS IN INTERNATIONAL POLITICS (VAR) An intensive examination of selected topics with an international dimension. Subjects will vary, depending upon the desires of both students and faculty. Allows the student to choose topics of particular interest to him. (IP)
PUP 4404 (POS 481 ) TOPICS IN EDUCATIONAL POLICY (VAR) An intensive examination of selected topics dealing with educational policy. The subjects will vary, depending upon the desires of both students and faculty.
PUP 4502 (POS 484) POLITICS OF URBAN TRANSPORTATION DECISION-MAKING (5) A study of urban transportation decision-making processes, with a special emphasis on the citizen participation, the pattern of mobilization of the community support for/or against transportation policies, and the interaction with the local, state and federal officials. The course attempts to provide students with an understanding of the decision-making process with respect to the urban transportation policy planning. The role of citizen participation, mobilization process, and their interaction with the public officials, will be analyzed. (PP)
CPO 4930 (POS 486) TOPICS IN INTERNATIONAL POLITICS (VAR) An intensive examination of selected topics with an international dimension. Subjects will vary, depending upon the desires of both students and faculty. Allows the student to choose topics of particular interest to him.
CPO 4005 (POS 488) TOPICS IN COMPARATIVE POLITICS (VAR) An intensive examination of selected political topics from a cross-national point of view. The subjects will vary, depending upon the desire of both students and faculty. Allows the student to choose topics of particular interest to him.
POS 4935 (POS 491) HONORS SEMINAR (VAR) Subject matter varies according to instructor.
POS 4935 (POS 492) HONORS SEMINAR (VAR) Subject matter varies according to instructor.
POS 4935 (POS 493) HONORS SEMINAR (VAR) Subject matter varies according to intructor.
POS 4147 (POS 495) POLITICS OF URBAN JEWISH LEADERSHIP (5) A study of the leadership structure of the Jewish community with special focus upon the Jewish elite integration process within the community power structure. The course attempts to provide students with an understanding of the nature of Jewish leadership structure and their role in the community social and political system. (AP)
-_ (POS 518) INDEPENDENT STUDY (VAR) By arrangement with instructor, permission of instructor required.
PUP 5934 (POS 552) TOPICS IN PUBLIC POLICY (VAR) An intensive examination of selected topics dealing with public policy. Subjects will vary, depending upon the desires of both students and faculty. Allows the student to choose topics of particular interest to him.
POS 5606 (POS 553) TOPICS IN PUBLIC LAW (VAR) An intensive examination of selected topics in the field of public law. The subjects will vary, depending upon the desires of both students and faculty.
POT 5115 (POS 556) TOPICS IN POLITICS AND THE ARTS (5) An intensive examination of selected topics in the field of politics and the arts. Subjects will vary, depending upon the desires of both students and faculty.
POT 5934 (POS 566) TOPICS IN POLITICAL THEORY (VAR) An intensive examination of selected topics dealing with political theory. The subjects will vary, depending upon the desire of both students and faculty. Allows the student to choose topics of particular interest to him.


## PSYCHOLOGY MAJOR

## Campus Location: Tamiami \& North Miami Campuses

DEGREE: Bachelor of Arts
LOWER DIVISION PREPARATION:
Required course: introductory psychology
Recommended courses: physics, history, sociology, philosophy, economics, mathematics UPPER DIVISION PROGRAM:

Specific Required Courses in Psychology Quarter Hours 14
PSY 3043 1. (PSY 349) Advanced General Psychology Lecture (2) Laboratory (5)
Note: Lecture and Laboratory to be taken concurrently in junior year
2. Other Advanced Laboratory or field experience

7
(e.g., $429,439,449,453,459,469$, or 479 )

Note: To be taken during senior year. Prerequisites: PSY
3043C (PSY 349), STA 3122 (MAS 307), STA 3123 (MAS 308).
Required Courses in Statistics 8

1. STA 3122 (MAS 307) (5)
2. STA 3123 (MAS 308) (3)

## Elective Courses in Psychology

at least 35
Note: PSY 4693C (PSY 448) is especially recommended for the student planning to take the psychology specialty part of the Graduate Record Examination
Elective Courses Outside of Psychology
at least 10
Remarks: (1) The student is strongly urged to contact the Psychology Department for advisement in curriculum planning; (2) Limited funds are available through the Psychology Department to senior students with demonstrated scholastic ability and financial need.
Bachelor degree with Honors:
Application must be made and departmental approval granted before the third quarter of the junior year to undertake an independent project which must be approved by and carried out under the supervision of a member of the Department. Upon completion of the study, a satisfactory oral defense of the work must be presented to a Department Committee.
Note: the bachelor's degree offered in this program is a liberal arts degree and not a professional degree. While it is possible to concentrate courses in one's area of interest, it is not possibie at the present time to obtain a "professional specialization" at the undergraduate level in psychology.

## GRADUATE STUDY

## Campus Location: Tamiami Campus only

The Department of Psychology presently offers graduate study opportunities toward the

Master of Science in Community Psychology. This graduate program provides scholarly, scientific and professional exposures which are characteristic of both traditional graduate study within the general discipline of psychology, and modern innovative programming within the particular domain of professional psychology practiced in community settings.

## Master of Science in Community Psychology

The aim of the M.S. program in Community Psychology is to enable students to master three interrelated roles and functions by which the psychologist assists community agencies and groups to be more effective: those of the program evaluator, the human service consultant and the psychosocial innovator. Students are trained to function as scientist-practitioners. They acquire basic and applied research, intervention, and evaluation skills required of all psychologists. In addition, they are exposed, during the 65 quarter-hours of graduate study, to specific content and methods courses in the main areas of community psychology practice. They engage in appropriate supervised field experiences, and complete a terminal Masters project or thesis. They also select elective courses appropriate to their specialty interests in other fields of psychology and/or units of the University.

Program graduates may be eligible for a variety of mid-professional, public service, entry level positions (i.e. master's level), in which they engage in supervised professional practice of community psychology. Graduates could, for example, meet the academic requirements of a "Master's Degree in Psychology" which is now required for employment as Psychologist II in the Department of Health and Rehabilitative Services of the State of Florida, providing that their program includes one or two elective courses from another subspecialty of psychology.

The Masters in Community Psychology is by virtue of its content and field experience requirements considered a terminal professional degree program. It is expected that most graduates will seek immediate employment and not procede directly to a Ph.D. program. In light of these objectives students earning the Masters degree in Community Psychology are expected to achieve considerable breadth and depth of training.

## Admission Requirements

General. The Florida State University System requires that applicants for admission to graduate study present:

1. A bachelor's degree or equivalent from a regionally accredited university or college.
2. A minimum of " $B$ " or better grade point average in all work while registered as an upper division student for the baccalaureate degree, OR a total score (quantitative plus verbal) of 1,000 or higher on the Graduate Record Examination or an equivalent score on some other measure specified by the University.
3. Applicants should check with the Admissions Office to ascertain current requirements, since the objectives of academic and professional excellence sought by the Department of Psychology and the intense competition among applicants for the limited number of graduate positions authorized, will result in increasing the effective requirements far beyond the University's "minimum."
Applicants to the program who are not psychology majors may be accepted conditionally until they meet the category I-IV requirements, listed below, early in their graduate career. A maximum of 15 quarter hour credits earned in the special student category exclusive of the prerequisite undergraduate courses may be applied to graduate degree requirements.
Undergraduate Courses. These requirements are designed to make certain that students accepted into graduate program have a broad base of dependable psychological knowledge and acquaintance with the basic methodologies upon which the discipline is founded.

## CATEGORY I

Satisfactory completion of one upper division course or laboratory course in three of the following areas (or their equivalent) outside the area of graduate specialization.

Developmental
Social
History, Systems, Overview Differential or Individual Differences (not statistics)

Abnormal, Personality
Community
Industrial
Motivation

CATEGORY II Satisfactory completion of one psychology laboratory course. Ordinarily this requirement will be met by taking a general experimental psychology laboratory course, such as PSY 349 or its equivalent.
CATEGORY III Satisfactory completion of one basic experimental course from areas such as learning, conditioning, physiological, perception, memory or related areas (can include laboratory courses but not general experimental laboratory)
CATEGORY IV Satisfactory completion of introductory statistics.

## Application procedures for the Master of Science in Community Psychology

Students seeking admission to the graduate program in Community Psychology must complete the following steps:

1. Submit a graduate application for admission to the Admissions Office of Florida International University. Application forms will be mailed upon request.
2. Have a copy of the official transcripts of all previously earned college or university credits sent from the applicant's former institution(s) to the Admissions Office of Florida International University. Copies submitted directly by applicants are not accepted for application purposes.
3. Submit three recommendations from previous instructors.
4. Submit an essay stating reason for interest in the program
5. Submit the results of the Graduate Record Exam (GRE) both Aptitude and Psychology Advanced Test, administered nationally by the Educational Testing Service (Box 955, Princeton, New Jersey, 08540).

## Degree Requirements

To be eligible to receive the Master's Degree a student must satisfy all university requirements for a Master's Degree and the specific requirements of an approved program of study.

All students in this program of study are expected to complete a 19 quarter-hour core course requirement. This core serves two functions: 1) to provide the student with the tools necessary to interpret and carry out research in the field; 2) to bring together some of the major intervention approaches of applied psychology (particularly through the Strategies and Methods of Applied Psychological Research course) within the framework of good and ethical practice.

In addition to the core, students in Community Psychology are required to complete 20 quarter hours of courses, focusing on the major issues relevant to the settings in which Community Psychology is practiced. The Specialty Area Requirements in Community Psychology also include a 10 quarter hour field or practicum experience and a Master's project of 6 quarter hours credit. Students are expected to take electives either in the department or in other departments and units of the University for at least 10 quarter hours.

## Typical Program of Study

Graduate Core Requirements (19 Quarter hours to be completed by all graduate students)
PSY 5206C (PSY/MAS 507) Design of Experiments in Psychological Research 4 credits
PSY 5246C (PSY/MAS 508) Multivariate Analysis in Applied Psychology 4 credits
—— (PSY 548) Strategies and Methods of Applied Psychological Research

5 credits
DEP 5405 (PSY 532)
CLP 5931 (PSY564)
Psychological Processes of the Maturing Adult 4 credits
Specialty Area Requirements
CYP 5535 (PSY 520)
Psychology of Institutional and Social Change
2 credits OR

|  |  |
| :--- | :--- |
| CYP 5515 |  |
| (PSY 552) |  |
| (PSY 521) |  |
| CYP 6936 | (PSY 620) |
| CYP 6536 | (PSY 621) |

Social Psychology of Organizations 4 credits
Psychological Services Administration 4 credits
Current Issues in Community Psychology 3 credits
Principles and Methods of Psychological Consultation

4 credits

PSY 6971 (PSY 699)

$$
\begin{array}{ll}
\text { * Masters Project in Psychology } & 6 \text { credits } \\
\text { Electives (in the Department or in other } & \\
\text { Departments or units of the University selected } & \\
\text { in consultation with advisor) } & 10 \text { credits }
\end{array}
$$

The following courses are usually taken early in the matriculation:
CYP 6936 (PSY 620) Current Issues in Community Psychology
CYP 6536 (PSY 621) Principles and Methods of Psychological Consultation
Psychological Methods of Program Evaluation Total quarter-hours required:
*The product expected in PSY 699 is a project or thesis of the quality and sophistication comparable to an article in the Psychological Review or Psychological Bulletin.

## Grades, Credits, and Course Loads

The optimum recommended course load for full-time graduate students is 10 quarter hours per quarter. The recommended course load for working or part-time students is 5 quarter hours. Approval for exceptions must be obtained from the chairperson of the Department of Psychology. Course work in which a grade below "C" is earned may not be counted toward the master of science degree. All work applicable to the master's degree must be completed within five years immediately preceding the awarding of the degree. A student may receive permission to transfer up to a maximum of 10 quarter hours of graduate credit to the degree program, provided that: 1) the course(s) were taken at the graduate level at an accredited college or university, 2) grade(s) of " $B$ " or better were earned, and 3) the course(s) were judged by the faculty advisor to be relevant to the student's graduate program. The credit must not have been used toward another degree.

## Academic Warning, Probation and Dismissal

WARNING: A student whose cumulative GPA falls below a 3.0 or otherwise is experiencing problems in the program, will be placed on WARNING indicating academic or practicum difPsychology ficulties.
PROBATION: A student on WARNING whose cumulative GPA falls below 3.0 will be placed on PROBATION indicating serious academic difficulty. The College/School of the student on PROBATION will appropriately communicate conditions which must be met in order to continue to enroll in the program.
DISMISSAL: A student on PROBATION whose cumulative and quarterly GPA falls below 3.0 will be automatically dismissed from his/her program and the University.

## COURSE OFFERINGS

PSY 3013 (PSY 300) INTRODUCTORY PSYCHOLOGY (5) (F,SS) Psychological principles underlying basic processes such as perceiving, learning, thinking, motivation and emotions. Students will be introduced to theories and research methods in terms of their contributions to contemporary psychology. This course will not count towards the major in psychology. It is designed for non-majors and is a prerequisite for majors who have not had an introductory course in psychology.
EDP 3004 (PSY 305) INTRODUCTORY EDUCATIONAL PSYCHOLOGY (5) (F,W,S,SS) An introduction to the ways in which the principles of psychology apply to educational practices, considering aspects of the basic processes such as development, learning, individual differences and adjustment, with special reference to the problems of teacher effectiveness and teacherstudent interaction. This course is designed for students who have not had a prior course in Educational Psychology. While not designed as a course for Psychology majors, it may, under special petition, be counted as meeting an elective requirement in Psychology.
DEP 3000 (PSY 307) HUMAN GROWTH AND DEVELOPMENT (5) (F,S,SS) An introductory study of the development of personality, intelligence, and motivation from childhood to adulthood, emphasis will be placed on development of cognitive systems through social learning. This course is designed primarily for students enrolled in the Schools of Education and Health and Social Services. Students planning to major in Psychology should enroll in PSY 330.
SOP 3742 (PSY 310) PSYCHOLOGY OF WOMEN (5) (F) An examination of women from various perspectives, such as biological, anthropological, mythological, religious, historical, legal, sociological and psycho-analytical points of view. Discussion of how these various perspectives influence the psychological development of contemporary women.

SOP 3932 (PSY 311) PSYCHOLOGY OF DRUGS AND DRUG ABUSE (5) (W) This course will cover some basic information about the nature and effects of the families 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.
CYP 3003 (PSY 320) INTRODUCTION TO COMMUNITY PSYCHOLOGY (5) (F,S) 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.
SOP 3724 (PSY 321) PSYCHOLOGY OF RACISM (5) (W) Consideration will be given to the nature and development of institutional racism in America. The historical, social, economic and psychological aspects of racism will be examined.
SOP 3783 (PSY 323) BLACK PSYCHOLOGY (5) An examination of the social-psychological consequences of being black in America. This course will focus upon contemporary Black attitude(s) and their relationship to the historical, social and economic realities of the American Blacks' sojourn in the U.S. Specific attention will be provided the individual, the family, and their attitudes towards the broader social milieu.
DEP 3001 (PSY 330) INTRODUCTORY DEVELOPMENTAL PSYCHOLOGY (5) (F,W,SS) 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. This course or its equivalent must be completed successfully before students may enroll in most 400 and 500 level courses in developmental psychology.
DEP 3303 (PSY 331) PSYCHOLOGY OF ADOLESCENCE (5) (W) An examination of the psychological, sociological and biological factors contributing to the changes from childhood to adolescence and from adolescence to young adulthood.
DEP 3402 (PSY 332) PSYCHOLOGY OF ADULTHOOD (5) (W) The transition from youth to middle age will be studied. Focus will be placed on changing roles in family, work, and societal settings as these factors influence personality and other aspects of psychological function.
PPE 3502 (PSY 340) PSYCHOLOGY OF CONSCIOUSNESS (5) Normal and altered states of human consciousness are analyzed from the perceptual and neuropsychological viewpoint. Broad topic areas include physiologically determined levels of arousal, from deep sleep to intense excitement, selective attention, perceptual plasticity, illusions, sensory deprivation, biofeedback, psychosomatic disease, hypnotism and suggestibility, as well as a critical treatment of the phenomena of parapsychology.
EXP 3652 (PSY 341) PSYCHOLOGY OF CREATIVITY (5) An exploration of the psychological processes involved in the act of creation. Several approaches to the understanding of creators and their creations will be used, including the study of eminent creative people, sessions with persons including the study of eminent creative people, sessions with persons involved in creative efforts, survey of scientific studies of creation, and personal involvement and introspection by the student.
PSB 3523C (PSY 343) MEMORY AND MEMORY IMPROVEMENT (5) This introduction to human memory will consider the topic from a number of points of view. The following issues will be addressed: the nature of memory and its phenomena; the capabilities and limitations of an ordinary and an extraordinary memory; and the skills which can aid an ordinary memory. PSY 3043C (PSY 349) ADVANCED GENERAL PSYCHOLOGY WITH LABORATORY, LECTURE (2) LABORATORY (5) (F,W,S) An intensive lecture and laboratory course designed to present the basic concepts and methods of traditional and contemporary psychology. Emphasis will be placed on the role of methodology and experimentation in all phases of psychology. Students will study sensory systems, information processing, perception and other psychological processes. In addition to classroom experience, students will participate in laboratory exercises designed to illustrate concepts covered in lectures. The laboratory will provide students with an opportunity to develop and use skills and techniques employed in the execution of human psychological experiments, and will meet requirements of a laboratory course in experimental psychology. This course is required of all psychology majors and must be completed during the first year of residence.
INP 3002 (PSY 350) INTRODUCTORY INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY (5) (F,W) Introduction to the study of behavior in the work environment. Illustrative topics include formal and informal organization, work motivation, satisfaction and performance, leadership, job analysis, selection and performance evaluation, training and development.
PCO 3003 (PSY 360) THEORIES OF PERSONALITY (5) (F,S) An examination of various theories of personality. Consideration will be given to traditional and contemporary approaches to personality development.
EXP 3304 (PSY 361) MOTIVATION AND EMOTION (5) (F,W) Introduces several perspectives from learning theory, perception, and personality theory to explore why and how people move through their physical and social environment.
CLP 3003 (PSY 362) PSYCHOLOGY OF PERSONAL ADJUSTMENT (5) Study of personal adjustment in the social and occupational life of the individual. Emphasis on interpersonal aspects of effective behavior.
SOP 3772 (PSY 363) PSYCHOLOGY OF SEXUAL BEHAVIOR (5) An examination of the nature, development, decline and disorders of sexual behaviors primarily from the perspectives of normal adjustment and interpersonal relations. Discussion also addresses love, intimacy, and similar emotionally charged sociopsychological topics. Modern and popular treatment approaches - including the "new sex therapies" - are critically evaluated.
SOP 3004 (PSY 370) INTRODUCTORY SOCIAL PSYCHOLOGY (5) (F,W) 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 3931 (PSY 372) PSYCHOLOGY OF GIVING, HELPING AND VOLUNTEERING (5) Theories, research data, and community applications of prosocial activities, such as giving, helping, volunteering and altruism.
SOP 4712 (PSY 410) ENVIRONMENTAL PSYCHOLOGY (5) (W) An introduction to the man-environment interaction, including psychological, sociological and physical aspects.
LIN 4701 (PSY 412) PSYCHOLOGY OF LANGUAGE (5) (W) An overview of the psychology of language and the psychological "reality" of linguistic structures, behavioristic vs. cognitive views of psycholinguistics will be examined. Consideration will be given to the biological basis of language and thought, language acquisition, and language pathology.
EAB 4794 (PSY 413) PRINCIPLES AND THEORIES OF BEHAVIOR MODIFICATION (5) (S) Studies different approaches to the modification of problem behavior through the application of learning principles and theories.
SOP 4705 (PSY 420) PSYCHOLOGY OF SOCIAL CHANGE (5) (W) An examination of methods of implementing institutional change. Consideration will be given to alternatives such as violent vs. non-violent confrontation, the use of information as an instrument of change and others.
CYP 4933 (PSY 421) TOPICS IN COMMUNITY PSYCHOLOGY (5) (S) Various topics and current methods in community psy-
chology will be covered. Students enrolled in this course will focus on the psychological aspects of various community problems such as drugs, racism, overpopulation, ecology, militarism, women's liberation, the youth movement, etc.

SOP 4513 (PSY 422) PSYCHOLOGY OF CONFLICT (5) This course examines the psychological factors involved in conflict situations. The focus is upon intrapersonal, interpersonal and intergroup conflict resolution and will attempt to determine their applicability to various conflict conditions such as racial, religious or international wars. The course will also consider the ultimate disintegration of the individual personality as a result of internalized conflict and will attempt to familiarize students with the psychological factors underlying varying conditions of conflict and its ultimate resolution.
OEP 4204 (PSY 427) PEDIATRIC PSYCHOLOGY (5) Aspects of normal and abnormal child care and child rearing will be examined. Adult-child interaction in the home and in institutional settings will be explored and common problems of childhood will be discussed.
CYP 4953 (PSY 429) COMMUNITY PSYCHOLOGY FIELD EXPERIENCES I (7) (F) 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 for developing an action plan for assisting institutions in implementing change. Students enrolled in this course should have successfully completed introductory Community Psychology.
LIN 4710 (PSY 430) LANGUAGE ACQUISITION (5) (S) An examination of how children acquire language, based on experimental findings from contemporary linguistic, psycholinguistic and behavioral theory.
OEP 4163 (PSY 431) COGNITIVE DEVELOPMENT (5) (S) An examination of developmental changes in the nature of children's thought processes. Particular emphasis will be given to the theories of Jean Piaget. Prerequisite: Students should have successfully completed a course in introductory developmental psychology or its equivalent.
DEP 4164 (PSY 432) CHILDREN'S LEARNING (5) (W) Learning in infancy and childhood with particular emphasis on simple conditioning, discrimination shifts, mediation, transposition, observational and concept learning. Students enrolling in this course should have completed successfully at least one prior course in developmental psychology.
SOP 4015 (PSY 433) SOCIAL AND PERSONALITY DEVELOPMENT (5) (W) An examination of the genetic, familial, and societal factors influencing the development of a child's personality and his social behavior.
OEP 4464 (PSY 434) PSYCHOLOGY OF AGING (5) An examination of the factors which contribute to the psychological profile characterizing old age. Biological and sociological components will be considered and their impact on perceptual, cognitive, and personality processes will be analyzed.
OEP 4044 (PSY 435) PSYCHOLOGY OF MORAL DEVELOPMENT (5) (W,S) The course is intended to be a critical survey of psychological theories and psychological research concerning the development of moral attitudes and behavior, and the application of research in moral development to social problems. Emphasis will be given to those theories that have generated a substantial body of empirical research. The major theories to be reviewed will include psychoanalytic theory (Freud, and the ego psychologists), cognitive developmental theory as it is applied to the development of moral judgment (Piaget, Kohlberg, etc.) and social learning theory (Aronfreed, Bandura, Hill, etc.).
DEP 4704C (PSY 439) DEVELOPMENTAL PSYCHOLOGY: LECTURE (2) AND LABORATORY (5) (F,S) Laboratory/observation exercises illustrative of the concepts and research techniques used in developmental psychology. Particular emphasis will be given to cognitive and social-cognitive development.
EXP 4934 (PSY 440) CURRENT EXPERIMENTAL THEORIES (5) (F,S) The stress in this course is upon current specific theories determining the nature and direction of the research and interest in the several important areas such as psychophysics, learning and remembering, developmental patterns and motivation, personality, etc. Topics to be covered will be announced at the beginning of the academic year. May be taken twice for credit toward the major.
EXP 4204 (PSY 441) SENSATION AND PERCEPTION (5) (F) Basic concepts in sensation and perception will be explored, with an emphasis on models of peripheral and central neural processing. Topics such as receptor function, brightness and color vision, movement and object perception, perceptual memory and pattern recognition will be considered. Psychnphysical techniques such as subjective magnitude estimation and signal detection theory will be offered.
EXP 4605 (PSY 442) COGNITIVE PROCESSES (5) (W) Investigation of the mental processing underlying experiences and behavior. Topics will 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.
PSB 4003 (PSY 443) INTRODUCTORY BIO-PSYCHOLOGY (5) (F) A study of the more important psychobiologic correlates of behavior in basic psychological phenomena. Open only to majors in the senior year or otherwise qualified students.
PSY 4693C (PSY 448) OVERVIEW OF PSYCHOLOGY (5) (W) A consideration of the historical origins and developments of modern psychology as a viable discipline, in light of the major influences upon its growth. Prerequisite: 20 quarter hours in upper division psychology courses.
EXP 4404C (PSY 449) HUMAN LEARNING AND REMEMBERING: LECTURE (2) AND LABORATORY (5) (S) 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 the conduct of experimental studies of human learning and remembering. Students who have not had Advanced General Psychology With Laboratory should first complete successfully PSY 349.
SOP 4615 (PSY 450) SOCIAL PSYCHOLOGY OF ORGANIZATIONS (5) Survey of the theoretical and methodological issues in the study of organizational structures and environments, focusing on social processes as constraints on organizational functioning.
INP 4203 (PSY 451) PERSONNEL PSYCHOLOGY (5) Techniques and procedures applicable to the selection, placement, utilization, and evaluation of personnel in organizations will be considered. The emphasis will be on empirical procedures rather than the management function in the personnel area. Topics such as quantitive methods and models for selection, criteria analysis, performance appraisal, management training, and job satisfaction will be discussed. Prior course in Statisticsstrongly recommended.
SOP 4645 (PSY 452) CONSUMER PSYCHOLOGY (5) (F,W) This course will study and review the psychological components contributing to satisfactions and dissatisfactions in buying and selling transactions. It will also study the consequences of such transactions as they affect the environment in which we live as well as society in general. The interface between business, labor, government and the consumer - as all four groups are involved in consumer affairs - will be analyzed objectively. SOP 4649 (PSY 453) EXPERIMENTAL CONSUMER PSYCHOLOGY (7) (S) Students will work individiualliy or in teams on topics and issues relevant to the needs of South Florida. The Research Projects approved will require gathering and analyzing of
data calculated to help reduce or solve current consumer affairs problems. Emphasis will be placed on methods and measurements used by psychologists. It is recommended that students complete the course in Consumer Psychology prior to registering for this course.
INP 4055C (PSY 459) INOUSTRIAL/ORGANIZATIONAL PSYCHOLOGY LECTURE (2) AND LABORATORY (5) Students will gain experience with the use of psychometric instruments in the areas of job analysis, personnel selection, performance appraisal, job satisfaction, criteria analysis, and management training and development. Prerequisites: Statistics, and Introductory Industrial/Organizational Psychology, or Personnel Psychology, or Personnel Management, are recommended.
PPE 4604 (PSY 460) PSYCHOLOGICAL TESTING 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.
CLP 4144 (PSY 461) ABNORMAL PSYCHOLOGY (5) (W,S) 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 will be discussed. Role of social mores is adduced.
PPE 4930 (PSY 462) TOPICS IN PERSONALITY (VAR) (F,W,S,SS)
PPE 4105 (PSY 463) HUMANISTIC PSYCHOLOGY (5) Studies the methodology, research and findings of the humanistic orientation in psychology. Topics such as counseling, encounter groups, higher consciousness, bio-feedback, intentional communities, education, mysticism and religion are examined from the humanistic viewpoint. Completion of a course in theories of personality is recommended.
PPE 4514 (PSY 464) PSYCHOLOGY OF OREAMS AND DREAMING (5) 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. Students should have successfully completed a course in Theories of Personality or its equivalent.
CLP 4374 (PSY 465) TREATMENT OF BEHAVIOR DISORDERS (5) 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.
DEP 4213 (PSY 467) CHILDHOOD PSYCHOPATHOLOGY (5) 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.
PPE 4325C (PSY 469) DIFFERENTIAL PSYCHOLOGY: LECTURE (2) AND LABORATORY (5) Lectures and laboratory field experiences in the principles and methods underlying the administration, construction and evaluation of psychological tests, and practice in the administration and interpretation of selected psychological tests. Students who have not had an introductory course in statistics should first complete successfully MAS 307 or its equivalent.
SOP 4505 (PSY 470) THEORIES OF HUMAN RELATIONS (5) (S) Research methods and findings on the topic of interpersonal interaction in face-to-face situations. Emphasis on content of research methods and findings rather than in-class experiences.
SOP 4525 (PSY 471) SMALL GROUP BEHAVIOR (5) F,W) Introduction to the study of the structure and function of groups emphasizing the behavior of individuals as affected by the group. The course will focus upon 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 personal experience in sensitivity or encounter training.
SOP 4522 (PSY 473) SOCIAL MOTIVATION (5) Focuses upon those sources of human motivation which are a consequence of man's social-interpersonal environment and his striving to obtain socially valued goals. Topics discussed include test-taking anxiety, alienation and affiliation motivation, internal vs. external orientation, achievement motivation, etc. The measurement of social motives and their roots and consequences for behavior will be discussed.
SOP 4842 (PSY 474) LEGAL PSYCHOLOGY (5) Particular emphasis will be given to interpersonal courtroom processes. Topics considered will include scientific jury selection, proxemics, persuasive argumentation, witness demeanor, eyewitness testimony, and similar influences upon juror decision making. Prerequisites: None.
SOP 4215C (PSY 479) EXPERIMENTAL SOCIAL PSYCHOLOGY: LECTURE (2) AND LABORATORY (5) (S) 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, conformity, group structure and communication, etc.
PSY 4930 (PSY 480) SPECIAL TOPICS IN PSYCHOLOGY (VAR)
SOP 4735 (PSY 481) PSYCHOLOGICAL ASPECTS OF INTERNATIONAL RELATIONS AND CONFLICT (5) (W) A study of the psychological, especially social, factors in the dynamics of international behavior interactions which may increase or decrease tensions and conflicts.
SOP 4444 (PSY 482) ATTITUDES AND ETHNICITY: A CROSS-CULTURAL PSYCHOLOGICAL APPROACH (5) Comparative study of the attitudes and practices of racial and ethnic groups toward each other in a variety of cultural and national settings. SOP 4715 (PSY 483) PSYCHOLOGICAL INFLUENCE OF CULTURE ON LEARNING AND THINKING (5) An analysis of the research and theory relating cultural and societal influences of learning and thinking. Consideration will be given to the controversies concerning assessment, individual and group differences. Prior course work in developmental psychology would be helpful.
PSY 4900 (PSY 490) INDEPENOENT 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 will be expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their study. PSY 4941 (PSY 491) INDEPENDENT FIELO 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 will be expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their experiences.
PSY 4916 (PSY 492) 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 will be expected to
have regularly scheduled meetings with their faculty advisor, to conduct the research, and to submit a written report of their research.

PSY 4931 (PSY 498) SENIOR SEMINAR IN PSYCHOLOGY (2) An advanced seminar for seniors. Analysis of major contemporary trends in psychological theory and research.
PSY 4914 (PSY 499) HONORS RESEARCH PROJECT (VAR) Limited to qualified seniors seeking honors in psychology. Students must submit a research plan and have a research advisor selected who has approved the research project prior to enrollment in the course. A written report of the research in the A.P.A. publication style must be submitted for evaluation before credit will be awarded.
PSY 5206C (PSY/MAS 507) DESIGN OF EXPERIMENTS IN PSYCHOLOGICAL RESEARCH (4) Reviews the Analysis of Variance, introduces student to randomized and blocking designs, factorial designs, fractional factorial, main effects and other plans as they are used in psychological research. Main emphasis is on the rationale behind the several designs and the techniques for applying these to psychological experiments. Prerequisite: MAS 307 and 308 or their equivalent.
PSY 5246C (PSY/MAS 508) MULTIVARIATE ANALYSIS IN APPLIED PSYCHOLOGICAL RESEARCH (4) Covers basic techniques of multivariate analysis, emphasizing the rationale and applications to psychological research. Includes multiple regression, Hotellings T2, MANOVA, principle component analysis and factor analysis. Prerequisite: MAS 308 or equivalent, linear algebra recommended.
CYP 5535 (PSY 520) PSYCHOLOGY OF INSTITUTIONAL AND SOCIAL CHANGE (4) A study of the theoretical basis of and strategies applied to the process of effecting social change in community institutions which are involved in the delivery of human services.
CYP 5515 (PSY 521) PSYCHOLOGICAL SERVICES ADMINISTRATION (4) A broad survey of the function of administrative institutions in society from a psychological perspective; focuses on the psychological theories, concepts and practices involved in administration, organization and delivery of human services; emphasizes prosocial data involved in political functioning and administrative behavior in the public sector. Prerequisites: enrollment in graduate program at FIU; permission of instructor. CYP 5954 (PSY 529) COMMUNITY PSYCHOLOGY FIELD EXPERIENCES II (7) (W) Same orientation and description as Field Experience 1. Students in this course will be able to pursue their work with community institutions in more depth. Students enrolled in this course must have completed Field Experience in Community Psychology I.
DEP 5145 (PSY 530) CULTURE AND CHILDHOOD (5) (W,S) An examination of cultural and societal influences on children's motor, perceptual, intellectual, and personality development. Extensive readings in the cross-cultural research literature will serve as the focus for class discussions and independent projects. The course is designed for seniors and graduate students.
SPA 5401 (PSY 531) DISORDERS OF LANGUAGE IN CHILDHOOD (5) (F) This course focuses on the failure of children to acquire normal speech and language. The various causes of such disorders and theories to account for failure to acquire language are considered. Techniques for assessing language disorders in children are evaluated. Students enrolling in this course should ordinarily have completed at least one course in developmental psychology.
DEP 5405 (PSY 532) PSYCHOLOGICAL PROCESSES OF THE MATURING ADULT (4) An intensive examination of the literature dealing with the maturing adult with particular emphasis on psychological considerations of career development, intellectual and personality evaluation changing roles as applied to career choice, deparenting and preparation for retirement. Prerequisites: Graduate standing. Seniors by permission of instructor.
EXP 5406 (PSY 547) THEORIES OF LEARNING (5) The major theoretical systems of learning will be covered with the intent of determining how well each accounts for the phenomena of learning. Emphasis will be 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 will be considered.
(PSY 548) METHODS OF PSYCHOLOGICAL RESEARCH (5) A practicum course in behavioral research in which an investigation is planned, carried out, analyzed, and reported. Discussion will be directed to experimental, quasi-experimental, and non-experimental designs, obtrusive and unobtrusive measures, mathematical and logical tools for analysis of results, uses of the computer for data collection and analysis, and ethical consideration in research on human populations. Prerequisite: permission of the instructor.
EXP 5005C (PSY 549) ADVANCED EXPERIMENTAL PSYCHOLOGY: LECTURES AND LABORATORY (7) Lecture and laboratory course investigating experimental research in the fundamental processes of human behavior. These include perceptual, cognitive, and linguistic processes. Students enrolling in this course should have successfully completed PSY 349 , MAS 307 and MAS 308

- (PSY 552) SOCIAL PSYCHOLOGY OF ORGANIZATIONS (4) The application of concepts and theories from social psychology and sociology to the organizational setting. Emphasis would be on role theory, value formation and the operation of norms, including their development and enforcement. Formal and informal organization structure, power and authority concepts, and leadership theories will be covered. Communication processes and networks and their effects on task accomplishment and satisfaction will be included.
CLP 5175 (PSY 560) PERSONALITY DYNAMICS (5) (S) A review of different approaches to the study of personality dynamics and of the related therapeutic modalities. Special consideration is given to psychoanalysis and neo-analytic psychology. Other therapeutic models which influence current psychological thought are also considered. Students should have successfully completed a course in theories of personality or its equivalent. Instructor's permission required.
CLP 5185 (PSY 561) CURRENT ISSUES IN MENTAL HEALTH (5) A critical, intensive examination of selected, important issues in mental health. Emphasis is given to the empirical study of contemporary problems related to the making of mental patients; planning, programming and administering mental health services; political, ethical and legal constraints on the operation of mental health facilities; interdisciplinary cooperation among helping and human service professionals; and evaluation of preventive care and treatment services. Prerequisite: Abnormal Psychology or permission of the instructor.
CLP 5166 (PSY 563) ADVANCED BEHAVIOR PATHOLOGY (5) 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) will be covered.
CLP 5931 (PSY 564) ETHICAL CODE IN PSYCHOLOGICAL PRACTICE (2) An examination of the ethica! standards for psychological practice as established by the American Psychological Association, and the Association's standards for delivery of
psychological services. Prerequisites: Admission to graduate study in psychology; other graduate students by permission of instructor.
EAB 5655 (PSY 565) ADVANCED METHODS OF BEHAVIOR CHANGE (5) (F, S) 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: PSY 413, 465, 461enrollment in an authorized graduate program; equivalent background; or permission of instructor.
SOP 5058 (PSY 570) ADVANCED SOCIAL PSYCHOLOGY (5) (W) 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. Students enrolling in this course shculd have completed successfully at least an introductory course in social psychology or its equivalent.
PSY 5939 (PSY 580) SPECIAL TOPICS IN PSYCHOLOGY (VAR) (F,W,S,SS)
EDP 6935 (PSY 601) SPECIAL TOPICS IN EDUCATONAL PSYCHOLOGY (VAR) An intensive analysis of a particular topic in educational psychology. Students will have to have topics approved by the instructor prior to registration. Open only to advanced and graduate students in the School of Education.
CYP 6936 (PSY 620) CURRENT ISSUES IN COMMUNITY PSYCHOLOGY (3) An intensive analysis of contemporary theoretical, practical and professional aspects of the field of community psychology. Topics discussed may lead to the graduate project required of each student. Prerequisites: Admission to graduate study in psychology. Other graduate students by permission of instructor.
CYP 6536 (PSY 621) PRINCIPLES AND METHODS OF PSYCHOLOGICAL CONSULTATION (4) An analysis of the basic psychological approaches underlying consultation, with special emphasis on the practical application of the processes of learning, cognition and interpersonal relations to techniques of consulting with various "target" agencies, individual clients, and other professionals in community settings. Prerequisite: graduate standing at FIU or permission of instructor.
CYP 6526 (PSY 622) PSYCHOLOGICAL METHODS OF PROGRAM EVALUATION (5) Development of skills for the pSychological assessment, monitoring and evaluation of human service programs with emphasis on the application of basic principles of behavioral science research in the field setting. Prerequisites: Admission to graduate study in Psychology; other graduate students by permission of instructor.
CYP 6956 (PSY 629) FIELD EXPERIENCE IN COMMUNITY PSYCHOLOGY (VAR) Placement of students in applied settings for the purpose of developing community based experiences in the application of theoretical and methodological approaches. Prerequisites: PSY 520, 521, 564, 620, PSY/MAS 507-508.
_- (PSY 648) STRATEGIES AND METHODS OF APPLIED PSYCHOLOGICAL RESEARCH (4) A practicum course in behavioral research in which an investigation is planned, carried out, analyzed, and reported. Discussion will be directed to single- and multiple-subject research and to experimental, quasi-experimental, and non-experimental designs, obtrusive and unobtrusive measures, mathematical and logical tools for analysis of results, computer applications in data collection and analysis, and ethical considerations in research on human populations. Prerequisites: PSY/MAS 507-508.
PSY 6971 (PSY 699) MASTER'S PROJECT IN PSYCHOLOGY (5) Terminal project leading to the M.A. degree; individually designed to meet each student's needs; constitutes an original approach to a problem related to the discipline and requires the submission of a final paper or equivalent work. Prerequisites: all required courses for the M.A. must be completed or in progress.


## SOCIOLOGY MAJOR

Sociology is part of the Department of Sociology and Anthropology and all information should be obtained from that department's office.
Campus Location: Tamiami Campus only
DEGREE: Bachelor of Arts
LOWER DIVISION PREPARATION: Ninety quarter hours ( 60 semester hours) or the Associate of Arts degree from a community college; work should be pre-Arts and Sciences, or pre-Anthropology or Sociology if such programs exist. If the student does not have an AA degree, his background must reflect an ability to handle advanced academic work.

Required Courses: Introduction to cultural anthropology, or introduction to physical anthropology, or introduction to sociology.
Recommended Courses: (1) other anthropology or sociology courses (2) ecology, economics, geography, history, political science, psychology, (3) arts, biology, English, foreign language, mathematics, philosophy.

## UPPER DIVISION PROGRAM

| Required Courses: | Quarter Hours |
| :--- | :--- |
| Core Courses: |  |
| ANT 3086 | (ASC 301) Anthropological Theories |
| SOC 3610 | (ASC 302) Sociological Theories |
| SOC 3500 | (ASC 303) Research Methods |
| SOC 3658 | (ASC 304) Ethical Issues in Social Science <br> Research |
|  | 5 |

# NOTE: A student with special interests may consult faculty advisors to plan an individualized program of study. 

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

## Minor in Sociology/Anthropology

Prescribed Courses:
25 credits in the Department of Sociology-Anthropology including the following:
2 courses chosen from among the four core courses required of departmental majors ANT 3086 (ASC 301) Anthropological Theories SOC 3610 (ASC 302) Sociological Theories SOC 3500 (ASC 303) Research Methods SSI 3303 (ASC 304) Ethical Issues in Social Science Research.

## COURSE OFFERINGS

ANT 3086 (ASC 301) ANTHROPOLOGICAL THEORIES (5) This course examines the process of theory building and explanation in the social sciences and outlines the historical and philosophical foundations of anthropological thought. Theorists and schools of thought reviewed include Darwin and evolution. Boas and historical particularism, Freud and culture and personality, and Malinowski and functionalism.
SOC 3610 (ASC 302) SOCIOLOGICAL THEORIES (5) Examines the emergence of sociology as the study of social relations. Compares and contrasts the work of selected theorists with respect to their methodologies, treatment of the emergence and consequences of modern society, political sociology, conception of social class and analysis of the role of religion in society. The student is expected to gain in-depth knowledge of opposing theories as well as an appreciation of the contingent nature of sociological theories.
SOC 3500 (ASC 303) RESEARCH METHODS (5) An introduction to the scientific method and its application to anthropological and sociological research. Topics include formulation of research problems, research design, field methods and collection of data, hypothesis testing and interpretation of results.
SSI 3303 (ASC 304) ETHICAL ISSUES IN SOCIAL SCIENCE RESEARCH (5) An introduction to the problems and 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.
SOC 3000 (SOC 301) THE SCOPE OF SOCIOLOGY (5) Introduction to the field of sociology with particular emphasis on scope and limitations. Basic but major divisions of the discipline will be introduced. Vocabulary, conceptualizations, research approaches, and vocational opportunities will be reviewed. The relationship of theory and empirical study will be stressed. (Also recomended for non-majors.)
SOC 3001 (SOC 302) THE BASIC IDEAS OF SOCIOLOGY (5) The course will introduce the student to the ideas of community, authority, status, alienation and the sacred as used in sociological literature.
SOC 3830 (SOC 311) THE INDIVIDUAL IN SOCIETY (5) Introduction to the study of the individual as a social being with particular emphasis on man's social origins, human perceptions, and the interaction of the individual and the group within society.
SOC 3820 (SOC 312) SMALL GROUPS (5) Survey of small group studies, their development and the associated theoretical schools of thought. The significance of small group studies for social theory is evaluated.
SOC 3850 (SOC 313) COLLECTIVE BEHAVIOR (5) The study of human behavior as found in relatively unstructured forms such as crowds, riots, revivals, public opinion, social movements, and fads. The interplay of such behavior and the rise of new norms and values are analyzed.
SOC 3150 (SOC 321) CRIMINOLOGY (5) An introduction to the study of criminal behavior, its evidence in society, society's reaction to the subjects involved, and the current state of theoretical thought on causality and treatment.
SOC 3130 (SOC 322) DELINQUENCY (5) An analysis of behavior which is extra legal with major concentration on its appearance among young people (juveniles) and society's response. Particular emphasis is given to the dynamic thrusts being made in establishing juvenile rights as a distinct part of human or civil rights.
SOC 3110 (SOC 323) SOCIAL DEVIANCY (DEVIANT BEHAVIOR) (5) The study of behavior that counters the culturally accepted norms or regularities. The social implications of deviancy are reviewed and theoretical formulations regarding deviant behavior are analyzed.
SOC 3380 (SOC 331-332-333-334-335) COMMUNITY SOCIOLOGY COURSES (5) Special courses dealing with community programs such as Model Cities, voluntary organizations, United Fund, inner city schools, pubic service agencies. Faculty will come from community agencies, and course work will focus on local problems.
SOC 3300 (SOC 341) THE COMMUNITY (5) 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 recognized. Attention is given to the interaction of individuals and groups as they exist within the community.
SOC 3424 (SOC 342) THE SOCIAL SYSTEM (5) The study of society as a system, the benefits of such a conceptual approach, and related theoretical constructs are compared.

SOC 3281 (SOC 343) SCHOOL ANO SOCIETY (5) A specialized course dealing with the place of schools (particularly public) in society and the import of social criteria for school personnel and the influence of such criteria on the educational processes within the school system (institution.)
SOC 3828 (SOC 345) HUMAN INTERACTION LABORATORY (5) Laboratory designed for those persons seeking to increase their effectiveness in task-oriented problem-solving work groups. It explores processes or personal growth and development and human group interaction.
DHE 3101 (SOC 351) INTRODUCTION TO POPULATION ANALYSIS (5) An introduction to the study of population analysis. Classifications by age, sex, occupation, or other criteria and the significance of such data for analyzing major social trends are studied. The import of statistical records such as births, deaths, marriage registrations and census data is reviewed and analyzed.
DHE 3300 (SOC 352) HUMAN ECOLOGY (5) An introduction to the adaptive processes social beings make to their environment with particular emphasis on spatial distributions of interrelated social facts such as crime rates and population characteristics or poverty and housing conditions. Current studies on social interrelationships and physical environments are introduced.
SOC 3201 (SOC 361) SOCIAL INSTITUTIONS/ORGANIZATION (5) An introduction to more formalized behaviors that tend to provide accepted, orderly, and enduring procedures for groups having more than narrow interests and which perpetuate themselves and continue their existence as a group. These institutionalized ways of behavior are associated with specific institutions and studied comparatively.
MAF 3210 (SOC 363) MARRIAGE AND THE FAMILY (5) An introduction to the intensive study of the kinship relationship of man known as the family. The family is distinguished from other social units and behavior variations of this special unit are analyzed and associated with special functions. Contemporary manifestations of the family and the dynamic changes indicated are considered.
SOC 3020 (SOC 371) SOCIAL PROBLEMS (5) 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 for selected social problems, an analysis of those aspects amendable to remedy, and an inventory of the knowledge and skills available.
SOC 3402 (SOC 381) SOCIAL CHANGE (5) The study of major shifts in focus for societies or culture is covered, and the course defines indicators associated with such changes. Particular attention is given to the development of industrial societies and the study of the dynamics involved for nations emerging from various stages of "underdevelopment."
SOC 4504 (SOC 402) BASIC RESEARCH DESIGN (5) Advanced course in social research which provides research practicum for studying patterns of human behavior, analyzing findings of studies methodical and analytical procedures, reporting and explaining these results, and applying these inferences to concrete situations, also acquaint the student with the use of computers in research in the behavioral sciences.
SOC 4611 (SOC 403) ADVANCED SOCIAL THEORY (5) An analysis of various classical and current sociological theories with particular attention paid to their conceptions of man in society and the wider implications such conceptions have for their theoretical perspective. The theories of Durkheim, Parsons, Weber, Goffman, Bendix and Dahrendorf will be examined.
SOC 4829 (SOC 404) ETHNOMETHODOLOGY (5).
SOC 4610 (SOC 405) THE CLASSICAL TRADITION IN SOCIAL THEORY (5) An examination of the classical theorists in sociology - included are Marx, Weber, Durkheim, Pareto, Toonies and Freud.
SOC 4003 (SOC 406) SOCIOLOGY OF THE 20th CENTURY (5) An examination of the sociological implications evident in the events of our modern world. Heavy reliance is placed on intellectual materials other than social science, especially literature. SOC 4833 (SOC 411) ROLE THEORY (5) An analysis of the relation between man and society from the perspectives of role theory. The course explores the effect society has on individual biography and action.
SOC 4842 (SOC 412) SYMBOLS AND SOCIETY (5) An analysis of the effect of culture on the individual and on society. The roles of popular and intellectual culture life will be examined.
SOC 4841 (SOC 413) MASS CULTURE (5)
SOC 4004 (SOC 414) SOCIOLOGY THROUGH FILM (5)
SOC 4251 (SOC 421) THERAPY AS A SOCIAL INSTITUTION (5) An analysis of psychotherapy from the sociological perspective. The effect of therapy on society and its functioning in society are also analyzed. Comparable institutions in other societies are examined.
SOC 4835 (SOC 422) CLINICAL SOCIOLOGY (5) The problems of alienation, anomie, and happiness will be analyzed. A third position between social work and social change will be sought. Personal adjustment, social revolution, and individual calculation will be weighed as responses to the demands of social life.
SOC 4490 (SOC 431-432-433-434-435) AREA STUDIES: SOCIAL STRUCTURES AND PROBLEMS (5) Special courses on the social structures and related sociological problems of specific geographical and cultural areas. To be offered at various times.
SOC 4331 (SOC 436) LATIN AMERICAN AND CARIBBEAN SOCIAL STRUCTURES (5) The types of social structures, statuses and roles and the resulting distributions of power and authority in the hemisphere.
SOC 4301 (SOC 441) COMMUNITY ORGANIZATION (5) An intensive study of how communities are organized with special emphasis on the interactive process of the varied components of a community. Special study permitting students to concentrate on interest areas is required.
SOC 4423 (SOC 442) COMPARATIVE SOCIAL SYSTEMS (5) The study of varied social systems particularly as to those qualities regularly occurring in each and those which differ. Such variables are then analyzed for associational correlates to the systems studied.
SOC 4407 (SOC 445) MACRO-SYSTEM CHANGE LABORATORY (5) This laboratory uses macro-systems approach to develop an understanding of human behavior and processes of social change operating on organizational, institutional, community and national levels.
SOC 4271 (SOC 446) SOCIOLOGY OF SCIENCE (5) A sociological analysis of the generation, development, and consequences of science as a social institution.

SOC 4310 (SOC 451) URBAN SOCIOLOGY (5) The study as manifested in the urban community with particular attention given to the problems associated with urban life. The development of urban societies is reviewed historically and factors associated with this development are identified.
SOC 4320 (SOC 452) RURAL SOCIOLOGY (5) The study of agrarian society, pre-urban, pre-city societies. Distinctive factors associated with such social life are identified, and particular attention is given to defining indicators associated with rural society.
SOC 4265 (SOC 455) MAN, SOCIETY AND TECHNOLOGY (5) The study of contemporary society, man's role in it, and effects of technological change. A study of the interrelationships wh special attention given to vocational study and instruction within the framework of the relationships perceived.

- (SOC 456) SOCIOLOGY OF DEATH (5) An introduction to "death" as social phenomenon. Attention given to various approaches which systematically study death with primary emphasis given to the sociological approach. Major attention is given to an exploration of attitudes toward death and an assessment of the implications for the respective groups involved.
SOC 4410 (SOC 461) SOCIAL STRATIFICATION (MOBILITY) (5) The study of society structured hierarchically with particular attention given to the form and content of the various levels. Problems in the social order and differential human behaviors associated with stratification are analyzed.
SOC 4406 (SOC 462) THE PROBLEM OF BUREAUCRACY IN THE MODERN WORLD (5) The course deals with the microsociological problems of the internal organization of bureaucracies and with relation between bureaucracy and personality, with the macro-sociological problems of the emergence of the bureaucratic form, bureaucratization and contemporary life, as well as with general problems of affluence, meaningless activity, how to beat the bureaucracy, and bureaucracy and atrocity.
MAF 4510 (SOC 463) COMPARATIVE FAMILY SYSTEMS (5) The study of family organization and function in selected major world cultures. Emphasis is given to the inter-relationships of the family, the economic system, urbanization, and human development.
MAF 4511 (SOC 464) STUDIES IN COMPARATIVE LIFE STYLES (5) A problem oriented course emphasizing the differential behavior associated with categories such as nationalism, social class, income distribution, and political or religious affiliaion.
SOC 4408 (SOC 465) HEROIC ELITES (5) A seminar devoted to attempts by selected Third World leadership groups to resolve perceived problems of underdevelopment and imperialism, ideological justifications for such activities are analyzed. Prerequisites: ASC 302 (SOC 406, SOC 467 recommended). Permission of instructor required.
SOC 4463 (SOC 466) IMPERIAL DEVELOPMENT (5) A seminar devoted to study of the relationship between colonialism and development in the contemporary Third World. Prerequisites: ASC 302 (SOC 406, SOC 467 recommended). Permission of instructor required.
SOC 4613 (SOC 467) SOCIAL THEORY AND THIRD WORLD INNOVATIONS (5) An examination of the contributions to social theory by intellectuals of the Third World. Particular attention is paid to theory derived from classical Marxism.
SOC 4550 (SOC 470) SEMINAR IN THE SOCIAL SCIENTIST'S ETHICS (5) An upper-level seminar emphasizing particular ethical considerations of import to the peculiar role and function of sociologists and anthropologists. Special attention to the interrelation of specific social scientific studies and their moral consequences, domestic and international. Prerequisite: ASC 304.

SOC 4745 (SOC 471) MINORITIES (RACE AND ETHNIC RELATIONS) (5) The study of social groups identified by racial or ethnic characteristics. Particular emphasis is given to their role in society, especially that society of which they are a part and the interactive process resulting from contact with the majority. Social behaviors of minorities are reviewed and related to institutional structures and their accepted norms.
SOC 4705 (SOC 472) THE ROLE OF WOMEN IN CONTEMPORARY SOCIETY (5) A concentrated study of women in society, role origins and their development in contemporary society. Particular attention is given to how such behaviors became normalized and the rapidity with which they change.
HUS 4413 (SOC 473) HEALTH AND WELFARE DELIVERY SYSTEMS (5) A review of the varied systems servicing society's health and welfare needs. Attention is given to the institutional origins of such systems and their propensity for change and modification. Studies reflecting evaluative considerations for such systems are reviewed.
SOC 4480 (SOC 474) SOCIOLOGY AND SOCIAL PLANNING An analysis of sociological concepts and their application to planning processes of society and its subunits. Planning processes are critically reviewed for evidences of such application. Both micro and macro planning processes are correlated to specific sociological units of analysis.
SOC 4267 (SOC 475) SOCIOLOGY OF REAL ESTATE AND LAND USE (5)
SOC 4464 (SOC 476) SOCIOLOGY OF THE UNDERPRIVILEGED SOCIETIES (5) An examination of the various theories concerning what is happening in the "underdeveloped world." The political, social, and economic events of these societies are subjected to sociological analysis.
SOC 4230 (SOC 477) SOCIOLOGY OF MEDICINE (5) The social organization of medical institutions and the social factors associated with incidence of physical/mental illness and its treatment. Opportunity available for students to pursue specialized interests related to public needs and medical services.
SOC 4211 (SOC 478) SOCIOLOGY OF RELIGION (5) The study of religious institutions, their structure and function in various societies. Leadership qualities, participation and practices, and the relationship of religious institutions to other social institutions are studied.
SOC 4221 (SOC 479) POLITICAL SOCIOLOGY (5) The underlying social conditions of political order, politcal process and political behavior are explored. Examples will be drawn from empirical and theoretical studies of power, elites, social class and socialization.
SOC 4214 (SOC 480) SEMINAR IN RELIGION AS A SOCIAL INSTITUTION (5) An upper-level seminar in which two or more religious systems are compared in terms of their social origins and social-political consequences. Emphasis on the socio-economic-political impact of particular religious institutions such as the Black church in the United States, revitalization movements among Third World peoples.
SOC 4620 (SOC 481) COMPARATIVE SOCIOLOGY (5) A cross-cultural and cross-national survey of sociological studies with particular emphasis on theoretical and methodological issues. Examples will be drawn from studies on culture patterns, social structure, sexual mores, power relationships and the ethical implications of cross-national research.
SOC 4741 (SOC 482) COMPARATIVE SLAVE SOCIETIES (5).

SOC 4540 (SOC 483) HISTORICAL SOCIOLOGY (5) The authenticity and meaning of historical data for sociological research. Systematic theories in history are analyzed for their utility in sociology. Particular emphasis will be placed on the sociological uses of the comparative method in history.
SOC 4428 (SOC 484) PRECAPITALIST SOCIAL STRUCTRES (5)
SOC 4475 (SOC 485) SEMINAR IN ETHNICITY (5) An upper-level seminar stressing a comparative sociological approach to the study of two or more racial-ethnic groups. Emphasis on the interrelations of ethnic communities within the same society and the socio-political effects of the relations. Prerequisite: Minorities, SOC 471 or permission of Dept.
SOC 4440 (SOC 491) SOCIAL CONFLICT (5) The study of conflict in society and its place in social relationships. A study of causes and resolutions with particular emphasis on methods of resolution and their influence on social change.
SOC 4652 (SOC 492) SOCIOLOGY OF SOCIOLOGY (5) An analysis of the disciplines of Sociology and Anthropology using the tools developed by those disciplines themselves. The political, social and economic contexts of the field are examined to see how the discipline is used, for what advantages, and to what effect.
SOC 4002 (SOC 493) BASIC ASSUMPTIONS OF SOCIOLOGY (5) An analysis of the basic assumptions underlying the different perspectives in Sociology and Anthropology.
SOC 4640 (SOC 494) INTELLECTUAL PRECURSORS OF SOCIOLOGY (5) An analysis of social ideas from which sociology emerged. The ideas of Aristotle, Hobbes, Rousseau, and Marx, among others, will be discussed as contributions to the emergence of Sociology.
SOC 4653 (SOC 495) SOCIOLOGY OF UTOPIA (5) An analysis of utopian thinking in Sociology and Anthropology as well as the sociological implications of utopianism.
SOC 4746 (SOC 496) SOCIAL CONFLICT IN MULTI-ETHNIC SOCIETIES (5) Cases are selected from a variety of societies with differing types of majority-minority situations. Prejudice and discrimination are seen as weapons in group and class conflict. The consequences of prejudice are analyzed in terms of the costs to every group in the society.
SOC 4931 (SOC 497) HONORS SEMINAR (S) Permission of instructor needed.
SOC 4905 (SOC 498) DIRECTED INDIVIDUAL STUDY (VAR) Supervised readings and/or field research and training. May be repeated.
SOC 4941 (SOC 499) DIRECTED FIELD RESEARCH (VAR) Permission of instructor required.
SOC 5652 (SOC 511) SOCIOLOGY OF ART AND LITERATURE (MODERN) (5).
SOC 5140 (SOC 572) SOCIOLOGY OF LAW AND LEGAL PROCESSES (5)
SOC 5261 (SOC 581) INDUSTRIAL SOCIOLOGY (5) Concentrated study of industrialization and the sociological theory invoived. Manpower, unemployment, apprentice programs, classificatory schemes are subject matter studied.
SOC 5284 (SOC 582) SOCIOLOGY OF EDUCATION (5) An analysis of education as a social process and the interrelationship of educational systems and society. The study of education as a socialization process, the social structure of education, and the role played as an agent in social change are emphasized.
SOC 5656 (SOC 586) SOCIOLOGY OF KNOWLEDGE (5) The study of the theoretical bases of knowledge and the inter-relatedness of social factors, particularly as knowledge relates to institutional forms of behavior.
SOC 5255 (SOC 587) SOCIOLOGY OF MENTAL HEALTH (5) A concentrated study of mental illness with particular emphasis on definitional conceptualizations and the relationship of such to incidence data. Includes study of the social factors on the etiology of mental disorders and the epidemiology of such illnesses. Family effects of mental illness discovery and treatment are assessed and mental health programs and their effectiveness are reviewed.
SOC 5264 (SOC 589) CONFLICT RESOLUTION: SOCIETY AND LABOR (5) A concentrated study of conflict as evidenced in labor's relationship to society. The development of methods of resolution and an assessment of the prevailing approaches. Attention is given to the historical roots of labor's development as a distinct social entity and the tensions precipated within different societies and their varied economic and political systems.
SOC 5316 (SOC 590) ADVANCED URBAN SOCIOLOGY (5) A concentrated study of urban problems. Emphasis given to social policy and the role of public and private agencies in sustaining, administrating and changing such policy. Urban problems are studied as an intermix of social, cultural, political and economic factors. Methods of social cost analysis are discussed.
SOC 5909 (SOC 591) DIRECTED INDIVIDUAL STUDY (VAR) Supervised readings and/or field research and training. May be repeated.
SOC 5941 (SOC 592) DIRECTED FIELD RESEARCH (VAR) Permission of instructor required.

# Ethnic Studies Certificate Program 

## Campus Location: Tamiami Campus only

Coordinating Committee: Ralph Clem (international Relations), Fernando Gonzalez-Reigosa (Psychology), Howard Rock (History), John Stack (Political Science), Babatunde Thomas (Economics), Maida Watson (Modern Languages).
Director: Anthony P. Maingot (Sociology/Anthropology)
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 of its importance in today's world. The Program seeks to establish a proper balance between its academic goals and objectives and the ongoing concerns of the University's local and international constituen-
cies. 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 diploma will specify the area of concentration chosen by the student.
A student may acquire the Certificate in Ethnic Studies by fulfilling the following requirements:

General Requirements

1. A minimum of 30 quarter hours with a grade of " $C$ " or better.
2. Courses in both the "Core" and "Specialized" areas (indicated below) must be taken from at least two different departments.
3. A maximum of 5 quarter hours in a relevant language will be accepted.
4. A maximum of 10 hours of Independent Study will be accepted.
5. The Program Director must approve the student's overall plan and all special topics courses must be approved by certificate advisors in each area.
The Program is especially eager to encourage programs of study abroad and field work in general. Credits 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 15 credit hours towards the Certificate.

## Specific Requirements

1. A core of a minimum of two (2) to three (3) courses of a theoretical and conceptual nature in the area of ethnic studies
2. A minimum of three (3) to four (4) specialized courses in one of the four distinct areas:
a) Black Studies
b) Jewish Studies
c) Cuban Studies
d) Comparative Studies

Core Courses: Sociology 471 or Anthropology 403: "Minorities"; Political Science 463: "Ethnic Politics"; International Relations 453: "Ethnicity and Nationality"; Economics 329: "Economics of Race and Sex Discrimination"; Psychology 482: "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
LAH 3930 (HIS 388) Cuban History
SOC 4331 (SOC 436) Latin American and Caribbean Social Structures
SOC 4613 (SOC 467) Third World Theory
FOW 4390 (MOL 406) Genre Studies (with reference to Cuban Literature)
ECS 4430 (ECO 403) The Economic Development of Cuba
INR 3246 (INR 344) International Relations of the Caribbean
Specialized Courses in Black Studies
ANT 4315 (ANT 423) Afro-American Anthropology
ANT 4352 (ANT 426) Area Studies
SOC 4746 (SOC 496) Social Conflict in Multi-Ethnic Societies
LIT 4203 (ENG 442) Regional Literature in English
LIT 4930 (ENG 499) Special Topics
AML 5212 (ENG 506) Major American Literary Figures
HIS 4420 (HIS 455) Individuals and History
MUH 3116 (MUS 307) Evolution of Jazz
Specialized Courses in Jewish Studies
POS 4147 (POS 495) Political Urban Jewish Leadership
INR 3274 (INR 333) International Relations of the Middle East
GEA 3630 (INR 373) Population and Geography of the Middle East
REL 3224 (REL 312) The Prophets

# CARIBBEAN-LATIN AMERICAN STUDIES 

## CERTIFICATE PROGRAM

Campus Location: Tamiami and North Miami Campuses
Director: Ken I. Boodhoo, International Relations
Coordinating Committee: F. Maurrasse, Physical Sciences; R. Moncarz, Economics; M. Szuchman, History; A. Maingot, Sociology; M. Rosenberg, Political Science.

The Caribbean-Latin American region encompasses an area of great social, economic and political importance. The area affords the opportunity to study diverse political systems emerging from neo-colonialism and caught up in the developmental process. Florida International University is ideally suited in terms of its location, resident immigrant populations and faculty expertise to develop a major concentration in this area. To maximize that critical mass of expertise, the thrust of the Program, initially, would be directed toward the Caribbean area, and consequently, to the offering of a Certificate in Caribbean Studies.

The Caribbean Studies Certificate Program is offered with two tracks leading to the award of two different Certificates acknowledging that a student has demonstrated competence in course work pertaining to the study of the Caribbean. These Certificates are designed to meet the needs of those who have a general interest in Caribbean and circum-Caribbean affairs, as well as those for whom work in Caribbean Studies would serve to assist in career planning or advancement.
Academic Certificate in Caribbean Studies
This Certificate is awarded with the Bachelor's degree, or upon completion of Certificate requirements to a student already possessing a Bachelor's degree. A student can acquire the Academic Certificate by fulfilling the following requirements:

1. Successful completion of at least six courses ( 30 quarter hours) in Caribbean or Caribbean-related courses which are listed below.
2. Two courses (ten hours) must be selected from the "Latin American" section of courses listed below.
3. Courses must be selected from at least two different departments.
4. A maximum of 5 credits of relevant language will be accepted.
5. A maximum of 10 credits of relevant independent study courses may be accepted. Such independent study will require the permission of one of the members of the Coordinating Committee.
6. Students in the Program should consult with Coordinating Committee members concerning course selection. They are required to file an application for the Certificate upon completion of the Program's requirements.
In addition, all of the requirements normal for obtaining the Bachelor's degree in the College of Arts and Sciences, or in one of the professional schools, must be met, including majors anri minors appropriate to that degree.

## PROFESSIONAL CERTIFICATE IN CARIBBEAN STUDIES

The Professional Certificate is not associated with the Bachelor's degree. It is awarded to a student upon completion of the following requirements:

All requirments for the award of the Academic Certificate are applicable except that,

1. A minimum of 25 credits must be completed.
2. It is recommended that courses be taken from at least two different departments.

The University offers the following courses from which the student who is participating in the Program can select:
Anthropology
ANT 4340 (ANT 420) Cultures of the Caribbean
Earth Sciences
GLY 3157 (EAS 302) Caribbean Geology
GLY 4190 (EAS 495) Caribbean Earth Sciences Seminar
Economics
ECS 4430 (ECO 403) The Economic Development of Cuba-Past and Present

ECS 4432 (ECO 408) Economic Caribbean Integration
ECS 4433 (ECO 409) Economics of the Caribbean
ECS 5025 (ECO 510) Economic Problems of Emerging Nations
English
LiT 4290-4203-4291 (ENG 440-445) Regional Literature in English
History
LAH 3930 (HIS 385) Caribbean I
LAH 3930 (HIS 386) Caribbean II: Modern Caribbean
LAH 3930 (HIS 388) Cuban History
HIS 4369 (HIS 427) Comparative New World Slavery
International Relations
CPO 3326 (INR 341) Population and Geography of the Caribbean
INR 3246 (INR 344) International Relations of the Caribbean

- (INR 356) Tourism and International Affairs

INR 4283 (INR 401) International Relations, Development \& the Third World
INR 4245 (INR 444) Caribbean Regional Relations
INR 4024 (INR 453) Ethnicity and Nationality: World Patterns and Problems.
Philosophy and Religion

- (PHR 495) Interdisciplinary Seminar-Cuban Migration

Political Science
CPO 3323 (POS 307) Government and Politics of the Caribbean CPO 4360 (POS 403) Cuban Politics
CPO 4364 (POS 419) Politics of the Afro-Caribbean Latin Nations - (POS 429) Conflict and Cooperation in the Caribbean

## Sociology

SOC 4331 (SOC 436) Latin American and Caribbean Social Structures
SOC 4613 (SOC 467) Third World Theory
SOC 4746 (SOC 496) Social Conflict in Multi-Ethnic Societies
Language Instructions
SPH 3120-3121-3122 (SPA 301-303) Beginning
Language Instruction, Intermediate Language Instruction I \& II
FRE 3120-3121-3200 (FRE 301-303) Beginning
Language Instruction, Intermediate Language Instruction I \& II

## LATIN AMERICAN COURSES:

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## Consumer Affairs

Campus Location: Tamiami Campus only
Director: Milton L. Blum (Psychology)
Coordinating Committee: Myrna Crabtree (Home Economics), Samuel Shapiro (Mathematical Sciences), Ronald Tikofsky (Psychology)

With the collaboration of all the academic units and the approval of the Vice President for Academic Affairs, the Consumer Affairs Institute administers a Consumer Affairs interdisciplinary certificate sanctioned by the College of Arts and Sciences of Florida International University.

The increasing number of issues and conflicts involving consumers, business, government, and labor demand study and research so that more appropriate resolutions can be achieved. The Certificate Program in consumer affairs is intended to provide a sound educational base for those dealing with consumer affairs matters-be they buyers or sellers. The courses leading to the Certificate can serve those pursuing careers in consumer affairs, and provide personal benefit to individuals in their roles as consumers.

The Certificate Program is intended to provide business, government, industry, and labor with a resource for educating selected personnel in a broad range of subject matter related to consumer affairs.

A Certificate in Consumer Affairs will be awarded upon satisfactory completion of thirty credits from the courses listed in the Certificate requirements. Completed courses are recorded on a university transcript. These courses may be taken upon enroliment as a Special Student and with the advice of the Certificate Program Director. Special Student enrollment and course registration can be completed simultaneously at the time of registration. Students can be admitted to the Program at the beginning of each quarter.

REQUIRED COURSES: Twenty (20) credits are to be chosen from the following courses.

ECO 3040 (ECO 305) CONSUMER ECONOMICS (5 credits) Effects of public policy on family incomes and expenditure patterns. Consumer behavior, advertising and other influences affecting demand.
SOP 4645 (PSY 452) CONSUMER PSYCHOLOGY (5) Factors that cause satisfaction and dissatisfaction in buying and selling transactions and their environmental effects.
COA 3410 (HMF 306) CONSUMER RESOURCES MANAGEMENT (3) Application of modern management principles to improve individual and family spending decisions.
COA 3411 (HRM 312)IMPROVING YOUR EFFECTIVENESS AS A CONSUMER (3) Study of time, information, and money as resources to be managed for increasing consumer effectiveness.
MAR 4503 (MAR 410) INTRODUCTION TO CONSUMER BEHAVIOR (5) The consumer as the basis for development of marketing programs by business organizations.
SOP 4649 (PSY 453) EXPERIMENTAL CONSUMER PSYCHOLOGY (7) Individual or team research study of consumer affairs topics of interest in South Florida. Reducing or solving current problems is of particular interest.
ELECTIVE COURSES: Ten (10) credits are to be chosen from the following courses.
HSC 402: (HSM 481) CONSUMER HEALTH ANO SAFETY EDUCATION (5) Problems and products influencing consumer health services. Study of solutions to prevent and correct fraud.

HSC 4023 (HSM 483) PEOPLE, POWER, AND HEALTH (5) Service organizations' policies, management, finances, and operating philosophy are examined. Problems of organization, evaluation, and change are considered.
PUP 4203 (POS 439) ENVIRONMENTAL POLITICS AND POLICY (5) Steps in the environmental policy-making process whereby private preferences are transformed into public policy.
APB 3130 (EVR 301) ENVIRONMENTAL SCIENCE (5) Fundamental principles of chemistry, physics, and biology are related to environmental awareness. Particular attention to air and water pollution.
APB 3131 (EVR 302) ENVIRONMENTAL SCIENCE II (5) Continuation of EVR 301. Particular attention to energy, agricultural, and food problems, food additives, and population.
(PHI 420) ETHICAL ISSUES IN BUSINESS (5) Ethical dimensions of current problems and issues facing the business manager or worker.
FOS 3004 (DIN 305) FOOD AND THE CONSUMER (5) Survey of nutrition information relating to problems of today's consumers.
ETI 4683 (ITE 422) HUMAN FACTORS ENGINEERING (5) Human performance and capacity are considered as they interact with jobs and objects in the work environment. plication of management principles to the human and material resource problems related to individual and family living.

HUN 3122 (DIN 301) NUTRITION AND CULTURE (4) Nutrients and their interrelationship to the food habits and the needs of various populations.
In addition, students with the permission of a faculty advisor have the option to pursue between four (4) and six (6) credits of the total number of thirty (30) credits required in either independent study, internship, or practicum. These credits would be received by enrollment in Psychology 490, 491, 492, or equivalent.

## Linguistic Studies

Director: Lynn Berk (English)
Coordinating Committee: Frances Aid (Modern Languages), George Kovacs (Philosophy and Religion), Lamar Ross (Anthropology and Sociology), John Staczek (Secondary Education), and Ronald Tikofsky (Psychology).

The University does not offer an undergraduate degree in Linguistic Studies, but it does provide a Certificate acknowledging that a student has demonstrated competence in course work pertaining to the study of Linguistics. This certificate is designed to meet the needs of those who have a general interest in Linguistic Studies, as well as those for whom work in Linguistics would assist in career planning or advancement.

A student can acquire a Certificate in Linguistic Studies by fulfilling the following requirements:
(1) The successful completion of at least six courses (30 quarter hours) in Linguistics or Linguistic-related courses. These courses are listed below.
(2) Courses must be selected from at least two different departments. It is recommended that courses be selected from three departments. Students should consult their certificate advisor in selecting courses.
(3) With the advice of the Coordinating Committee, the student is encouraged to attain some degree of proficiency in a language other than his/her native language.
In addition to the requirements noted above, all of the requirements for obtaining a Bachelor's Degree in the College of Arts and Sciences or in one of the professional schools must be met, including the majors and minors appropriate to that degree.

A Coordinating Committee, representing various fields and consisting of faculty engaged in the teaching of one or more courses in Linguistic Studies will advise students and grant the Certificate.

A student wishing to earn a Linguistics Studies Certificate will choose courses from the following list of offerings:

## Required Courses

1. LIN 3010 (MOL 309) Introduction to General Linguistics ( 5 credits) OR ENG 3500 (ENG 320) English Linguistics (5 credits)
2. FOL 4930 (MOL 497) Special Topics: Spanish Grammar ( 5 credits) OR ENG 4555 (ENG 461) Modern English Grammar ( 5 credits)
3. One of the following courses:

LIN 3642 (ANT 338) Language and Culture ( 5 credits)
LIN 4701 (PSY 412) Psychology of Language ( 5 credits)
LIN 4710 (PSY 430) Language Acquisition ( 5 credits)
PHI 4220 (PHI 430) Philosophy of Language ( 5 credits)
PHI 4222 (PHI 431) Philosophy of Dialogue ( 5 credits)
Remaining courses for the Certificate will be selected from the following list:

## Anthropology

LIN 3642 (ANT 338) Language and Culture (5 credits)
English
ENG 3500 (ENG 320) English Linguistics (5 credits)
LIN 4400 (ENG 460) Applied Linguistics ( 5 credits)
ENG 4555 (ENG 461) Modern English Grammar (5 credits)
ENG 5517 (ENG 553) History of the English Language (5 credits)

Modern Languages
LIN 3200 (MOL 307) Phonetics ( 5 credits)
LIN 3400 (MOL 308) Applied Linguistics (5 credits)
LIN 3010 (MOL 309) Introduction to General Linguistics ( 5 credits)

- (MOL 335) History of the Language ( 5 credits)

FOL 3732 (MOL 337) Romance Linguistics ( 5 credits)
LIN 4226 (MOL 475) Contrastive Phonology ( 5 credits)
LIN 4333 (MOL 476) Contrastive Morphology ( 5 credits)
LIN 4418 (MOL 478) Problems in Language Learning ( 5 credits)
LIN 4620 (MOL 479) Studies in Bilingualism (5 credits)
Philosophy and Religion
PHI 4220 (PHI 430) Philosophy of Language (5 credits)
PHI 4222 (PHI 431) Philosophy of Dialogue (5 credits)
Psychology
LIN 4701 (PSY 412) Psychology of Language (5 credits)
LIN 4710 (PSY 430) Language Acquisition (5 credits)
SPA 5401 (PSY 531) Disorders of Language in Childhood (5 credits)
Mathematics
MHF 4302 (MAS 405) Mathematical Logic (5 credits)

## SCHOOL OF BUSINESS AND ORGANIZATIONAL SCIENCES

The School of Business and Organizational Sciences offers academic programs leading to the undergraduate degrees of Bachelor of Business Administration and Bachelor of Public Administration, and the graduate degrees of Master of Business Administration, Master of Public Administration, and Master of Science in Management. These programs are designed to help prepare the student for careers in business, public administration, and other areas of management.

Programs of the School of Business and Organizational Sciences are based on a background of courses in the arts and sciences, followed by a foundation of management policies, institutions, and operations. including study of basic management tools of analysis and decision-making. Further study in the functional areas of enterprise leads to a thorough preparation in a selected field of specialization.

The School is organized into three divisions (Finance/Accounting, Management, Policy/Marketing/Environment) and one program (Public Administration). There is a central undergraduate advising unit (DM363) and a graduate coordinator (DM362B). These advisors are available to provide detailed informaton about programs offered by the School. Their phone number is 552-2781.

## PROGRAMS OF STUDY

Every student must have a program of study completed by the end of his or her first quarter of attendance. A completed program of study is one that has been filled out and signed by the student, his or her counselor and the appropriate division chairperson. If such a program of study is not completed at least three (3) quarters before a student is expected to graduate, the student may not be permitted to register for further classes. Entering students should immediately call (305) 552-2781 for a counseling appointment. Please note that no more than 20 quarter hours of credit (undergraduate students) or 15 quarter hours of credit (graduate students) may be taken as a special student and applied toward a degree: courses must be approved in advance by a counselor.

## UNDERGRADUATE STUDY: BUSINESS

A student entering into a bachelors program of the School is required to have completed the Associate of Arts degree or its equivalent, and is encouraged to bring with him or her some knowledge of accounting, mathematics, computer programming, and economics. The broad liberal arts exposure inherent in the Associate of Arts degree usually enables a student to complete the Bachelor of Business Administration requirements in the equivalent of two years and to take most of the professional work with Florida International's School of Business and Organizational Sciences. This professional work includes: (1) certain required courses, each of which is designed to introduce the student to a common body of knowledge, including quantitative analysis, finance and control, administrative theory and practices, the social and legal environment of business and government, and marketing and distribution; (2) courses required for the student's major; (3) approved elective courses; and, (4) pre-core courses (where necessary).

The student entering an undergraduate program of the School of Business and Organizational Sciences is required to meet the following four standards:

1) 90 quarter hours ( 60 semester) completed,
2) grade point average of 2.0 or above,
3) satisfactorily meet general University requirements for admission, including, in this case, the general education requirements. The general education requirements are: English composition (9), humanities (9), social science (9), natural science (9), mathematics (4), electives in one of the above areas (14), and
4) Certain "prerequisite" courses as described below.

The basic program in the School of Business and Organizational Sciences to obtain a BBA degree is 90 quarter hours. Generally, the student completing computer proficiency, general education requirements, or prequisite deficiencies at Florida International will add these credits to his or her basic 90 quarter hour program. At a minimum the student's last 45 hours of courses must be taken at Florida International. All lower division deficiencies must be completed during the student's first two quarters at Florida International.

## UNDERGRADUATE STUDY: PUBLIC ADMINISTRATION

The Bachelor of Public Administration degree program is offered for students interested in entering public service upon completion of their undergraduate work, or for those who wish to continue study in public management on a graduate level toward a master's degree. The program is primarily designed and geared toward those who want to develop their knowledge and skills for service in local government agencies.

The undergraduate Public Administration program is available to students whose two years of undergraduate work culminated in the Associate of Arts degree or its equivalent. Students from all areas of study are encouraged to apply to the program. There are three requirements: 1) 90 quarter-hours ( 60 semester hours) completed; 2) grade point average of 2.0 or above; 3) University general education requirements of English composition (9), humanities (9), social science (9), natural science (9), mathematics (4), and electives in one of above areas (14).

The Bachelor of Public Administration program consists of 18 courses ( 90 quarter-hours), of which 12 courses ( 60 quarter-hours) are required and six ( 6 ) courses ( 30 quarter-hours) are approved electives. All required courses must be taken in the Public Administration program; however students are permitted to take approved elective courses in other departments of the University. The student's last 45 hours of courses must be taken at Florida International, and any lower division deficiencies must be completed during the student's first two quarters at Florida International.

## COUNSELING

As noted above, the School has a centralized undergraduate advising unit with three counselors (DM363) and a graduate coordinator (DM362B). If, after discussing the matter fully with the counselor and the person in charge of counseling, the student has a question about his or her program of study he or she may contact the Division Chairperson (Finance and Accounting) or the Associate Dean (other programs).

# UNDERGRADUATE STUDY: GENERAL INFORMATION 

## UPPER DIVISION TRANSFER CREDITS

Previous credit may be considered acceptable for transfer toward upper level academic study in the School if the credit was earned within the last six (6) years at an accredited institution, and was designated as junior-senior level credit at a four year or upper level institution, or is validated by some acceptable measure to verify its equivalence. Students wishing to transfer to the School of Business and Organizational Sciences must be in good standing at their previous school or college.

## CHANGE OF MAJOR

Any student attempting to change to a new or revised major in the School of Business and Organizational Sciences must meet the requirements that exist at the time of the change.

## RESIDENCY REQUIREMENTS

A student must complete his or her last 45 quarter hours of course work at Florida International to qualify for the BBA, or BPA degree from the School.

## CREDIT-BY-EXAMINATION

A student registered for a course in the School may, at the discretion of the instructor and division chairperson and after presenting sufficient justification, attempt credit by examination. Upon successful completion of the special examination given by the course instructorpreferably during the first week of classes to allow registration for another course that academic quarter-a grade of EM will be noted on the course grade roll at the end of the quarter, if the student, in the opinion of the professor, passes the special examination.

## COURSE SELECTION AND CLASS LOADS

Generally, a junior level student should concentrate on the 45 quarter hours of core courses (and pre-core courses, if needed). Courses at the 400 and 500 levels are normally taken during the senior year, and the student must have the necessary background and/or training before enrolling.

The normal class load each quarter for an undergraduate student is: Quarter Hours*

| Full-time attendance | 15 |
| :--- | ---: |
| Working part-time | 10 |
| Working full-time | 5 |
| *Unusual circumstances combined with high |  |
| $\quad$ scholarship may warrant an exception which |  |
| $\quad$ must be approved by the Dean. |  |

## GRADUATION PROCEDURES

1. During the first year in the program, undergraduate and graduate students develop and sign with their faculty advisor and dean, advance standing forms and programs of study; this program of study becomes the basic contract between the Sciool and the student and is used in determining when a student is eligible for a degree.
2. Approximately five months prior to the expected graduation date, the student files an application for graduation with the Office of Registration and Records.
3. The Dean's Office, having received this application from the Office of Registration and Records, has the appropriate faculty advisor review the student's record in order to determine that he has, or is in the process of, successfully fulfilling the courses required for graduation as listed in the program of study.
4. If the student's progress is deemed acceptable, the faculty advisor, division chairperson, and dean certify the application for graduation, contingent upon completion of the course work which the student is registered for in his final quarter.
5. The Dean's Office should receive copies of all programs of study after all signatures have been obtained.

## UNDERGRADUATE MAJORS

Major programs leading to the bachelor's degree are offered in accounting, finance, insurance, international business, management, marketing, personnel management, real estate and regional development, transportation management, urban and regional affairs, and management information systems.

## UNDERGRADUATE BUSINESS PROGRAM REQUIREMENTS

LOWER DIVISION PREPARATION:

The following course requirements, in addition to the other requirements for the Associate
of Arts degree, should be a part of the 90 quarter hours ( 60 semester hours) of lower division coursework completed in order to enter these upper division majors.

Required Courses: 6 semester hours of accounting; 6 semester hours of economics; 3 semester hours of college algebra; 3 semester hours of statistics; 3 semester hours of computer programming. If completed at Florida International University, this coursework will normally be taken in addition to the 90 quarter hours of required upper division work.

Computer Programming Proficiency Requirement: The rapidly increasing need of the professional administrator for exposure to computer technology and terminology is the rationale for the Computer Programming Proficiency Requirement of the School. The growth and reliance on data processing techniques by business and government demand that fundamental experience in this area be achieved. Therefore, prior to enrollment in BUA 306 (or ACC 408), each student must demonstrate computer programming proficiency. This requirement may be completed in any of the following ways:

- Successful completion of a computer programming course at the lower division.
- Successful completion of MAS 323-Basic Programming for Business (non-accounting majors) or MAS 319-Introduction to COBOL Programming (accounting majors) at Florida International University.
- Self-study, or work experience. An examination is offered on a regular basis for students selecting this alternative.
Further details may be obtained from the Advisement Office of the School.


## UPPER DIVISION PROGRAM:



NOTE: MAS 304, ECO 301 and ACC 300 will be waived if the student received an A, B, or $C$ in the appropriate lower division courses. Please see a counselor to determine whether these courses should or should not be added to your academic program. If a student has successfully completed comparable courses at the lower level, upper division credit will not be given for MAS 304, ECO 301 and ACC 300.
Core Courses Required for Business Administration Students:
FIN 3403 (BUA 301) Financial Management 5
MAN 3503 (BUA 302) Managerial Decision Making 5
MAR 3023 (BUA 303) Marketing Management 5
$\begin{array}{cc}\text { QMB } 3150 & \begin{array}{c}\text { (BUA 305) Applications of Quantitative } \\ \text { Methods in Business }\end{array}\end{array}$
CIS $3000 \begin{gathered}\text { *(BUA 306) Introduction to Information } \\ \text { Systems }\end{gathered}$
ACC $3303 \begin{gathered}\text { *(BUA 307) Accounting for Planning and } \\ \text { Control }\end{gathered}$
MAN 3010 (BUA 309) Organization and Management 5 (BUA 314) Business and Society
or
(BUA 320)Business in the International Environment

5
ECO 3202 (ECO/BUA) 311 Applied Macroeconomics 5

MAR 4254 (BUA 494) International Business Policy (International Business majors)
or
MAN 4723 (BUA 496) Policy Analysis 5
*These courses should not be taken by students majoring in accounting. See pages 123 and 124 for accounting core courses and programs.
Major: Required Courses 25
Approved Electives 15
TOTAL (Does not include deficiencies) 90
Note: All electives must be approved in advance by the Dean or his designee.

## PREREQUISITES FOR BUSINESS CORE COURSES

(ACC 300) ACCOUNTING FOR DECISIONS—This course will be waived if student received a " C " grade or better in a Principles of Accounting sequence (This would be ACC 107 and 108, or ACC 100, 101 and 102 at Miami-Dade).
ECO 3003 (ECO 301) PRINCIPLES OF ECONOMICS-This course will be waived if student received a "C" grade or better in Principles of Economics sequence. (ECO 210 and 211 at Miami-Dade).
STA 3132 (MAS 304) QUANTITATIVE METHODS FOR ADMINISTRATION I-This course will be waived if student received a "C" grade or better in a comparable level statistics course (BST 201 or MAT 251 at Miami-Dade).
FIN 3403 (BUA 301) FINANCIAL MANAGEMENT-ACC 300 or its equivalent (see above for ACC 300)
MAN 3503 (BUA 302) MANAGERIAL DECISION MAKING-Callege algebra, statistics, and BUA 305 or its equivalent.
MAR 3023 (BUA 303) MARKETING MANAGEMENT--None.
QMB 3150 (BUA 305) APPLICATION OF QUANTITATIVE METHODS IN BUSINESS-MAS 304, or its equivalent (See above for MAS 304) and college algebra.
CIS 3000 (BUA 306) MANAGEMENT INFORMATION SYSTEMS-BUA 309, BUA 307, and computer programming proficiency requirement (BDP 167 at Miami-Dade, MAS 323 at FIU for nonaccounting majors, MAS 319 at FIU for accounting majors).
ACC 3303 (BUA 307) ACCOUNTING FOR PLANNING AND CONTROL—ACC 300 or its equivalent (see above for ACC 300). MAN 3010 (BUA 309) ORGANIZATION AND MANAGEMENT-None.

- (BUA 314) BUSINESS AND SOCIETY-ECO 301 or its equivalent (see above for ECO 301).

ECO 3613 (BUA 320) BUSINESS IN AN INTERNATIONAL ENVIRONMENT-BUA 311
ECO 3432 (ECO 311) APPLIED MACROECONOMICS-ECO 301 or its equivalent (see above for ECO 301).
MAR 4254 (BUA 494) INTERNATIONAL BUSINESS POLICY-Open only to International Business majors in lieu of BUA 496. Course should be taken in student's last academic quarter before graduation.

MAN 4722 (BUA 496) BUSINESS POLICY-Completion of all core course requirements. Course should be taken in student's last academic quarter before graduation.

## UNDERGRADUATE PUBLIC ADMINISTRATION PROGRAM REQUIREMENTS

UPPER DIVISION PROGRAM:
Required Courses:PAD 3702 (PAD 305) Administrative Statistics and DataSystems5
PAD 3413 (PAD 310) Organizational Group Processes ..... 5
PAD 3034 (PAD 312) Public Policy and Its Administration ..... 5
PAD 3033 (PAD 321) Administrators and the Legislative Process ..... 5
PAD 3834 (PAD 325) International Comparative Administration ..... 5
PAD 4024 (PAD 400) Concepts and Issues in Public Administration ..... 5
PAD 4103 (PAD 402) Politics of Administrative Organizations ..... 5
PAD 4414 (PAD 403) Public Personnel Administration ..... 5Quarter Hours
PAD 4104 (PAD 404) Organization and Administrative Theory ..... 5
PAD 4804 (PAD 405) Government and Administration of Metropolitan Areas ..... 5
PAD 4432 (PAD 407) Administrative Leadership and Behavior ..... 5
PAD 4223 (PAD 428) Budgets and the Administrative Process ..... 5
Electives:
(PAD 301) Financing Public Organizations
(PAD 301) Financing Public Organizations ..... 5 ..... 5
PAD 3204
PAD 3204
(PAD 320) Personal Growth and AdministrativeDevelopment5
PAD 4110 (PAD 401) Administrative Interaction in the Public Sector ..... 5
PAD 4603 (PAD 406) Administrative Law ..... 5
PAD 4032 (PAD 408) Public Choice ..... 5
PAD 4415 (PAD 409) Administration of Personnel Resources ..... 5
PAD 4040 (PAD 410) Public Values, Ethics and Morality in Changing Environment ..... 5
Other Electives:
List of recommended elective courses from other departmentsof the University is available from the SBOS counselors.

## RECOMMENDED COURSE SEQUENCES FOR UNDERGRADUATE PROGRAMS

## PROFESSIONAL ACCOUNTING

The bachelor degree program in Accounting consists of three parts: the Core ( 40 quarterhours), the Concentration in Accounting ( 35 quarter-hours), and Electives ( 15 quarter-hours, which must be selected from among the courses listed below or be approved by the chairperson of the Finance and Accounting Division).

Courses for an emphasis in Managerial Accounting are:
Required Courses: $\qquad$ (ACC 401), $\qquad$ (ACC 402), ACC 4201 (ACC 403), ACC 4301 (ACC 405), ACC 4501 (ACC 406), ACC 4731 (ACC 408), ACC 4348 (ACC 425). Elective Courses: ACC 4601 (ACC 407), ACC 4648 (ACC 412), ACC 4548 (ACC 413), ACC 4522 (ACC 414), MAN 4723 (BUA 496), ACC 3949 (COE 325), ACC 4949 (COE 425), ECO 3101 (ECO 307), ECO 4623 (ECO 417), ECO 4134 (ECO 432), ENC 3453, (ENG 311), ENC 3353 (ENG 312), (FIN ( 400 LEVEL ELECTIVE), BUL 4661 (LAW 407), MAN 5830 (MAN 550), MAN 5831 (MAN 551), MAN 5832 (MAN 552), COP 3120 (MAS 319).

Courses for an emphasis in Financial and Public Accounting are:
Required Courses: - (ACC 401), (ACC 402), ACC 4201 (ACC 403), ACC 4301 (ACC 405), ACC 4501 (ACC 406), ACC 4601 (ACC 407), ACC 4731 (ACC 408).
Elective Courses: ACC 4648 (ACC 412), ACC 4548 (ACC 413), ACC 4522 (ACC 414), ACC 4803 (ACC 417), (ACC 419), ACC 4248 (ACC 424), ACC 4348 (ACC 425), MAN 4723 (BUA 496), ACC 5111 (ACC 502), ACC 5865 (ACC 506), ACC 5211 (ACC 517), ACC 3949 (COE 325), ACC 4949 (COE 425), ECO 3101 (ECO 307), ECO 4623 (ECO 417), ECO 4134 (ECO 432), ENC 3453 (ENG 311), ENC 3353 (ENG 312), ——FIN (400 LEVEL ELECTIVE), BUL 4661 (LAW 407), COP 3120 (MAS 319).

## FLORIDA CPA REQUIREMENT

Completion of a Bachelor of Business Administration with emphasis in public accounting is accepted by the Florida State Board of Accountancy as fulfilling requirements to sit for the Certified Public Accounting Examination.

The law relating to the practice of public accounting (Chapter 473, Florida Statutes 1969) provides in Rule 21A-9.02-Major in Accounting that:

For purposes of Section 473.08(4)(b), F.S., a major in accounting is defined as an educational program at accredited colleges or universities which includes at least 18 semester hours or 27 quarter hours, or the equivalent, in accounting education above the elementary level and 27 semester hours or 40 quarter hours, or the equivalent, in general business education. For this purpose, accounting hours above the minimum requirement may be substituted for general business hours.

## ACADEMIC STANDARDS-ACCOUNTING

The upper-division undergraduate accounting program is designed to introduce the student to that common body of knowledge of business and accounting needed for the development and growth of the professional accountant in public accounting, industry, education, and government. The student is urged to acquire a broad, general education in the arts, the humanities and the sciences at the lower-division level for his (or her) own personal development and growth.

Accounting is a profession with high entrance and retention standards. Since this program is designed to help prepare students for careers in the accounting profession, its grading, retention, and graduation standards also must be high. The student who earns two grades of "D" or less in one or more of the first three courses taken (ACC 401, ACC 402, and ACC 405) may not continue taking courses in the accounting program without written permission of the Chairman of the Finance and Accounting Division. In addition, to qualify for the Bachelor of Business Administration degree with a major in accounting, the student must maintain a " C " average in all accounting courses attempted.

## MODEL SCHEDULE-ACCOUNTING

The following is a model schedule with several options that must be followed by the typical full-time student who (1) has completed all of the freshman-sophomore requirements, and (2) wishes to complete the undergraduate accounting program with emphasis in public accounting. Deviations from this schedule must be approved by the chairperson of the Finance and Accounting Division. (The student possessing a non-business baccalaureate degree should consult a School of Business and Organizational Sciences academic counselor for alternative programs that meet the Florida State Board of Accountancy requirements.)

Quarter 1
FIN 3403 (BUA 301)
QMB 3150 (BUA/MAS 305)
(BUA 314)
Note: Pre-core deficiencies must be completed in Quarter 1.

## Quarter 2

(ACC 401)
MAN 3503 (BUA 302)
ECO 3432 (ECO 311)

Quarter 3
(ACC 402)
MAR 3023 (BUA 303)
MAN 3010 (BUA 309)

Quarter 4
ACC 4301 (ACC 405)
ACC 4501 (ACC 406)
Elective: ECO 3101 (ECO 307), ECO 4623 (ECO 417), ECO 4134 (ECO 432), ENC 3353 (ENG 312), a 400 level finance course or BUL 4661 (LAW 407), COP 3120 (MAS 319)

Quarter 5
ACC 4601 (ACC 407)
ACC 4201 (ACC 403)
Elective: ACC 4648 (ACC 412), ACC 4548 (ACC 413), ACC 4522 (ACC 414), ACC 4248 (ACC 424), ACC 4348 (ACC 425), a 400 level finance course, COP 3120 (MAS 319).

Quarter 6
MAN 4723 (BUA 496)
ACC 4731 (ACC 408)
Elective: BUL 4661 (LAW 407), ACC 4648 (ACC 412), ACC 4548 (ACC 413), ACC 4522 (ACC 414), ACC 4248 (ACC 424), or ACC 4348 (ACC 425).

## FINANCE

The bachelor degree program in Finance consists of (1) the core courses ( 50 quarterhours), (2) an area of concentration in Finance ( 25 quarter-hours), and (3) electives (15 quarter hours).

The areas of concentration in Finance are as follows:

1. Managerial Finance-FIN 4404 (FIN 405) (Policies for Financial Management) and FIN 4419 (FIN 406) (Topics in Finance)
2. Financial Institutions and Markets-FIN 4303 (FIN 415) (Nonbank Financial Intermediaries and Markets) and FIN 4324 (FIN 416) (Commercial Bank Management)
3. Investments-FIN 4502 (FIN 425) (Security Analysis) and FIN 4504 (FIN 426) (Topics in Investment Analysis)
The Finance concentration consists of five courses selected from the above three areas. The student majoring in Finance is urged to elect courses in micro-and macro-economics. The prerequisite for 400 and 500 level finance courses is BUA 301.

SUGGESTED PROGRAM OF STUDY
Quarter 1
QMB 3150 (BUA/MAS 305)
ACC 3303 (BUA 307)
MAN 3002 (BUA 309)
Quarter 2
FIN 3403 (BUA 301)
MAN 3503 (BUA 302)
ECO 3432 (ECO 311)
Quarter 3
MAR 3023 (BUA 303)
CIS 3000 (BUA 306)
(BUA 314)

## Quarter 4

Three electives

Quarter 5
Three electives

## Quarter 6

Three electives: BUA 496
strongly recommended or required (see advisor).


#### Abstract

INSURANCE An insurance major is offered through the Division of Policy, Marketing, and Environment. An Insurance major is required to take 25 quarter hours of insurance courses at the 400 level. For most students majoring in insurance the following five courses are recommended: RMI 4015 (INS 405)-Principles of Insurance (5) RMI 4220 (INS 410)-Casualty Insurance I (5) RMI 4221 (INS 411)-Casualty Insurance II (5) RMI 4212 (INS 412)-Property Insurance I (5) RMI 4213 (INS 413)-Property Insurance II (5) These five insurance courses have been approved by the State of Florida Insurance Commissioner's office to fulfill the educational requirements for taking the 2-20 license examination.

A student may, however, after consultation with his or her major advisor, choose to take other courses such as RMI 4115 (INS 407) (Life Insurance), RMI 4016 (INS 418) (Management of Insurance Enterprise), or other insurance offerings. Students may also be eligible for the certificate of professional insurance accomplishment.


## INTERNATIONAL BUSINESS

An International Business (IB) major is offered through the Division of Policy, Marketing, and Environment. The IB major must take BUA 320 (Business in an International Environment) in the business core. All IB majors are required to declare a functional major (such as Accounting, Finance, Management, or Marketing), and to satisfy the requirements of that major. In so doing, however, the international course in the functional major must be taken (such as ACC 419-International Accounting, MAN 451-International Management, FIN 555-Financial Management in the Multinational Corporation, or MAR 408-International Marketing). In addition, the three approved elective courses provided for in the functional majors must be selected from the following (exclusive of the international course in the declared functional major), with the concurrence of the student's major advisor:

- (ACC 419)-International Accounting

FIN 5605 (FIN 555)-Financial Management in the Multinational Corporation
MAN 4600 (MAN 451)-International Management
MAN 4610 (MAN 452)—International and Comparative Industrial Relations
MAR 4243 (MAR 408)—International Marketing
MAR 4244 (MAR 418)-Export Marketing
PAD 3834 (PAD 325)-International Comparative Administration
ECS 3003 (ECO 313)-Comparative Economic Systems
ECO 4701 (ECO 437)-World Economy
ECO 4733 (ECO 440)-Multinational Corporation
The capstone course, BUA 494 (International Business Policy), is required of all IB Majors in lieu of BUA 496 (Policy Analysis). It should be taken in the final quarter prior to graduation. The IB major is offered only as a second major, but ordinarily would not involve additional course work beyond that required in the single major programs. Accordingly, students selecting the IB option will graduate as dual majors in the functional field of their choice and International Business.

## MANAGEMENT

The Division of Management offers degree programs of study at the bachelors level in Organizational Theory, Personnel Management, Behavioral Science, Management Science, Management Information Systems, and Health Care Management. (The undergraduate program in Health Management is jointly offered by the School of Health and Social Services. For admission requirements, consult the Department of Health Sciences, School of Health and Social Services.) The student is given wide latitude either to specialize in one particular area, or to select from courses on a more general level of professional education. The management major requires 20 quarter hours of management courses at the 400 or 500 level. MAN 430 (Operations Planning and Control) is required for all students within the 20 hours requirement with the exception of those selecting the personnel management track.

Alternative suggestions for course selections in various tracks follow the suggested general program of study below.

## Quarter 1

QMB 3150 (BUA 305)
ACC 3303 (BUA 307)
MAN 3002 (BUA 309)
Quarter 2
FIN 3403 (BUA 301)
MAN 3503 (BUA 302)
MAR 3023 (BUA 303)
Quarter 3
CIS 3201 (BUA 306)
MAN 3712 (BUA 314)
MAN 4521 (MAN 430)

## Quarter 4

ECO 3432 (ECO 311)
One course with MAN prefix
One elective course*
Quarter 5
Two courses with MAN prefix
One elective*
Quarter 6
MAN 4723 (BUA 496)
Two electives*
*Elective courses may be taken in any academic area. (Recommended departments outside SBOS are Economics, Mathematical Sciences, and Psychology.)

```
1. Personnel Management (Select 4 of 5)
    MAN 4401 (MAN 454) Industrial Rela-
        tions
    MAN 4410 (MAN 455) Labor Man-
        agement and Collective Bargaining
    MAN 4301 (MAN 457) Personnel Man-
        agement
    MAN 4320 (MAN 463) Personnel Re-
        cruitment and Selection
    MAN 4330 (MAN 464) Wage and Salary Administration
3. Organizational Behavior
MAN 4521 (MAN 430) Operations Planning and Control
MAN 4201 (MAN 453) Organization Theory
MAN 4151 (MAN 456) Behavioral Sciences in Management
MAN 4120 (MAN 461) Intergroup Relations in Organizations
5. Flexible Option
MAN 4521 (MAN 430) Operations Planning and Control
Any three (3) other MAN courses
```

2. Management Information Systems

QMB 4680 (MAN 420) Simulation of Management Systems
MAN 4820 (MAN 422) Information Systems Development
MAN 4523 (MAN 428) Production Information Systems
MAN 4521 (MAN 430) Operations Planning and Control
4. General Management

MAN 4521 (MAN 430) Operations Planning and Control
MAN 4600 (MAN 451) International Management
MAN 4201 (MAN 453) Organization Theory
MAN 4771 (MAN 458) Small Business Management

## MARKETING

The bachelor degree program in Marketing necessitates 25 quarter hours of marketing courses at the senior (400) level. Of these 25 quarter hours, 15 hours consist of the following required courses:
MAR 4713 (MAR 404) Cases in Marketing Management
MAR 4503 (MAR 410) Consumer Behavior
MAR 4613 (MAR 411) Marketing Research
The remaining 10 credit hours may be selected by the student with his or her advisor from other marketing course offerings. It is suggested that students concentrate in a specific area and take, for example:

1. Advertising Concentration

MAR 4303 (MAR 413) Advertising Management
MAR 4344 (MAR 414) Advertising Campaign Management
3. International Concentration MAR 4243 (MAR 408) International Marketing
MAR 4244 (MAR 418) Export Marketing
2. Retailing Concentration

MAR 4153 (MAR 405) Retailing Management I
MAR 4154 (MAR 406) Retailing Management II
4. Distribution-Concentration

MAR 4203 (MAR 417) Marketing Channels
MAR 4213 (MAR 419) Transportation Logistics

Marketing majors, however, are not limited to the above concentration and may choose courses from any other marketing offerings.

## REAL ESTATE

A Real Estate major at the bachelors degree level is offered through the Division of Policy, Marketing, and Environment within the School of Business and Organizational Sciences. The

Real Estate major student is expected to take 25 quarter hours within the Real Estate course offerings or, with the consent of his or her advisor, in an allied field such as Urban and Regional Affairs. Under normal circumstances a Real Estate major without previous formal undergraduate work in the area will be expected to take the two introductory courses REE 3040 (RES 390) Introduction to Real Estate, and REE 3430 (RES 391) Legal Environment of Real Estate, along with three other 5 quarter hour courses chosen with the consent of his or her major advisor.

## TRANSPORTATION MANAGEMENT

Transportation Management is one of the bachelor's degree programs offered through the Division of Policy, Marketing, and Environment. The student who wishes to major in Transportation Management is required to take 25 quarter hours of Transportation Management courses at the senior (400) level. The student is encouraged to take TRA 4240 (TRA 405) (Transportation Systems and Services) and TRA 4320 (TRA 492) (Transportation Policy) for 10 quarter hours of major field credit. Besides these two courses, the student is encouraged to take three courses in Transportation Management such as TRA 4510 (TRA 406) (Mass Transportation and Urban Problems), TRA 4012 (TRA 419) (Principles of Transportation Logistics), and TRA 4101 (TRA 410) (Transportation Rate Making), or a field such as Air Transportation and take TRA 4410 (TRA 441) (Air Transportation), TRA 4411 (TRA 442) (Airport Management), and TRA 4412 (TRA 443) (Aircarrier Management).

## GRADUATE STUDY: General Information

The Graduate Programs of the School of Business and Organizational Sciences offer the student advanced professional education for managerial careers in business and government. At the graduate level, the degrees of Master of Business Administration, Master of Public Administration, and Master of Science in Management for example in Accounting, Finance, Health Care, and Real Estate are offered. Certificate programs in Emergency Medical Services (EMS) Systems Administration, Insurance, Management Information Systems, Personnel Administration, Real Estate, and Transportation Management are also offered.

Generally, graduate programs in the School of Business and Organizational Sciences are aimed at accomplishing two objectives. The first objective is to provide the student with a sound foundation in a variety of management functions such as marketing, production, accounting, finance, quantitative methods, decision-making, and behavioral science. Based upon this foundation, the second objective of the programs in the School is to provide students with a specialization and expertise in a particular area of management so as to facilitate the student's performance on his or her entry or second level job.

## ADMISSION REQUIREMENTS

To be eligible for admission to the graduate programs in the School of Business and Organizational Sciences at Florida International, the applicant must:

1. Satisfactorily meet the general University requirements for admission to graduate programs.
2. Hold a bachelors degree from a regionally accredited college or university.
3. Meet the minimum standards regarding entrance examination scores and upperdivision grades as determined by the faculty:
a) Admission to the Master of Business Administration (MBA), and the Master of Science in Management-Accounting, Finance, and Real Estate programs will be based upon a combination of the score on the Graduate Management Admissions Test (GMAT) and the upper division grade-point average (GPA). Specifically, the applicant must have a combined score of at least 725 points, computed as follows:
$($ GPA $\times 100)+($ GMAT score $)=725$, with a minimum 450 on the GMAT.
b) Admission to the Master of Public Administration program will be based upon either a 3.0 or better upper division grade point average or a score of 1000 or higher on the Graduate Record Examination (GRE).
c) Applicants for admission to the Master of Science in Management-Health Care Management should have a " B " or better upper division grade point average and a score of 1000 or higher on the Graduate Record Exam (GRE). Applicants whose records fall below these standards may be considered for admission to the Program at the discretion of the Program Director.
d) Admission to the Master of Science in Management International Business program will be based upon either an upper division grade point average of 3.0 or higher or a score of 450 or better on the Graduate Management Admissions Test (GMAT).
4. A foreign student must present a minimum score of 500 on the TOEFL or equivalent on a comparable examination. (See General Admission Requirements for Foreign Students - undergraduates and graduates, in the Admission section of the catalog.)
5. Be in good standing with previous colleges or universities attended.

## APPLICATION PROCEDURES FOR THE MASTER OF BUSINESS ADMINISTRATION, THE MASTER OF PUBLIC ADMINISTRATION, AND THE MASTER OF SCIENCE IN MANAGEMENT PROGRAMS

A student planning to enroll in graduate studies in the School must complete the following steps and meet the stipulated requirements:

1. Submit a graduate application for admission to the Admissions Office of Florida International. Application forms will be mailed upon request. The admission process may require as much as two months after receipt of the application, depending upon the time involved in the receipt of transcripts and test scores.
2. Have a copy of the official transcripts of all previously earned college or university credits sent from the applicant's former institution(s) to the Admissions Office of Florida International. Copies submitted by applicants are not accepted for application purposes.
3. (a) The candidate applying to the MBA or MSM Accounting, Finance, International Business and Real Estate programs must submit his or her scores on the Graduate Management Admissions Test (GMAT), administered nationally by the Educational Testing Service (Box 966, Princeton, New Jersey 08540). Registration forms will be mailed upon request.
(b) The candidate applying to the MPA or MSM Health Care Management programs must submit his or her scores on the Graduate Record Exam (GRE), administered nationally by the Educational Testing Service (Box 955, Princeton, New Jersey 08540). Registration forms will be mailed upon request.

## DEGREE REQUIREMENTS

To be eligible for a Master's degree, a student must:

1. Satisfy all university requirements for a master's degree.
2. Meet the requirements of an approved Program of Study.*
3. (a) Complete a minimum of 45 quarter hours (depending on program) of graduate level coursework, for the Master of Science in Management programs. (The last 45 hours must be at Florida International)
(b) Complete a minimum 60 quarter hours of graduate level coursework for the Master of Business Administration or Master of Public Administration program. (The last 45 hours must be at Florida International)
4. Earn a minimum average of " B " $(3.0)$ or the equivalent in all work completed at FIU as a graduate student.
*The student's Program of Study is developed by the student and his faculty advisor and must be approved by the division chairperson and the dean of the School of Business and Organizational Sciences.

## GRADUATION PROCEDURES

See the procedures described on page 120.

## GRADES AND CREDITS

No courses in which a grade below " C " is earned may be counted toward the MBA, MPA, or MSM degrees. However, all work taken as a graduate student will be counted in computing the quality point average, including courses graded "D,' and any undergraduate courses taken while a graduate student.

## TRANSFER CREDIT

The student may receive permission to transfer up to a maximum of 10 quarter hours of graduate credit to his or her degree program, provided that: (1) the course(s) were taken at the graduate level at an accredited college or university, (2) the course(s) were not introductory or "survey" in nature, (3) grade(s) of " $B$ " or better were earned, (4) the course(s) were judged by the faculty advisor, division chairperson, and dean to be relevant to the student's graduate program, and (5) the credit(s) were not used toward another degree. Credit is not transferable until the student has earned 25 quarter hours in his School of Business and Organizational Sciences graduate program. Students wishing to transfer to the School of Business and Organizational Sciences must be in good standing at their previous school or college.

## MAXIMUM RECOMMENDED COURSE LOADS

Full time students......................................................................... 10 quarter hours Students working full or part-time 5 quarter hours Approval for exceptions must be obtained from the dean or his designee.

## SPECIAL STUDENT REGISTRATION

Only fully admitted graduate students may register for MBA courses with the exception of MBA 605 and MBA 607. The special student should be counseled by the appropriate faculty advisor before registering for any courses.

## 500-LEVEL COURSES

500-level courses are open to graduate students and seniors. Master of Public Administration and Master of Science in Management students may take a maximum of three 500-level courses. All other courses in the student's program must be at the 600 -level (courses which are only open to graduate students). Master of Business Administration students will normally take all work at the 600 -level.

## TIME LIMIT

All work applicable to the master's degree must be completed within six years immediately preceding the awarding of the degree, and within five years of the students first admission to graduate study in the School of Business and Organizational Sciences.

## CHANGE OF MAJOR

The graduate student who wishes to change his or her program major must submit a new graduate application for admission to the Admissions Office of Florida International, and meet the program requirements in effect at the time of the change of major.

## ACADEMIC WARNING, PROBATION, AND DISMISSAL

WARNING: A student whose cumulative GPA falls below a 3.0 will be placed on WARNING indicating academic difficulty.

PROBATION: A student on WARNING whose cumulative GPA falls below 3.0 will be placed on PROBATION indicating serious academic difficulty. The College/School of the student on PROBATION will appropriately communicate conditions which must be met in order to continue to enroll in the program.
DISMISSAL: A student on PROBATION whose cumulative and quarterly GPA falls below 3.0 will be automatically dismissed from his/her program and the University.

## MASTER OF BUSINESS ADMINISTRATION (MBA)

The objective of the Master of Business Administration (MBA) is to provide the student with a general background in the concepts and processes of administration. The MBA program at Florida International is aimed at developing a management generalist who has a breadth of knowledge and understanding, and who is oriented toward pragmatic problem solving. Limited specialist training is available for the student who has the necessary background.

The courses leading to the MBA degree are designed to provide a breadth of experience in the tools and concepts of business administration. The total MBA program is fixed at 60 quarter hours of the MBA courses. The courses are categorized by area, with a regular MBA course and substitute(s) for each category. If a student tests-out or is counseled out of the "regular" course(s) he or she must select one of the substitutes in the same category. To be eligible for testing or counseling out of a "regular" course, the student should have previously completed at least three to four courses in that functional area at the upper division level with above-satisfactory grades. Electives may be taken from any of the 600 -level offerings within the SBOS. Students without accounting or statistical background will substitute MBA 605 (Managerial/Financial Accounting) and MBA 607 (Quantitative Methods in Management) for their electives.

| MBA Program |  |  |
| :---: | :---: | :---: |
| Area | Regular Course | Possible <br> Substitute Courses ${ }^{1}$ |
| Economics* (Micro/Macro) | ECP 6704 (ECO 606) Managerial Economics | An elective in either Marketing or Finance. This substitute is only available to an economics major. |
| Information Systems | MAN 6830 (MBA 626) Organization Information Systems | MAN 6833 (MAN 618) Information Systems Planning |
| Quantitative Methods* | MAN 6721 (MBA 625) Managerial Decision Making | MAN 6836 (MAN 630) Systems Analysis |
| Accounting** | ACC 6313 (MBA 627) Accounting for Decision-Making | ACC 6411 (ACC 606) Managerial Accounting <br> ACC 6391 (ACC 607) Seminar in Managerial Accounting 1 <br> ACC 6291 (ACC 610) Seminar in Financial Accounting Theory ACC 6651 (ACC 612) Studies in ACcounting ACC 6512 (ACC 613) Income Tax Planning and Research |
| Finance (Corporate) | FIN 6428 (MBA 635) Financial Management | FIN 6636 (FIN 655) International <br> Finance <br> FIN 6246 (FIN 615) Financial <br> Markets <br> FIN 6806 (FIN 645) Financial Theory |
| Operations | MAN 6501 (M8A 637) Operations Management | MAN 6836 (MAN 630) Systems Analysis |
| Marketing | MAR 6716 (MBA 636) Marketing Management | MAR 6246 (MAR 608) Advanced International Marketing |
| Management | MAN 6205 (MBA 617) Organizational Analysis | MAN 6112 (MAN 661) Group Processes MAN 6405 (MAN 650) Labor Relations MAN 6601 (MAN 653) International Management |

Policy
MAN 6721 (MBA 699) Policy Analysis No substitutes
Two 600 level business
administration courses
(10 quarter hours) depending
upon the waiver of ACC 6011 (MBA 605)
and QMB 6603 (MBA 607)
${ }^{1}$ See the guidelines under program description above.
*For the student without MAS 304 and BUA 305 (coliege algebra and statistics) background; MBA 607 will replace one elective, to be taken prior to ECO 606 and MBA 625.
**For the student without ACC 300 and BUA 307 (financial and managerial accounting) background; MBA 605 will replace one elective, to be taken prior to MBA 627 and MBA 635. NOTE: The first four categories - economics, information systems, quantitative methods, and accounting - must be satisfied prior to taking any other MBA courses. The policy course has to be scheduled for the last quarter of MBA study. Two electives are allowable within the program except as noted.

## MASTER OF PUBLIC ADMINISTRATION (MPA)

The Master of Public Administration program is a 60 quarter hour program composed of five required courses ( 25 quarter hours) dealing with public administration: political, social and economic environment, management theories and organizational behavior, financial processes, research methodology and policy. An additional 7 courses ( 35 quarter hours) which the student is required to take are offered in six different modules: values and administration, organizational behavior, quantitative, administrative problems, local government and international public administration. The student must take at least one course from five different modules.

Students engaged in an internship program are allowed to take only 3 courses from different modules, 2 additional electives within the program and 2 faculty supervised independent studies related to their internship work culminating in written research papers.

Students may also specialize in different fields of public administration such as public health or criminal justice. In such cases, they will take only three courses from different modules and four elective courses from other departments outside the program which may include independent studies. However, courses taken outside the Public Administration program must be approved prior to registration.

All students will be required to demonstrate competence in "Quantitative Methods" and "Public Personnel Administration" or enroll in these courses.

NOTE: Individuals taking couses as special students are reminded that only up to fifteen quarter hours can be transferred toward their degree after they have been admitted to the program.

PROGRAM OF STUDY
Required Courses ..... 25
PAD 6053 (PAD 600) Political, Social and Economic Context of Public Administration ..... 5
PAD 6106 (PAD 601) Organizational Theory and Administrative Behavior ..... 5
PAD 6227 (PAD 602) Public Finance and theBudgetary Process ..... 5
PAD 6706 (PAD 603) Research Methods in Complex Public Organizations ..... 5
PUP 6005 (PAD 604) Public Policy ..... 5
Electives35

1. Values and Administration
PAD 5044 (PAD 520) Values and Technology in Modern Society ..... 5
PAD 6035 (PAD 621) Public Interest and the Public Trust ..... 5
PAD 6042 (PAD 622) Democracy and the Administrative State ..... 5
PAD 6605 (PAD 660) Administrative Law and Procedures ..... 5
2. Organizational Behavior
PAD 5427 (PAD 561) Collective Bargaining in the Public Sector ..... 5
PAD 6417 (PAD 640) Public Personnel Administration ..... 5
PAD 6437 (PAD 641) Dynamics of Individual Growth ..... 5
PAD 6109 (PAD 643) Organizational Development and Change ..... 5
3. Quantitative
(PAD 630) Quantitative Methods and ComputerSkills5
CIS 6204 (PAD 631) Management Information Systems ..... 5
PUP 6006 (PAD 633) Public Policy Analysis and Evaluation ..... 5
4. Administrative Issues
PAD 5435 (PAD 562) Administrator and the Role of Women ..... 5
PAD 5443 (PAD 564) Public Administrator and Media Relations ..... 5
PAD 6043 (PAD 663) Government and Minority Group Relations ..... 5
5. State and Local GovernmentsPAD 6816 (PAD 650) Regional and State GovernmentAdministration5
PAD 6807 (PAD 651) Urban and Municipal Government Administration ..... 5
6. International
PAD 6838 (PAD 610) Development Administration ..... 5
PAD 6836 (PAD 611) International Public Administration ..... 5

## MASTER OF SCIENCE IN MANAGEMENT (MSM)

The Master of Science in Management program provides an in-depth educational experience for the student desiring greater specialization in a particular area.

Concentrations within the Master of Science in Management program are available in the following areas: Accounting, Finance, Health Care Management, International Business, and Real Estate.

The Master of Science in Management program is a one to two year sequence depending upon the specific program and the applicability of the student's undergraduate course work. The type and number of prerequisite courses varies by the area of concentration. Each student will be counseled concerning his individual deficiencies, if any, and how they may be met.

## MSM ACCOUNTING

The MSM program in accounting is designed primarily for the student with an undergraduate degree in accounting. The student with a bachelor's degree in another field may be admitted to this program, but will be required to complete preparatory courses in business and accounting.

Due to varied career opportunities, the MSM program in Accounting is divided into four subprograms and many variations are possible. The Managerial Accounting program is designed for the student who aspires to be an officer in a business corporation, a governmental unit, or a not-for-profit organization. The Public Accounting program is designed for the student who aspires to be a Certified Public Accountant and leader in the public accounting pro-
fession. The International Accounting program is designed for the student who aspires to a professional career with an international accounting firm, a multinational corporation, an international public organization, and institutions in a developing country. The Taxation program is designed for the student who aspires to a career as a tax professional in public accounting, law, industry, education, or government.

A student who earns an MSM in Accounting and successfully passes the Certified Public Accountant Examination usually will qualify to receive a certificate as a Certified Public Accountant. An explanation of the relevent Florida Statute follows.

## FLORIDA CPA REQUIREMENT

Completion of a Bachelor of Business Administration with emphasis in public accounting is accepted by the Florida State Board of Accountancy as fulfilling requirements to sit for the Certified Public Accountant Examination. For the law relating to the practice of public accounting in which Major in Accounting is defined see Rule 21A-9.02 on Page 124.

Ordinarily a person passing the CPA Examination must complete one year of employment in the office of a Florida practitioner or an out-of-state practitioner before receiving a certificate as a Certified Public Accountant. However, the law relating to the practice of public accounting provides in Rule 21A-9.03 that:

An additional one year accounting course acceptable in lieu of one year of employment is defined as a minimum of 30 semester hours or 45 quarter hours, or the equivalent, in courses which would qualify for graduate level credit at accredited colleges or universities which shall include at least 12 semester or 18 quarter hours, or the equivalent, in postbaccalaureate accounting education. For purposes of this rule, courses used to satisfy Rule 21A-9.02 may not be included in the additional one year accounting course.
Each of the four subprograms (or specializations) in the master degree program in Accounting has been designed to allow the student to specialize. Thus, the choice of a specialization pre-determines most of a student's course requirements. Each student must work with the graduate advisor in designing his (or her) own program of study in compliance with the requirements of his chosen specialization. The following is the outline of a general program of study:

## PROGRAM OF STUDY

Quarter Hours
Required Courses: selected from the courses below; 15 of the re-
quired hours must be at the 600 level.
ACC 5311 (ACC 501) Financial Accounting ..... 5ACC 5111 (ACC 502) Standards and Principles ofFinancial Accounting5
ACC 5131 (ACC 503) Advanced Financial Accounting ..... 5
ACC 5865 (ACC 506) Governmental and Institutional Accounting ..... 5
ACC 5734 (ACC 508) Accounting Information Systems ..... 5
ACC 5611 (ACC 512) Auditing ..... 5
ACC 5511 (ACC 513) Accounting for Income Taxes ..... 5
ACC 5211 (ACC 517) Accounting Problems ${ }^{1}$ ..... 5
ACC 6735 (ACC 602) Seminar in Accounting Information Systems $1^{1 / 2}$ ..... 5
ACC 6745 (ACC 603) Seminar in Accounting Information Systems II $^{2}$ ..... 5
ACC 6411 (ACC 606) Managerial Accounting ${ }^{1 / 2}$ ..... 5
ACC 6391 (ACC 607) Seminar in Managerial Accounting $\left.\right|^{1 / 2}$ ..... 5ACC 6845 (ACC 608) Seminar in Managerial AccountingII ${ }^{2}$5
ACC 6291 (ACC 610) Seminar in Accounting Theory $I^{1 / 2}$ ..... 5
ACC 6932 (ACC 611) Seminar in Accounting Theory II $^{1}$ ..... 5
ACC 6651 (ACC 612) Studies in Auditing ${ }^{1}$ ..... 5
ACC 6512 (ACC 613) Tax Planning and Research ${ }^{1 / 3}$ ..... 5

ACC $6531 \quad \begin{gathered}\text { (ACC 614) Taxation of Corporations and } \\ \text { Partnerships }\end{gathered}$
ACC 6553 (ACC 615) Taxation of Estates and Trusts ${ }^{3}$ 5
ACC 6275 (ACC 616) International Accounting ${ }^{1 / 4} 5$
ACC $6554 \begin{gathered}\text { (ACC 620) Tax Accounting Theory and Tax } \\ \text { Policy }\end{gathered}$
ACC 6555 (ACC 621) Consolidated Corporate Taxation ${ }^{3}$ 5
$\begin{array}{ccc}\text { ACC } 6556 & \text { (ACC 622) Partnership Taxation and Tax } \\ \text { Shelters }\end{array}$
ACC 6557 (ACC 623) Tax Planning and Fiduciary Taxation ${ }^{3}$

ACC 6558 (ACC 624) Current Developments in Taxation ${ }^{3}$ 5
ACC 6559 (ACC 625) Seminar in Taxation ${ }^{3}$ 5
ACC 6582 (ACC 626) International Taxation ${ }^{3 / 4} 5$
ACC 6822 (ACC 630) Behavioral Accounting 5
$\begin{array}{ccc}\text { ACC } 6832 & \begin{array}{c}\text { (ACC 631) Accounting and Quantitative } \\ \text { Methods }\end{array}\end{array}$
Masters Project (Required ${ }^{5}$ )
ACC 6910 (ACC 695)
Elective: Selected with permission of faculty advisor 20
45
${ }^{1}$ Designed primarily for the Public Accounting subprogram.
${ }^{2}$ Designed primarily for the Managerial Accounting subprogram.
${ }^{3}$ Designed primarily for the Taxation subprogram.
${ }^{4}$ Designed primarily for the International Accounting subprogram.
${ }^{5}$ With the approval of the graduate advisor, a student may substitute a graduate level, research-oriented actounting course for ACC 695.

## MSM FINANCE

This graduate program, leading to the degree of Master of Science in Management, offers an alternative to students who want to pursue an advanced education in business and, at the same time, wish to concentrate their training on a field of specialization. The MSM Program in Finance is designed to develop analytical skills and decision-making abilities in the solution of problems related to raising and using funds. Graduates will be able to demonstrate a suitable competence in handling complex financial and investment situations. Moreover, their top management view of firms and corporations will be strengthened in order to enable them to participate effectively in the other functions of business. Graduates will also have a good institutional knowledge on financial and capital markets, financial instruments, and current developments and opportunities available to investors, financial institutions, and non-financial enterprises.

CONTENT AND STRUCTURE: The program consists of sixty (60) quarter hours (12 courses) divided into three groups as follows:

1. Seven core courses. All participating students are required to take these courses. However, eligible students can waive these courses depending on their undergraduate education.
(a) Three of the core courses are of the general background type. They cover the subjects of general management, economics, and quantitative methods.
(b) Four of the core courses cover specific functions in business such as accounting and the processing of information, marketing, and finance.
2. Four specialization courses. Each student will select courses from a number of finance offerings that will be available. A concentration in a particular subject such as corporate finance, investments, financial institutions and banking, theory and models, etc., is not only possible but encouraged. Individual faculty counseling is available to provide assistance in designing the field of speciality.
3. One elective course. Any 600 -level course offered by the School of Business and Organizational Sciences can be taken to meet this requirement.
Quarter Hours
Required Courses: ..... 35
ECP 6704 (ECO 606) Managerial Economics ..... 5
ACC 6011 (MBA 605) Financial Accounting Analysis ..... 5
ECP 6704 (MBA 606) Managerial Economics ..... 5QMB 6603 (MBA 607) Quantitative Methods inManagement5
MAN 6205 (MBA 617) Organizational Analysis ..... 5
MAN 6830 (MBA 626) Organizational Information Systems ..... 5
FIN 6428 (MBA 635) Financial Management ..... 5
MAR 6716 (MBA 636) Marketing Management ..... 5
Specialization Courses:20
(A sample of courses that the student can select to satisfy the specialization requirement)
ACC 6391 (ACC 607) Seminar in Managerial Accounting ..... 5
ECO 6236 (ECO 626) Money and Monetary Policy ..... 5
FIN 5473 (FIN 545) Small Business Finance ..... 5
FIN 6426 (FIN 605) Asset Selection Management ..... 5
FIN 6416 (FIN 606) Business Financial Structure ..... 5
FIN 6246 (FIN 615) Financial Markets and Institutions ..... 5
FIN 6315 (FIN 616) Management of Deposit Institutions (Banking) ..... 5
FIN 6516 (FIN 625) Security Analysis ..... 5
FIN 6525 (FIN 626) Portfolio Management ..... 5
FIN 6716 (FIN 635) Financial Management of Government Organizations ..... 5
FIN 6806 (FIN 645) Financial Theory and Models ..... 5
FIN 6636 (FIN 655) International Finance ..... 5
FIN 6915 (FIN 695) Master's Project ..... 5
FIN 6936 (FIN 697) Special Topics in Finance ..... 5
RMI 6055 (INS 600) Graduate Survey of Insurance ..... 5PAD 6227 (PAD 602) Public Finance and the BudgetaryProcess5
REE 4200 (RES 500) Real Estate Finance ..... 5

## MSM HEALTH CARE

The educational program in health care management is jointly offered by the School of Business and Organizational Sciences and the School of Health and Social Services. The program is designed to provide appropriate academic preparation for people who will be leaders in the delivery of health services.*
*NOTE: The program requirements are under review and will probably be changed to a two-year, 60 hour program by September 1977.
PROGRAM PREREQUISITES: One course in health statistics; one course in accounting and one course in health delivery systems; one year of work experience in the health care field is preferred.

PROGRAM OF STUDY

| Required Courses: | Quarter Hours |
| :--- | :--- | ---: |
| $\left.\begin{array}{lll}\text { HCA 6431 } & \text { (HCM 631) Public Health Policy } & \\ - & \text { (HCM 681) Health Management Analysis } & 5 \\ \hline & \text { (HCM 684) Health Management } & 5 \\ - & \text { (HCM 695) Masters Project } & 5 \\ & & 5\end{array}\right)$ |  |



## MSM IN INTERNATIONAL BUSINESS

The MSM in International Business is a 60 quarter hour program designed to acquaint students with the international environment and provide basic management tools and solid preparation in one area of specialization. The first block of four core courses will give the student a conceptual framework of international business, economic development and comparative politics. They will deal with international corporations, international investment and international cooperation. The second block of four courses will give the student a general background in accounting, finance, management and marketing. Each student will then specialize in one of the major areas: Accounting, Finance, Management, or Marketing, taking four additional courses in his/her chosen field. All students will be required to demonstrate competence in Quantitative Methods or will be required to take the course MBA 607.

PROGRAM OF STUDY

| Required Courses: |  | Quarter Hours 20 |
| :---: | :---: | :---: |
| INTERNATIONAL STUDIES |  |  |
| ECS 5025 | (ECO 510) Economic Problems of Emerging | 5 |
| or |  |  |
| INR 5086 | (INR 572) Topics in International Relations | 5 |
| PAD 6838 | (PAD 610) Development Administration | 5 |
| MAN 6713 | (MBA 615) World Dynamics and the Organization | 5 |
| MAN 6725 | (MBA 616) Organization and the Intranational |  |
|  | Environment | 5 |
| GENERAL BUSINESS 20 |  |  |
| ACC 6011 | (MBA 605) Financial Accounting Analysis | 5 |
| MAN 6205 | (MBA 617) Organizational Analysis | 5 |
| FIN 6428 | (MBA 635) Financial Management | 5 |
| MAR 6716 | (MBA 636) Marketing Management | 5 |
| Specialization: |  | 20 |
| accounting |  |  |
| ACC 5131 | (ACC 503) Advanced Accounting |  |
| ACC 6391 | (ACC 607) Seminar in Managerial Accounting I | 5 |
| ACC 6275 | (ACC 616) International Accounting | 5 |
| ACC 6582 | (ACC 626) International Taxation | 5 |

ACC 6907 (ACC 693) Independent Study in Accounting ..... 5ACC 693(ACC 697) Special Topics in Accounting5
FINANCE
FIN 6246 (FIN 615) Financial Markets ..... 5
FIN 6315 (FIN 616) Management of Deposit Institutions ..... 5

            or
    FIN 6516 (FIN 625) Security Analysis ..... 5
FIN 6636 (FIN 655) International Finance ..... 5
FIN 6906 (FIN 693) Independent Study in Finance ..... 5
MANAGEMENT
MAN 6601 (MAN 653) International Management ..... 5
MAN 6603 (MAN 671) Problems in Comparative Management ..... 5
MAN 6604 (MAN 672) Comparative Management Analysis ..... 5
MAN 6905 (MAN 693) Independent Study in Management ..... 5
MARKETING
MAR 6246 (MAR 608) International Marketing ..... 5
MAR 6617 (MAR 611) Marketing Research ..... 5
MAR 6717 (MAR 690) Advanced Marketing Management ..... 5
MAR 6915 (MAR 693) Independent Study in Marketing ..... 5

## MSM REAL ESTATE AND REGIONAL DEVELOPMENT

A Master of Science in Management with a concentration in Real Estate is available to persons interested in graduate work in Real Estate.

University graduates in real estate find employment in: land planning and development; real estate investing and counseling; environmental planning; development of new cities; international real estate; recreational land use development; construction management; corporate real estate divisions; governmental agencies; appraising; marketing or residential, commercial, and industrial properties; property management, such as of large apartment complexes, office buildings, and shopping centers; conventional and creative real estate financing through financial institutions, such as commercial banks, savings and loan associations, life insurance companies, mortgage bankers and mortgage brokers; and teaching in the rapidly growing field of real estate education. Further, competent real estate talent is being called upon for participation in the rapidly growing field of real estate syndication, limited partnerships and joint ventures.

Program Prerequisites: one semester or quarter of financial management; two semesters or quarters of economics; one year of work experience in the real estate industry or an undergraduate major in business administration.

> PROGRAM OF STUDY

Quarter Hours
Required Courses:
25
REE 6946 (RES 695) Masters Project 5
Four of the following courses
REE 6295 (RES 685) Seminar in Real Estate Finance 5
REE 6195 (RES 686) Seminar in Real Estate Valuation
Theory and Practice
5
REE 6715 (RES 687) Regional Planning and Development 5
REE $6795 \begin{gathered}\text { (RES 688) Seminar in Urban Housing Policy } \\ \text { and Problems }\end{gathered}$
REE $6395 \begin{gathered}\text { (RES 689) Seminar in Real Estate Investment } \\ \text { and Taxation }\end{gathered}$
Electives: with permission of the faculty advisor $\mathbf{2 0}$
45
Remark: a specialization in industrial real estate is offered with the advice and support of the Society of Industrial Realtors.

## CERTIFICATE PROGRAMS: GENERAL INFORMATION

The overall purpse 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 culminate in the awarding of a certificate.

## EMERGENCY MEDICAL SERVICES (EMS) SYSTEMS ADMINISTRATION

The objective of the program is to train managers of EMS Systems (such as Emergency Departments in hospitals, fire rescue squads and coast guard), to manage efficient and effective EMS Systems. In addition, the program is designed to help planners, coordinators and evaluators in the local, regional and state level EMS Systems to make better decisions in an environment that is rapidly changing.

The program is oriented to those people who are already in the field of Emergency Medical Services, with the intention of meeting the individual needs of these trainees, considering their expertise, areas of responsibility and time available for training. The program will educate them so that they are better prepared to provide expertise, either in the developmental or operational phases of local, regional and state EMS Systems.

## COURSES:

The Certificate Program consists of four required courses. Each carries 5 academic credits. The required courses are:

———(HCM 414) or (HCM 682) Health Delivery Systems<br>-(HCM 684) Management for Health Facilities<br>(HCM 523) Introduction to Emergency Medical Systems Management<br>(HCM 624) EMS Seminar<br>For additional information contact the Division of Management

## INSURANCE

The Certificate in Professional Insurance Accomplishment is a program to enable individuals in, or wishing to enter, the insurance industry to obtain recognition for their attainments in insurance education.

The courses leading to the Certificate may be taken by both degree-seeking students as part of their regular programs, or by special, non-degree seeking students who may be seeking professional recognition and qualifications.

The Certificate Program requires participants to obtain 30 quarter hours, or six five-credit hour classes, in senior ( 400 level) insurance courses. The insurance Certificate requires participants to take five required courses and one elective course.

Those required are:

| RMI 4015 | (INS 405) Introduction to Insurance |
| :--- | :--- |
| RMI 4220 | (INS 410) Casualty Insurance I |
| RMI 4221 | (INS 411) Casualty Insurance II |
| RMI 4212 | (INS 412) Property Insurance I |
| RMI 4213 | (INS 413) Property Insurance II |

The elective should normally be selected from:
RMI 4115 (INS 407) Life Insurance
RMI 4145 (INS 416) Business and Estate Insurance Planning
RMI 4135 (INS 417) Employee Fringe Benefit Programs
Inquiries concerning the Certificate for Professional Insurance Accomplishment should be addressed to the Division of Policy, Marketing, and Environment.

## MANAGEMENT INFORMATION SYSTEMS

This Program is designed as a three course sequence for systems professionals and users heavily involved in the information systems development activity. These courses may be taken
as part of a regular degree program or the opportunity exists for any interested individual to participate as a special student without pursuing a formal degree. The purpose of the Program is to provide advanced study to complement the work experience of practitioners who deal with information systems problems on a regular basis in their organization. The sequence consists of three courses to provide this complementary background:

> MAN 5830 (MAN 550) Planning for Information Systems
> MAN 5831 (MAN 551) Analysis of Information Requirements

MAN 5832 (MAN 552) Design of Information Systems
Additional information about these offerings may be obtained from the MIS Certificate Program coordinator in the Division of Management.

## PERSONNEL ADMINISTRATION

The objective of this program is to provide training in advanced personnel management techniques and methods to personnel professionals who do not necessarily wish to seek a degree. The program is aimed at developing immediately applicable skills in individuals who are assumed to already have an adequate foundation in the concepts and role of the personnel management function. A certificate of completion signed by the dean of the School will be awarded to any student who completes the program of four five-credit hour courses ( 20 hour total) in the personel management area of concentration at the graduate level. The program begins in the fall term only. College level skill in statistics is assumed to be a prerequisite for entry into this program.

The Certificate Program consists of the following four required courses: MAN 6351 FALL: (MAN 643) Personnel Training and Development MAN 6321 WINTER: (MAN 644) Personnel Selection and Placement MAN 6331 SPRING: (MAN 645) Wage and Salary Administration MAN 5930 SUMMER: (MAN 558) Seminar in Personnel Management
For students who desire to take additional elective courses, the following are recommended:

| MAN 6405 | (MAN 650) Labor Relations |
| :--- | :--- |
| MAN 6411 | (MAN 652) Collective Bargaining |
| MAN 6112 | (MAN 661) Group Processes in Organizations |

For information concerning admission to this program contact the Division of Management.

## REAL ESTATE AND REGIONAL DEVELOPMENT

In order to provide Real Estate professionals with an opportunity to do advanced University work in their area of specialization, the Real Estate Institute has initiated a certificate program in Real Estate. A Certificate of Completion signed by the Director of the Institute will be awarded to any student who completes a program of six-five credit hour courses ( 30 hours total) in the Real Estate area of concentration at the upper division or graduate level. The courses will be selected during the orientation course with an advisor at the time of admission.

The Certificate Program will be given at a level equivalent to upper division and graduate work. In order to maintain the integrity of the Certificate Program a " $B$ " average is required for course work taken, even though it is not a regular degree program. Grade " $B$ " level performance is considered above average work. An individual will not be awarded the Certificate unless he or she performs above average overall for the six courses in the sequence.

This program is designed for individuals who are not necessarily interested in working for a graduate degree, but who desire advanced training in their area of specialization. The series of six courses covers major topics in the real estate industry. The courses cover these topics in depth from both a theoretical and practical viewpoint.

Qualification for the Certificate Program will be judged on the basis of the competence of the individual in his profession and not on previous college work or special examination. An interested professional discusses his background and interests with a faculty advisor who will determine the appropriateness of the certificate program for the individual and the acceptability of his qualifications. Upon acceptance by the advisor, the individual will register for a noncredit two hour orientation course through Continuing Education. The fee for this course will be $\$ 25.00$. The student will then register as a special student to satisfy the six course requirement for the certificate.

## TRANSPORTATION MANAGEMENT

The Division of Policy, Marketing, and Environment offers a Certificate Program in Transportation Management. The program is a vehicle to enable students employed in, or wishing to enter, the transportation industry to obtain recognition for their attainments in transportation education.

The courses leading to the Certificate may be taken by both degree-seeking students as part of their regular programs, or by special, non-degree seeking students who may wish for professional recognition and qualifications.

The Certificate Program requires participants to obtain 30 quarter hours, on six five-credit hour classes, in senior (400) level transportation courses, of which 20 hours are required, 10 hours elective.

Those required are:
TRA 4240 (TRA 405) Transportation Systems and Services
TRA 4410 (TRA 411) Air Transportation
TRA 4411 (TRA 442) Airport Management
TRA 4412 (TRA 443) Aircarrier Management
The electives should be selected from:
TRA 4510 (TRA 406) Mass Transportation and Urban Problems
TRA 4320 (TRA 408) Transportation Regulation
TRA 4101 (TRA 410) Transportation Rate Making
TRA 4012 (TRA 419) Transportation Logistics
TRA 4320 (TRA 492) Transportation Policy
URP 3000 (EUS 340) Urban Planning Concepts
ETC 4560 (EUS 430) Transportation Planning
URP 4011 (EUS 449) Planning Implementation

## COURSE OFFERINGS

## ACCOUNTING

(ACC 300) ACCOUNTING FOR DECISIONS (5) (F, W, S,SS) Accounting concepts and techniques essential to administration of a business enterprise and the determination of income and financial position; asset and equity accounting in proprietorships and corporations.
ACC 3882 (ACC 301) INTRODUCTION TO THE ACCOUNTING PROCESS (2) (F,W,S,SS) Analysis of the accounting cycle and the technical procedures used in classifying, summarizing, and interpreting the transactions of a business entity. A strongly recommended elective to be completed by those wishing to reinforce their financial accounting knowledge prior to taking BUA 307.
(ACC 401) FINANCIAL ACCOUNTING I (5) An exploration of concepts, standards, and principles underlying financial reporting with major emphasis upon the measurement, analysis, and interpretation of income and changes in financial position (funds flow). Prerequisite: 9 quarter hours of introductory financial and managerial accounting with grades of " C " or better and BUA 301.
(ACC 402) FINANCIAL ACCOUNTING II (5), A continuation of ACC 401 with major emphasis upon the accounting concepts, standards, and principles underlying the measurement and reporting of financial position. Prerequisite: ACC 401 or equivalent.
ACG 4201 (ACC 403) FINANCIAL ACCOUNTING 111 (5) A continuation of ACC 402 with major emphasis on accounting for partnerships, business combinations, consolidated financial statements, and on financial statement analysis. Prerequisite: ACC 402 or equivalent.
ACC 4301 (ACC 405) MANAGERIAL ACCOUNTING (5) Determination and control of production costs; job order and process systems; actual and standard costs; budgetary control, cost and profit analyses, and other considerations for performance measurement and analysis. Prerequisite: ACC 401 and BUA 302.
ACC 4501 (ACC 406) INCOME TAX ACCOUNTING (5) A survey of federal income taxation with primary emphasis on the taxation of individuals and corporations. Prerequisite: ACC 402, or equivalent.
ACC 4601 (ACC 407) AUDITING (5) (F,W,S) Standards and procedures applied by independent public accountants, ethics and responsibilities of auditors, development of audit programs, accumulation of audit evidence, and reporting. Prerequisite: ACC 402, or equivalent.
ACC 4731 (ACC 408) ACCOUNTING SYSTEMS AND MANAGERIAL ANALYSIS (5) A continuation of ACC 405 with emphasis on long range management performance measurement and analysis, design of accounting systems, internal control, management systems audits, and use of data processing equipment. Prerequisites: ACC 405 or equivalent, and knowledge of COBOL language.
ACC 4648 (ACC 412) TOPICS IN AUDITING (5) An in-depth study of recent developments in auditing. Prerequisite: ACC 407, or equivalent.
ACC 4548 (ACC 413) TOPICS IN TAXATION (5) An in-depth study of recent legislative, administrative, and judicial developments in taxation. Prerequisite. ACC 406, or equivalent.
ACC 4522 (ACC 414) TAXATION OF CORPORATIONS AND PARTNERSHIPS (5) An in-depth study of income taxation of corporations and partnerships, including tax planning. Prerequisite: ACC 406, or 513, or equivalent.
ACC 4803 (ACC 417) (See LAW 407)

- (ACC 419) INTERNATIONAL ACCOUNTING (5) Comparative analysis of accounting concepts and practices in different countries; international accounting standards; problems of accounting for multinational corporations, including transfers of funds and income measurement, the role of accounting in national economics development.
ACC 4248 (ACC 424) TOPICS IN FINANCIAL ACCOUNTING (1-5) An in-depth study of recent developments in financial accounting. Prerequisite: ACC 402, ACC 502, or equivalent.
ACC 4348 (ACC 425) TOPICS IN MANAGERIAL ACCOUNTING (1-5) An in-depth study of recent developments in managerial accounting. Prerequisite: ACC 405, or equivalent.
ACC 4905 (ACC 493) INDEPENDENT STUOY IN ACCOUNTING (1-10) (F, W, S, SS) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairperson required. Written permission of the instructor, divisional chairperson, and dean required,
ACC 4903 (ACC 497) SPECIAL TOPICS IN ACCOUNTING (1-10) (F,W,S,SS) 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. Consent of faculty supervisor and divisional chairman required. Written permission of the instructor, division chairperson, and dean required.
ACC 5311 (ACC 501) FINANCIAL ACCOUNTING (5) (F,W,S) An exploration of concepts, standards, and principles underlying financial reporting with major emphasis upon the measurement, analysis, and interpretation of assets, equities, income, and changes in financial position. Prerequisite: BUA 307, or equivalent, and consent of instructor, or MBA 627.
ACC 5111 (ACC 502) STANDAROS AND PRINCIPLES OF FINANCIAL ACCOUNTING (5) (F,S) A survey of official pronouncements on accounting standards and principles. Prerequisite: ACC 402 or ACC 501, or equivalent.
ACC 5131 (ACC 503) ADVANCED FINANCIAL ACCOUNTING (5) (F,W,S) Accounting for partnerships, business combinations, consolidated financial statements, diversified and multinational corporations, fiduciary relationships, and not-for-profit institutions. Prerequisite: ACC 402 or ACC 501, or equivalent, or consent of instructor. No credit given if ACC 403, or equivalent completed previously.
ACC 5865 (ACC 506) GOVERNMENTAL ANO INSTITUTIONAL ACCOUNTING (5) Budgeting, accounting, and reporting standards and practices for government and other not-for-profit entities. Prerequisite: ACC 402 or ACC 501, or equivalent.
ACC 5734 (ACC 508) ACCOUNTING INFORMATION SYSTEMS ANALYSIS (5) Coverage of accounting usage of computers. Emphasis on auditing and control of EDP systems. Use of flowcharting, decision tables, computer software, and case studies. Coverage of EDP topics typically in the CPA examination. Prerequisite: ACC 300 or BUA 306, or equivalent or MBA 605 and MBA 626, or equivalent.
ACC 5611 (ACC 512) AUDITING (5) (W) The standards and procedures applied by independent public accountants and their ethical considerations and responsibilities in the rendering of opinions on enterprise financial statements; internal auditing and control; and accounting systems. Prerequisite: ACC 501, or equivalent, or consent of instructor. No credit given if ACC 407 and 408, or equivalents, completed previously.
ACC 5511 (ACC 513) ACCOUNTING FOR INCOME TAXES (5) (F,S) Exploration of concepts of federal income taxes and tax planning with emphasis upon the determination of taxable income for the individual, the partnership, and the corporation. Prerequisite: ACC 501, or equivalent, or consent of instructor. No credit given if ACC 406, or equivalent completed previously.
ACC 5211 (ACC 517) ACCOUNTING PROBLEMS (5) (W) Intensive study of selected advanced accounting topics including problems of multiple ownership, fund accounting, and actuarial applications; questions and problems from recent CPA examinations. Prerequisite: ACC 503, or equivalent, or consent of instructor.
ACC 6735 (ACC 602) SEMINAR IN ACCOUNTING INFORMATION SYSTEMS I (5) Application of general systems concepts to accounting, operational, and related planning and control information requirements. Topical coverage such as data base management systems, on-line real-time systems, time-sharing, etc., and application in accounting. Emphasis on the analysis of computer-based controls. Case histories and projects. Prerequisite: ACC 508, or equivalent.
ACC 6745 (ACC 603) SEMINAR IN ACCOUNTING INFORMATION SYSTEMS II (5) A continuation of ACC 602 with emphasis upon the theories underlying complex information systems. Prerequisite: ACC 602, or equivalent.
ACC 6411 (ACC 606) MANAGERIAL ACCOUNTING (5) In-depth study of the determination and control of production cost; budgetary control; cost volume and profit analyses, and considerations of alternative methods of performance measurement and analysis. Prerequisite: ACC 405 or MBA 627, or equivalent.
ACC 6391 (ACC 607) SEMINAR IN MANAGERIAL ACCOUNTING I (5) (S) Analysis of transfer pricing, product pricing, incremental profit analysis, decision models, alternative performance measurement techniques, and other advanced topics. Prerequisite: ACC 405 or MBA 627, or equivalent.
ACC 6845 (ACC 608) SEMINAR IN MANAGERIAL ACCOUNTING II (5) An intensive study of the controllership function in corporate organizations; an appraisal of the controller's role in planning, accomplishing, and evaluating company performance. Prerequisite: ACC 607, or equivalent.
ACC 6291 (ACC 610) SEMINAR IN FINANCIAL ACCOUNTING THEORY I (5) (W) A study of the theoretical structure of accounting, with special attention to asset and income definition, recognition, and measurement; and an appraisal of pronouncements of professional accounting organizations. Prerequisite: ACC 503, or equivalent, or consent of instructor.
ACC 6932 (ACC 611) SEMINAR IN FINANCIAL ACCOUNTING THEORY II (5) A continuation of ACC 610 with emphasis on the problems of accounting for price-level changes and other current issues. Prerequisite: ACC 600, or equivalent.
ACC 6651 (ACC 612) STUDIES IN AUDITING (5) (S) Professional and technical aspects of auditing practice; ethics and legal responsibilities; review of field work emphasizing materiality, sampling, and working papers, reporting problems including long-form and special purpose reports; study of recent auditing developments. Prerequisite: ACC 407 or ACC 512, or equivalent.
ACC 6512 (ACC 613) INCOME TAX PLANNING AND RESEARCH (5) An in-depth study of the taxation and planning aspects of a variety of business and other transactions. Emphasis will be upon developing an ability to perceive tax issues and to conduct research to resolve them. Prerequisite: ACC 406 or ACC 513, or equivalent.
ACC 6531 (ACC 614) TAXATION OF CORPORATIONS AND PARTNERSHIPS (5) The study of the federal tax consequences of the formation, operation, reorganization and liquidation of corporations; election of Subchapter $S$ status; and the federal tax considerations in choosing between the corporation and the partnership as a vehicle for commercial activity is emphasized. Prerequisite: ACC 613 or permission of the instructor and the advisor for the taxation specialization.
ACC 6553 (ACC 615) TAXATION OF ESTATES AND TRUSTS (5) The study of the federal estate tax and federal gift tax pro-
visions is emphasized. The income taxation of estates and trusts is integrated with estate and gift taxation. Estate and income tax planning are also considered. Prerequisite: ACC 613 or permission of the instructor and the advisor for the taxation specialization.
ACC 6275 (ACC 616) INTERNATIONAL ACCOUNTING (5) Comparative analysis of accounting concepts and practices in different countries; international accounting standards; problems of accounting for multinational corporations, including transfers of funds and income measurement; the role of accounting in national economic development. Prerequisite: ACC 503, or equivalent, or consent of instructor.
ACC 6554 (ACC 620) TAX ACCOUNTING THEORY AND TAX POLICY (5) The study of the tax accounting concepts and the judicial doctrines inherent in the federal tax law and in tax planning is emphasized. The relationship of taxation to national output and the effect of taxation on prices, resource allocation, and income distribution is examined. Prerequisite: ACC 406 or ACC 513, or equivalent.
ACC 6555 (ACC 621) CONSOLIDATED CORPORATE TAXATION (5) The in-depth study of the tax benefits inherent in multiple corporate groups determining income as a single taxable entity is emphasized. The limitations on the group as a whole, especially liberalized carryover provisions are also explored. Prerequisites: ACC 613 and ACC 614.
ACC 6556 (ACC 622) PARTNERSHIP TAXATION AND TAX SHELTERS (5) The intensive study of both the formation, operation, and dissolution of a partnership (general and limited) and the use of the partnership to establish and operate tax sheltered investments in real estate, oil and gas, leasing, farming, cattle and others. Prerequisite: ACC 614 or permission of the instructor.
ACC 6557 (ACC 623) TAX PLANNING AND FIDUCIARY TAXATION (5) The study of the income taxation of estates, trusts, and the beneficiaries thereof, including the determination of distributable net income, throwback rules, the grantor trust and income in respect of a decedent, is emphasized. The use of trusts in tax and estate planning is also explored. Prerequisites: ACC 613 and ACC 615.
ACC 6558 (ACC 624) CURRENT DEVELOPMENTS IN TAXATION (5) The study of recent legislative, administrative and judicial developments affecting taxation is effected through the application of research techniques to income tax and estate tax planning. Prerequisites: ACC 613 and ACC 620.
ACC 6559 (ACC 625) SEMINAR IN TAXATION (5) Intensive study of a particular topic or a limited number of topics. The topics included in this course will depend upon the availability of faculty with expertise in the following special classes of tax problems; advanced corporate taxation; taxation of deferred compensation; taxation of not-for-profit institutions; interstate, state, and local taxation; and others as current developments demand. Prerequisites: ACC 613 and ACC 620.
ACC 6582 (ACC 626) INTERNATIONAL TAXATION (5) The complex federal income tax provisions applicable to the foreign income of U.S. citizens, residents, and corporations, and to foreign persons with U.S. income is surveyed. The tax policy of developing and developed countries with respect to foreign investment is discussed in the context of international tax planning. Prerequisite: ACC 613 or permission of the instructor and the advisor for the taxation specialization.
ACC 6822 (ACC 630) BEHAVIORAL ACCOUNTING (5) Study of the effect of the process and products of accounting and of changes in the process and products on individual and group behavior; consideration given to how accounting can aid individuals and organizations to attain their goals. Prerequisite: ACC 402 or ACC 501 and 405, or equivalents.
ACC 6832 (ACC 631) ACCOUNTING AND QUANTITATIVE METHODS (5) Study of statistical and management science techniques that are or may be utilized in financial and managerial accounting. Prerequisites: BUA 302,305, and 306, or equivalents.
ACC 6907 (ACC 693) INDEPENDENT STUDY IN ACCOUNTING (1-5) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
ACC 6910 (ACC 695) MASTER'S PROJECT (5) (F,W,S,SS) An individualized research project, and report, which may include field experience with a firm or agency, library research, computer programming, or project development. Permission of the faculty advisor is required before registering for the course. The course should be taken during the last half of the student's graduate program.
ACC 6935 (ACC 697) SPECIAL TOPICS IN ACCOUNTING (1-5) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.
ACC 3949 (COE 325) COOPERATIVE EDUCATION-ACCOUNTING I (1-5) (S) A special program permitting accounting students to work during alternating quarters, up to a maximum of 3 quarters, in a public accounting firm, an industrial or, a not-for-profit enterprise, or a governmental agency in a job related to the area of concentration in their university program.
ACC 4949 (COE 425) COOPERATIVE EDUCATION-ACCOUNTING II (1-5) A continuation of COE 325.
ACC 6612 (MBA 612) AUDITING FOR MANAGERS (5) An exploration of the concepts and objectives of internal control, auditing, and audit reports from the point of view of the manager.
ACC 6513 (MBA 613) TAX ACCOUNTING FOR MANAGERS (5) An exploration of the concepts of federal income taxation and tax planning from the point of view of the manager.


## BUSINESS ADMINISTRATION (BUA) CORE COURSES

[^1]MAN 3503 (BUA 302) MANAGERIAL DECISION MAKING (5) (F,W,S,SS) This course will concentrate on practical decision problems for the manager in an organization. Emphasis will be placed on the environment and definition of managerial problems and practical approaches to solving these problems. Topics to be included are decision-making theory, linear programming, network analysis, inventory models and simulation. Prerequisites: College Algebra, Statistics, and BUA 305 or equivalent.
MAR 3023 (BUA 303) MARKETING MANAGEMENT (5) (F,W,S,SS) A descriptive study emphasizing the functions and institutions common to marketing systems.
QMB 3150 (BUA 305) APPLICATION OF QUANTITATIVE METHODS IN BUSINESS (5) Application of quantitative techniques to business problems. General topics include the process of quantitative decision making, sampling, and forecasting. The latter part of the course will concentrate on specific techniques applicable to the student's functional major. Prerequisites: College Algebra, Statistics.
CIS 3000 (BUA 306) INTRODUCTION TO INFORMATION SYSTEMS (5) (F,W,S,SS) Survey of the major problems of information systems and information processing in organizations. Brief study of basic computer concepts, the information systems development cycle, the relation between information systems and decision making, and the general systems framework for information problems. Prerequisites: Completion of the Computer Programming Proficiency Requirement, and BUA 309, 307.
ACC 3303 (BUA 307) ACCOUNTING FOR PLANNING AND CONTROL (5) (F,W,S,SS) Use of accounting concepts, techniques and financial data as an aid to management planning, coordination and control. Topics covered include cost behavior and control, budgeting, analysis concepts, performance measurement and analysis, and capital budgeting. Prerequisite: ACC 300 or equivalent.
MAN 3010 (BUA 309) ORGANIZATION AND MANAGEMENT (5) (F,W,S,SS) An analysis of organizations and the management processes of planning, organizing, directing, and controlling in the context of socio-technical systems. Individual, group, intergroup, and organizational responses to various environments and technologies are studied, as are pertinent techniques of manpower management.
(BUA 314) BUSINESS AND SOCIETY (5) An examination of the interaction between business and the social, political, and legal order. Analysis of the appropriate and acutal relationships and responsibilities of business to its various publics. The nature of property and profits, the balancing of claims of owners, employees, customers and citizens; elements of constitutional law; competition and monopoly; anti-trust policies and practices. Stress on the broad effects of the total environment upon the administration of the private sector of organization. Prerequisite: ECO 301 or equivalent.
ECO 3432/ECO 3202 (ECO/BUA 311) APPLIED MACROECONOMICS (5) (F,W,S,SS) Aggregate economic performance and business conditions analysis. Analysis of the nature and causes of business fluctuation. Economic expansions and stagflation public policies for economic stability; fiscal policy, monetary policy and incomes policy. Sectoral analysis and macroeconomic forecasting. Prerequisite: ECO 301 or equivalent.
(BUA 320) BUSINESS IN AN INTERNATIONAL ENVIRONMENT (5) introductory analysis of the business system and management decision-making as enterprise operates internationally. Special emphasis given to international trade and investment; foreign exchange; financial markets; political and cultural interactions between host societies and multinational enterprise.
MAR 4254 (BUA 494) INTERNATIONAL BUSINESS POLICY (5) Project and case analysis on international business decisionmaking. Cross-functional approach emphasizes interactions among decisions, including those relating international and domestic activities. Focus is on integrating and evaluating decisions in a multinational enterprise environment. Prerequisites: Should be taken in last quarter of senior year: open only to International Business majors, in lieu of BUA 496.
MAN 4722 (BUA 496) POLICY ANALYSIS (5) The use of cases, guest lecturers, and gaming to integrate the analysis and measurement tools, the functional areas and public policy issues. The objective is to develop skill in broad areas of rational decision-making in an administrative context of uncertainty. Prerequisite: Completion of all core requirements. Should be taken in last academic quarter of senior year.

## BUSINESS ENVIRONMENT AND POLICY

_ ECO 4623 (BEP 401/ECO 417) MODERN BUSINESS HISTORY (5) 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 - and legal, and other, efforts to limit it. Prerequisite: BUA 312 or consent of instructor.

- (BEP 402) SOCIAL RESPONSIBILITY AND SOCIAL ACCOUNTING (5) The sources of the conception of corporate social responsibility. An examination of the classical doctrines as well as the developing 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: BUA 312 or consent of instructor.
$\qquad$ (BEP 403) BUSINESS ENVIRONMENT AND POLICY FORMATION (5) 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: BUA 312 or consent of instructor.
(BEP 404) SOCIAL SCIENCE OF BUSINESS (5) Sociological, anthropological, psychological studies of corporate management and the effect of corporate behavior. Emphasis will be upon existing data and on the development of research oriented proposals intended to develop new insights into the application of social science techniques to the problems of business as an institution and the society. Prerequisite: BUA 312 or consent of instructor.
- (BEP 405) BUSINESS AND THE ECOLOGY (5) 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, environmental damage, and abatement of these factors. Prerequisite: BUA 312 or consent of instructor.
PUR 4000 (BEP 425) THEORY AND PRINCIPLES OF PUBLIC RELATIONS (5) A course suitable for students of management in all areas of other disciplines, as well as the basic introduction to the theory, history, practice, and future of public relations. A comprehensive study of the fied. Prerequisite: MAR 413 or consent of instructor.
PUR 4800 (BEP 426) PLANNING AND IMPLEMENTATION PUBLIC RELATIONS CAMPAIGNS (5) An advanced course in application of theory to actual implementation of public relations activities. Will include practice in prejaiation of speech ghostwriting, press kits, handing of special events, and complete production on a team basis of a multimedia public relations presentation. Prerequisite: BEP 425 or consent of instructor.

PUR 4934 (BEP 427) PUBLIC RELATIONS SEMINAR (5) Open to public relations emphasis students only. A course designed to allow the advance public relations student or pursue a specially selected, specific area of public relations (i.e. political, medical, financial, governmental, corporate, educational, etc.) through in-depth study under a tutorial style of instruction and guidance. Prerequisites: BEP 425 and BEP 426, or consent of instructor.
(BEP 493) INDEPENDENT STUDY IN BUSINESS ENVIRONMENT (1-5) Individual conferences, supervised reading, reports on personal readings.
_- (BEP 497) SPECIAL TOPICS IN BUSINESS ENVIRONMENT (1-5) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum.
_(BEP 498) INDEPENDENT RESEARCH IN BUSINESS ENVIRONMENT (1-5) Individual conferences, supervised research, reports on personal research.

## FINANCE

FIN 3100 (FIN 310) PERSONAL FINANCE AND RESOURCE MANAGEMENT (5) (F,S) The application of organization, f nance, and management concepts and methods to aid the individual in making personal financial and career decisions.
FIN 4404 (FIN 405) POLICIES FOR FINANCIAL MANAGEMENT (5) (F,W) The process of securing and allocating funds within the organization with emphasis on the relevant financial decision-making and policy aspects.
FIN 4419 (FIN 406) TOPICS IN FINANCE (5) (S) Extensions of topics selected from those covered in Finance 405 . Specific topics may vary with students interests.
FIN 4303 (FIN 415) NONBANK FINANCIAL INTERMEDIARIES AND MARKETS (5) (W) The role of financial institutions, the sources and uses of funds of nonbank financial intermediaries, the objectives and constraints of these intermediaries, and the supply and demand for loanable funds in different financial markets.
FIN 4324 (FIN 416) COMMERCIAL BANK MANAGEMENT (5) (F,S) The management of bank assets and liabilities, specialized banking functions and the role of the commercial bank in financing business.
FIN 4502 (FIN 425) SECURITY ANALYSIS (5) (F,W) The intrinsic value and technical approaches to security analysis, personal portfolio development.
FIN 4504 (FIN 426) TOPICS IN INVESTMENT ANALYSIS (5) (S) Extensions of topics selected from those covered in Finance 425. Specific topics will reflect student interests.

FIN 4713 (FIN 435) FINANCIAL POLICIES OF NOT-FOR-PROFIT ORGANIZATIONS (5) (W) Financial processes relevant to governmental and other not-for-profit organizations. Emphasis is on legal, political, and market constraints on securing, managing, and expending funds.
(FIN 455) FINANCIAL MANAGEMENT IN THE MULTINATIONAL CORPORATION (5) Capital budgeting, operational analysis, and financing decisions in the multinational context. Working capital management and intrafirm fund transfers. Measurement and evaluation of risk of internationally diversified assets.
FIN 4904 (FIN 493) INDEPENDENT STUDY IN FINANCE (1-10) (F,W,S,SS) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and division chairman required.
FIN 4934 (FIN 497) SPECIAL TOPICS IN FINANCE (1-10) For groups of students who wish an intensive study of a particular topic of a limited number of topics not otherwise offered in the curriculum. Consent of faculty supervisor and division chairman required.
FIN 5314 (FIN 507) WORKING CAPITAL MANAGEMENT (5) Intermiediate theories and techniques of cash, amounts receivable, inventory, and amounts payables management. Prerequisite: BUA 301 or MBA 635.
FIN 5515 (FIN 508) SECURITY ANALYSIS AND STOCK MARKET OPERATIONS (5) Various approaches to evaluating the "worth" of a potential commitment of funds to a given security will be analyzed. In addition, the structure and operations of the various stock and bond exchanges will be clarified.
FIN 5223 (FIN 517) FINANCIAL MANAGEMENT OF SAVINGS AND LOANS (5) Financial management of savings and loan associations and other mortgage lenders; supply and demand of mortgage funds, state and federal regulatory bodies' legal and institutional characteristics and of mortgage markets. Prerequisite: BUA 301 or MBA 635.
FIN 5473 (FIN 545) SMALL BUSINESS FINANCE (5) The financial markets, financial instruments, and managerial policies and techniques available to potential and existing entrepreneurs and owner/managers. Emphasis will be upon analysis of areas of opportunity for small business, analysis of financing alternatives, and analysis of profitability.
FIN 6426 (FIN 605) ASSET SELECTION AND MANAGEMENT (5) The selection and management of short-term and longterm assets to achieve corporate objectives; working capital management and capital budgeting under certainty risk.
FIN 6416 (FIN 606) BUSINESS FINANCIAL STRUCTURE (5) The selection and management of alternative sources of funds to obtain the optimal capital structure: short-term financing, long-term financing, constraints and cyclical phenomena affecting capital structure, stockholder relations, reorganizations and mergers.
FIN 6246 (FIN 615) FINANCIAL MARKETS (5) Demand for and supply of loanable funds in several major financial markets, money market instruments, and the role of financial institutions in financial markets.
FIN 6315 (FIN 616) MANAGEMENT OF DEPOSIT INSTITUTIONS (5) The objectives, constraints; and policies applicable to the management of financial institutions having primary deposit functions; commercial banks, saving and loan associations, savings banks, and credit unions.
FIN 6316 (FIN 617) MANAGEMENT OF NONDEPOSIT INSTITUTIONS (5) The objectives, constraints, and policies applicable to the management of the nondeposit financial institutions; life insurance companies, property and casualty insurance companies, pension funds, investment companies, real estate investment trusts, and finance companies.
FIN 6516 (FIN 625) PORTFOLIO MANAGEMENT (5) Financial theories will be applied to the construction of portfolios. Portfolio management techniques will be analyzed in regard to goals of individuals, corporations, and various financial institutions.
FIN 6525 (FIN 626) PORTFOLIO MANAGEMENT (5) Financial theories will be applied to the construction of portfolios. Portfolio management techniques will be analyzed in regard to goals of individuals, corporations, and various financial institutions.

FIN 6716 (FIN 635) FINANCIAL MANAGEMENT OF GOVERNMENTAL ORGANIZATIONS (5) This budgetary process of identifying, justifying, and allocating funds. Stresses the securing of funds in the market and the efficient allocation of funds. FIN 6436 (FIN 640) CAPITAL BUDGETING AND LONG TERM RESOURCE ALLOCATION (5) The theory of capital allocation at the level of the firm and empirical findings. Decision models and their application. The pattern of capital expenditure of industries and of the economy as a whole. Investment determinants. Prerequisite. MBA 635.
FIN 6806 (FIN 645) THE THEORY OF FINANCE (5) The rigorous theory of rational financial decision-making under both certainty and uncertainty to provide a basis for judging existing practice and a framework that readily accepts new developments in the field.
FIN 6456 (FIN 646) QUANTITATIVE METHODS IN FINANCIAL ANALYSIS (5) The applications of computer techniques to financial management of manufacturing firms and financial institutions. Prerequisite: MBA 635 or MBA 607.
FIN 6636 (FIN 655) INTERNATIONAL FINANCE (5) A comparative study of the institutional characteristics and internal efficiency of developed and underdeveloped capital markets. The relationships between world capital markets and prospects for integration. The role of multilateral institutions, multinational corporations, states, and the structue of trade in the international short and long term capital flows. The development of financial centers. Prerequisite: MBA 635.
FIN 6906 (FIN 693) INDEPENDENT STUDY IN FINANCE (1-5) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
FIN 6915 (FIN 695) MASTERS PROJECT (5) An individualized research project, and report, which may include field experience with a firm or agency, library research, computer programming, or project development. Permission of the faculty advisor is required before registering for the course. The course should be taken during the last half of the student's graduate program.
FIN 6936 (FIN 697) SPECIAL TOPICS IN FINANCE (1-5) For groups of students who wish intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.

## HEALTH CARE MANAGEMENT

HCM 413/HSC 4111 (HCM/HSM 413) HEALTH MANAGEMENT ENGINEERING (5) Basic theory of health systems analysis including information systems development and use and various industrial engineering and operations research tools and techniques. Prerequisite: HSM 401.
HCA 411 l/HSC 4321 (HCM/HSM 414) HEALTH CARE SYSTEMS (5) Description and analysis of various health care administrative systems, the interrelationships of providers and consumers, as individuals and as groups, the various payment mechanisms, and methods of evaluating quality of care. Prerequisite: HSM 401 or equivalent.
HCA 4203/HSC 4131 (HCM/HSM 418) HEALTH CARE ACCOUNTING (5) Analysis of the accounting cycle and procedures for recording, summarizing and interpreting financial data captured in hospital transactions. Emphasis will be placed on accounting concepts most relevant to managerial decision-making including budgeting, cost accounting and control. Prerequisite: ACC 300 or equivalent.
HCA 4711/HES 4723 (HCM/MAS 419) QUANTITATIVE ANALYSIS FOR HEALTH CARE (5) This course is designed to introduce the student of health care to various techniques of health data analysis. The format and development of the course material are intended for those with little mathematical background, basic algebra being the only requirement for the course. Topics covered are chosen for and related to their practical and potential applications in the health area.
HCA 5504 (HCM/HSM 502) HEALTH MANAGEMENT TECHNIQUES (5) Survey of management techniques, behavioral and quantitative, as applied to the health industry.
HCA 5611 (HCM/HSM 515) HEALTH PLANNING TECHNIQUES (5) Basic health planning methods and procedures. Functions performed and special support techniques of hospital, medical public health, nursing homes, educational and similar associations. Prerequisites: 1 semester of basic statistics.
HCA 5505/HSC 5120 (HCM/HSM 517) HUMAN RESOURCES MANAGEMENT IN HEALTH FACILITIES (5) The personnel administration function in the health facilities. Includes study of personnel policies and procedures; recruitment, training, and retention of employees; personnel relations and benefit programs; motivation in human productiveness; group costs, the study of labor relations in the health field.
HCA 5135/EMT 5008 (HCM/HSM 523) INTRODUCTION TO EMERGENCY MEDICAL SYSTEM ADMINISTRATION (5) This course is designed to explore the development and implementation of Emergency Medical Service Systems. It will cover history, legislation and structure and planning of Emergency Medical Services.
HCA 6136/EMT 6936 (HCM/HSM 624) EMERGENCY MEDICAL SYSTEMS SEMINAR (5) This course is designed to explore in a seminar-workshop environment EMS topics designed for the EMS administrator and planner. Prerequisite: HCM/HSM 523.

HCA 6431 (HCM/HSM 631) PUBLIC HEALTH ADMINISTRATION (5) To develop an in-depth understanding of the role of the public health administrator, how he can function most effectively in this role, and how health care managers can best relate their goals and his.

- (HCM/HSM 651) MENTAL HEALTH PROGRAM MANAGEMENT (5) Analysis of functional areas and professional and administrative frameworks of mental health organizations and of political, legal and budgetary roles and relationships, external and internal, or mental health programs and delivery systems.
(HCM/HSM 670) HOSPITAL ADMINISTRATION I (5) The role of the hospital. Overall organization of the hospital, administrative, medical staff, and specific functional areas.
(HCM/HSM 671) HOSPITAL ADMINISTRATION II (5) Clinical and functional areas of hospitals. Prerequisite: HCM 670.
(HCM 685) HEALTH CARE FACILITIES ORGANIZATION AND ADMINISTRATION (5) The course will provide opportunities to study the performance of hospitals and other health facilities through selected field experience.
-_ (HCM/HSM 680) APPLICATION OF MANAGEMENT SCIENCE IN HEALTH CARE (5) An examination of the quantitative and behavioral management tools as applied to actual cases. This course is designed to equip the student with logical decision making techniques in solving management problems in health care facilities. Prerequisites: HSM 400, HSM 401 or equivalent.
$\qquad$ (HCM/HSM 681) HEALTH MANAGEMENT ANALYSIS (5) Introduction to technique and methods of gathering and interpreting health care information. Survey of management science techniques as applied to health management. Prerequisite: HCM 419 or equivalent.
$\qquad$ (HCM/HSM 682) HEALTH DELIVERY SYSTEMS (5) Description of various health care delivery systems in the U.S. and other countries. The relationship to the social delivery system. Quality of health care, group practice and prepayment programs.
$\qquad$ (HCM/HSM 683) HEALTH LAW TRENDS (5) The legal and legislative basis of the health care delivery system, the relationships of health care providers and consumers in various practice settings, in the various payment mechanisms and in the field of mental health.
$\qquad$ (HCM/HSM 684) HEALTH MANAGEMENT (5) This course is an attempt to help students develop professional managerial skills and attitudes. The course will analyze the basic elements of organization and management. Prerequisite: HSM 400 or equivalent.
- (HCM/HSM 687) SEMINAR IN HEALTH MANAGEMENT (1-10) Consideration of selected problem areas in health management including policy formulation, executive development, and cost-benefit analysis. Prerequisite: Consent of instructor.
- (HCM/HSM 688) HEALTH FINANCIAL MANAGEMENT (5) This course concentrates on various aspects of managerial finance in a health setting. The primary emphasis is on budgeting for operations and capital improvements, working capital management, third party reimbursement systems as well as long and short term financing strategies.
HCA 6101 (HCM 689) HEALTH CARE ORGANIZATION This course examines illness as a phenomenon which both influences and is influenced by society (the culture). As such, it can be viewed as a social deviance - which patients, the provider and the society attempt to control. An examination of conceptual, methodological and substantive issues in the study of social psychological and demographic factors which relate to occurrence of morbidity and mortality.
(HCM/HSM 693) INDEPENDENT STUDY IN HEALTH CARE MANAGEMENT (1-10) Individual conferences, supervised readings, reports on personal investigations Consent of faculty sponsor, division chairman, and Dean required.
$\qquad$ (HCM/HSM 695) MASTER'S PROJECT IN HEALTH CARE MANAGEMENT (5-10) Each student is required to develop and conduct an individual project on a topic of interest. The topic shall be chosen in consultation with a faculty member in the School.
HCA 6811 (HCM 696) RESIDENCY IN HEALTH MANAGEMENT (5-10) Assignment to local health facilities for survey and solution of management problems under supervision. Formal report is required.
(HCM/HSM 697) SPECIAL TOPICS IN HEALTH CARE MANAGEMENT (5) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty tutor, division chairman, and Dean required.


## INSURANCE

RMI 4015 (INS 405) PRINCIPLES OF INSURANCE (5) Types of risk; methods of handling risk; analysis of insurance as a principal method; organization and operation of insurance companies; bases for decision-making in management of personal and business risks.
RMI 4115 (INS 407) LIFE INSURANCE (5) Functions and uses of life insurance, types of policy contracts, calculation of premiums and reserves; investments; legal principles, organization, management, and supervision of companies.
RMI 4305 (INS 408) RISK MANAGEMENT (5) Concepts and philosophies or risk management; application of alternatives to handling risks, including risk retention, loss prevention, corporate insurance programs and self-insurance; insurance surveys and case studies.
RMI 4405 (INS 409) INSURANCE LAW (5) Legal environment and essentials of the law particularly applicable to the business of insurance; emphasis on statutory regulation in Florida.
RMI 4220 (INS 410) CASUALTY INSURANCE I (5) A broad concept of casualty insurance, including a thorough review of basic policies, dailies, underwriting, and losses; multiple line and comprehensive forms. Subjects covered include property and personal liability insurance, boiler and machinery insurance, air insurance, inland and ocean marine insurance, workmen's compensation, and surety.
RMI 4221 (INS 411 ) CASUALTY INSURANCE II (5) A continuation of INS 410 , but including agency management and company administration.
RMI 4212 (INS 412) PROPERTY INSURANCE I (5) Basic principles of fire, and allied lines insurance, including standard fire insurance contracts, declarations, agreements, conditions, and exclusions; fire insurance forms, clauses, and endorsements; special and allied fire lines; marine and other insurance.
RMI 4213 (INS 413) PROPERTY INSURANCE II (5) Multiple-line risk and risk management; the multiple-line insurance industry; property and liability hazards and policy contracts; functional aspects of underwriting, rate making, and claims handling.
RMI 4117 (INS 415) PERSONAL INSURANCE PLANNING (5) Planning a personal program of insurance, integrating life, health and accident, property, pensions, and governmental programs
RMI 4145 (INS 416) BUSINESS AND ESTATE INSURANCE PLANNING (5) Applications of life and health insurance to business and estate planning situations; emphasis on current practices and developments in retirement planning, business continuation, and estate conversions.
RMI 4135 (INS 417) EMPLOYE FRINGE BENEFIT PROGRAMS (5) Coverage of executive compensation, contractual agreements, benefit formulas, financing of death, disability, and retirement benefits, group life and health insurance, pension and profit sharing plans, and taxation and legal aspects underlying pensions; deferred and non-deferred considerations.
RMI 4016 (INS 418) MANAGEMENT OF INSURANCE ENTERPRISE (5) Analysis of the operations of insurance organizatıons, underwriting, rate making, regulation, legal organization, management and control, financial analysis, marketing systems.
RMI 4500 (INS 428) SOCIAL INSURANCE (5) Introductory analysis of the rationale for social insurance; structure of current social insurance programs; evaluation of programs; old-age, survivors, health, disability, and unemployment insurance.

RMI 4910 (INS 493) INDEPENDENT STUDY IN INSURANCE (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faclty tutor and divisional chairman required.
RMI 4935 (INS 497) SPECIAL TOPICS IN INSURANCE (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.
RMI 6055 (INS 600) GRADUATE SURVEY OF INSURANCE (5) Graduate examination of current problems in insurance, including theory of insurance, uses of insurance in business organizations; property and liability insurance, health insurance, and life insurance.
RMI 6912 (INS 693) INDEPENDENT STUDY IN INSURANCE (1-10) individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
RMI 6936 (INS 697) SPECIAL TOPICS IN INSURANCE (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.

## BUSINESS LAW

BUL 4111 (LAW 401) BUSINESS LAW I (5) Principles of law affecting the legal environment of business; law of contracts; sales; torts; agency and employment, legal relations of government and business.
BUL 4112 (LAW 402) BUSINESS LAW II (5) Bailments; shipment and sale of goods; suretyship; bankruptcy; commercial paper; real and personal property; insurance; relevant provisions of uniform commercial code.
BUL 4661 (LAW 407) LAW FOR ACCOUNTANTS (5) A survey of select topics in the legal environment in which business operates, with emphasis on the laws dealing with contracts, sales, agency, partnerships, corporations, and other topics of direct interest to students majoring in accounting. The course is, however, open to non-accounting majors.
BUL 4100 (LAW 410) LEGAL ENVIRONMENT OF BUSINESS (5) Legal environment of business, analysis of legal principles affecting management; the role of law in business decisions; the legal tool as a system for order in the business arena; its effectiveness as a planning instrument. This course is a study of the importance of the impact of the law and legal institutions upon the field of commerce with attention to the regulation of competition through analysis of antitrust legislation, the workings of administrative law, the formulation of judicial decision, the power of constitutional provisions, various aspects of employment legislation, as well as other select topics.
BUL 4905 (LAW 493) INDEPENDENT STUDY IN BUSINESS LAW (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
BUL 4650 (LAW 497) SPECIAL TOPICS IN BUSINESS LAW (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.
BUL 6124 (LAW 600) SURVEY OF BUSINESS LAW (5) Graduate level survey of business law which examines the social purposes, functions and forms of the law and the courts, particularly as they relate to business organizations.
BUL 6906 (LAW 693) INDEPENDENT STUDY IN LAW (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
BUL 6651 (LAW 697) SPECIAL TOPICS IN LAW (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.

## MANAGEMENT

MAN 4810 (MAN 407) MANAGEMENT SCIENCE (5) Survey of management science-operations research from an applied point of view. Emphasis on the formulation of models of business problems such as Allocations, Inventories, Project Management, Replacement, Transportation, Scheduling, Sequencing, Queuing Theory, and Competition. Prerequisite: BUA 305, or equivalent.
QMB 4700 (MAN 410) PRINCIPLES OF OPERATIONS RESEARCH I (5) Application of deterministic operations research models such as linear and nonlinear programming, networks (CPM), dynamic programming, and branch and bound techniques to managerial problems of allocation, planning and scheduling investment, and control prescheduling, investment, and allocation. Prerequisite: BUA 408.
QMB 4680 (MAN 420) SIMULATION OF MANAGEMENT SYSTEMS (5) Basic concepts in computer simulation of systems. Application of these concepts in a variety of managerial' problems. The course covers waiting line models, continuous simulation models, heuristic methods, and management games. Several computer programs and languages for simulation are presented. Exposure to the operation and analysis of some simulation models. Prerequisite: BUA 305,306, or equivalent.
MAN 4820 (MAN 422) INFORMATION SYSTEMS DEVELOPMENT (5) An intermediate level study of the analysis and design phases of the information systems development cycle. Covers topics in problem identification, specification of user requirements, enumeration of alternative design, and choice of the best design for the situation.
MAN 4322 (MAN 427) PERSONNEL INFORMATION SYSTEMS (5) A survey of personnel reporting requirements; assessment of information needs, manpower planning and development of integrated personnel systems. Prerequisites: BUA 306 and MAN 457.
MAN 4523 (MAN 428) PRODUCTION INFORMATION SYSTEMS (5) A study of the special problems associated with the development of information systems capability to support the production function of an organization. Review of information systems approaches to inventory control and work processing management.
MAN 4521 (MAN 430) OPERATIONS PLANNING AND CONTROL (5) Concepts in design, analysis, and control of operating systems, plant layout and design, materials handling, quality control, forecasting, decision theory applied to production and service systems. Prerequisites: BUA 302 and BUA 305.
MAN 4600 (MAN 451) INTERNATIONAL MANAGEMENT (5) Introductory survey in 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; export-import procedures; conflicts with national interests.

MAN 4610 (MAN 452) INTERNATIONAL AND COMPARATIVE INDUSTRIAL RELATIONS (5) Examines selected industrial relations systems of Western Europe, Asia and the Americas, with special emphasis on differences among systems and why such differences exist. Additionally, the industrial relations significance of the multinational enterprise, and management problems associated with operations in diverse systems, are analyzed.
MAN 4201 (MAN 453) ORGANIZATION THEORY (5) 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: BUA 309 or Equivalent.
MAN 4401 (MAN 454) INDUSTRIAL RELATIONS (5) Organizational and economic analysis of the problems and issues arising out of legislative and judicial efforts to define the rights, duties and responsibilities of labor organizations and management in the fields of labor relations.
MAN 4410 (MAN 455) LABOR MANAGEMENT AND COLLECTIVE BARGAINING (5) The various options of settlement of labor-management disputes. Evaluation of the nature, institutions and processes of collective bargaining, the analysis of labormanagement issues and their significance, and the character and procedures of arbitration, mediation fact finding and conciliation. The course deals also with the analysis of the labor market.
MAN 4151 (MAN 456) BEHAVIORAL SCIENCE IN MANAGEMENT (5) An analysis of selected concepts in behavioral science, their interaction and application to management. Topics include perception, motivation, and group behavior.
MAN 4301 (MAN 457) PERSONNEL MANAGEMENT (5) 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 devoted to human resources management and development at various organizational levels.
MAN 4771 (MAN 458) SMALL BUSINESS MANAGEMENT (5) The organization and operation of the small business - the accounting, finance, production and marketing subsystems. The use of analytical approach. Problems of manpower management and information flow. Possible use of EDP. Case Studies.
MAN 4120 (MAN 461) INTERGROUP RELATIONS IN ORGANIZATIONS (5) A study of the psychological and sociological dimensions of intergroup relations. Attention to the problems experienced by subgroups in large and small organizations with particular reference to ethnic, racial, and subcultural groups. The roles and responsibilities of managment in the constructive resolution and utilization of inter-group conflict in organizations.
MAN 4930 (MAN 462) OILEMMAS OF RESPONSIBILITY IN BUSINESS MANAGEMENT (5) The use of interdisciplinary concepts and tools to develop and understand the moral and ethical dilemmas involved in business and corporate spheres of activity. Specifically attended to are issues such as pollution, consumer affairs, and quality of public facilities.
MAN 4320 (MAN 463) PERSONNEL RECRUITMENT AND SELECTION (5) In-depth study of the personnel staffing function. Included an analysis of objectives, techniques, and procedure for forecasting manpower needs, recruiting candidates and selecting employees.
MAN 4330 (MAN 464) WAGE AND SALARY ADMINISTRATION (5) Presents the theories and techniques used by management in the areas of work measurement, wage incentives and job evaluation.
(MAN 470) WOMEN IN MANAGEMENT OF BUSINESS ORGANIZATIONS (5) This course is intended for students interested in the present and future status of female managers. It will focus on topics of the historical foundations of female professionals, the socio-economic status of women in business, educational factors, sex roles and the informal organization, relevant legal requirements, the development of effective managerial climates for effective performance and strategies for changing organizations.
MAN 4905 (MAN 493) INDEPENDENT STUDY (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required. CR/NC only.
MAN 4930 (MAN 497) SPECIAL TOPICS (1-10) Students who wish an intensive study of particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty supervisor and division chairman required. Grade Option. (COE 320) COOPERATIVE EDUCATION - MANAGEMENT I (1-5) A special program enabling management majors to work in jobs significantly related to their major area and career goals. Specific placement must be approved by the Division Chairperson and faculty advisor prior to enrollment. Prerequisites: Qualification for Cooperative Education Program.

- (COE 420) COOPERATIVE EDUCATION - MANAGEMENT II (1-5) Continuation of COE 320. Prerequisites: COE 320 and qualification for Cooperative Education Program.
MAN 5415 (MAN/PAD 534) PUBLIC SECTOR COLLECTIVE BARGAINING (5) Examines the labor force, labor markets, public manpower policy, and organizational manpower planning. Emphasis is given to recent developments in public and organizational policy.
MAN 5123 (MAN 541) HUMAN INTERACTION I: PERSONAL GROWTH LABORATORY (5) Experience designed to increase self-awareness of social impact, to increase sensitivity to the feelings of others, to improve interpersonal communication and increased understanding of the change-learning process. Study and analysis of class-group participation as well as other functional social groups.
MAN 5830 (MAN 550) PLANNING FOR INFORMATION SYSTEMS (5) An in-depth study of systems concepts as they apply to information systems in organizations. Consideration of planning for systems development and its accomplishment through the phases of the life cycle and of the overall management of the information systems function. Enrollment limited to students in the MIS Certificate Program.
MAN 5831 (MAN 551) ANALYSIS OF INFORMATION REQUIREMENTS (5) An in-depth study of the problems of determining effective information needs for systems users. Consideration of the development of data element dictionary capability, procedures for eliciting requirements and techniques for documenting requirement and report content. Enrollment limited to students in the MIS Certificate Program.
MAN 5832 (MAN 552) DESIGN OF INFORMATION SYSTEMS (5) An in-depth study of the problem of determining an efficient design to meet the requirements specified by the user. Consideration of the determination of alternative designs, selection of the "best" design and conversion of the design into programming specifications. Enrollment limited to students in the MIS Certificate Programs.

MAN 5930 (MAN 558) SEMINAR IN PERSONNEL MANAGEMENT (5) Overview and examination of the various aspects of the Personnel Management function. Course is only open to students enrolled in the Personnel Management Certificate Program.
MAN 6819 (MAN 601) SURVEY OF MANAGEMENT SCIENCE (5) An introductory course that will examine model building and the methodology, techniques and tools of Management Science. A survey of the analytic models available will be included.
QMB 6805 (MAN 605) DETERMINISTIC MODELS FOR MANAGEMENT ANALYSIS () Applications of deterministic models such as linear and nonlinear programming, network analyses (PERT), dynamic programming, and branch and bound algorithms to managerial problems of allocation, planning, scheduling, investment, and control.
QMB 6855 (MAN 606) STOCHASTIC MODELS FOR MANAGEMENT ANALYSIS (5) Applications of probabilistic models such as queuing, inventory, and renewal to their managerial problems.
QMB 6875 (MAN 611) STOCHASTIC MODELS FOR PROJECT MANAGEMENT (5) Review of deterministic models and principles, introduction to GERT, critical path methods, criticality index, and resource considerations in stochastic networks. Emphasis on operational decision-making, advanced topics and individual projects. Students will use the computer, and existing programs, to analyze/simulate hypothetical project networks and learn to interpret the results in order to facilitate operational decisions.
MAN 6833 (MAN 618) INFORMATION SYSTEMS PLANNING (5) An in-depth study of systems concepts as they apply to information systems in organizations. Consideration of planning for systems development and its accomplishment through the phases of the life cycle and of the overall management of the informtion systems function.
MAN 6895 (MAN 619) SEMINAR IN MANAGEMENT SCIENCE (5) New topics and new application areas will be explored. Lectures will relate the latest advances in the theory and application of Management Science.
QMB 6845 (MAN 620) SIMULATION OF MANAGEMENT SYSTEMS (5) Basic concepts of computer simulation of systems. Application of these concepts to a variety of managerial problems. Industrial dynamics, urban dynamics, and large system simulation. Simulation in economic analysis. Heuristic methods, management games.
MAN 6834 (MAN 621) INFORMATION REQUIREMENTS ANALYSIS (5) An in-depth study of the problem of determining effective information needs for systems users. Consideration of the development of data element dictionary capability, procedures for eliciting requirements, and techniques for documenting requirement and report content.
MAN 6835 (MAN 622) INFORMATION SYSTEMS DESIGN (5) An in-depth study of the problem of determining an efficient design to meet the requirement specified by the user. Consideration of the determination of alternative designs, selection of the "best" design and conversion of the design into programming specifications.
MAN 6836 (MAN 630) SYSTEMS ANALYSIS (5) A study of the systems approach to problem solving as it applies to any area of specialization. Consideration of the problems in determining system objectives, identifying system boundaries and constraints, marshalling resources for achieving system objectives, analyzing the subcomponents of the system and their respective objectives, and managing the system.
MAN 6529 (MAN 639) SEMINAR IN PRODUCTION CONTROL SYSTEMS (5) The design of control systems for production operations automation and its impact on organizations. Integrated operational - simulation approach. Group and individual projects.
MAN 6124 (MAN 641) HUMAN INTERACTION II ORGANIZATIONAL CONSULTATION (5) Theories and approaches to organization development and change with a particular focus on public schools and organizations. Laboratory supervision on systematic consultation and action skills, including method of assessment (survey feedback, milling, confrontation meetings, systems analysis), agenda-setting, feedbacks, coaching, third-party consultation for conflict management, and team training. Prerequisite: MAN 541.
MAN 6311 (MAN 642) ADVANCED PERSONNEL MANAGEMENT (5) 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 devoted to human resources management and development at various organizational levels.
MAN 6351 (MAN 643) PERSONNEL TRAINING AND DEVELOPMENT (5) Determining training needs. Training methods. The training staff. Supervisor development. Equal Employment Opportunity Management.
MAN 6321 (MAN 644) PERSONNEL SELECTION AND PLACEMENT (5) Individual differences and their measurement in personnel selection and job placement. Job design and redesign. The learning process. Counseling and career guidance.
MAN 6331 (MAN 645) COMPENSATION ADMINISTRATION (5) A in-depth analysis of wage and salary administration including such topics as job evaluation, wage incentive systems, and work sampling.
MAN 6405 (MAN 650) LABOR RELATIONS (5) Examines the collective bargaining system in the United States, from the viewpoint of the practitioner. Various aspects of the environment, structure, processes, issues and impact of collective bargaining are considered. Special attention given to the negotiation and administration of agreements.
MAN 6403 (MAN 651) GOVERNMENT AND INDUSTRIAL RELATIONS (5) Survey of industrial relations law with special emphasis on the current status of union-management relations law. Covers the scope and content of current legislation selected topics in applied labor relations law, and the role of the government.
MAN 6411 (MAN 652) COLLECTIVE BARGAINING TOPICS (5) An advanced course in labor relations for students with some background wishing more depth than that provided in introductory courses. Topics of contemporary interest, such as public sector collective negotiations are treated at length.
MAN 6601 (MAN 653) INTERNATIONAL MANAGEMENT (5) Graduate seminar which focuses on management issues that confront the multinational enterprise. Includes basic trade theory, tariffs and trade barriers, organizational transfer, foreign exchange, international financial management, export-import procedures, comparative business customs, personnel management, and institutions affecting the multinational manager.
MAN 6121 (MAN 660) INTERPERSONAL BEHAVIOR AND ANALYSIS (5) A human interaction-human relations training laboratory designed to increase self-awareness and understanding of behavioral dynamics in groups. Course aims to enable students to broaden their conceptual understanding of human interpersonal communications and conflict. Enrolirnent is limited to fifteen students per section.

MAN 6112 (MAN 661) GROUP PROCESSES IN ORGANIZATIONS (5) The social psychological processes of organizational functioning. The roles played by small groups in organizational settings.
MAN 6211 (MAN 662) ORGANIZATION DEVELOPMENT AND RENEWAL (5) A study of approaches, processes, and technologies for affecting organizational change and improvement based on behavioral science principles and practices. Attention will also be given to behavioral science theory and interventions which tend to promote greater organizational health and renewal.
MAN 6213 (MAN 663) CONFLICT IN ORGANIZATIONS (5) A critical examination of the role and impact of interpersonal and intergroup conflict in organizations. Models and approaches to utilizing and resolving conflict toward constructive personal and organization ends will be emphasized.
MAN 6603 (MAN 671) PROBLEMS IN COMPARATIVE MANAGEMENT (5) Discussion of literature, readings, cases, aimed at underscoring differences and similarities in management behavior in different countries and cultures. General instruction in obtaining and utilizing data on comparative management differences.
MAN 6604 (MAN 672) COMPARATIVE MANAGEMENT ANALYSIS (5) Development and testing of hypotheses concerning differences and similarities in managerial behavior in different countries and cultures; discussion of implications; case analysis.
MAN 6910 (MAN 690) RESEARCH METHODS IN MANAGEMENT (5) Covers the research methods and analytical techniques most widely used in research in human resources and general management. Emphasis is on helping students to become aware of current techniques and their applications.
MAN 6715 (MAN 691) POLITICS IN ORGANIZATIONS (5) The objective of this course is to give the student experience in an executive role in contemporary organizations. The stress is on human interaction, decision-making under pressure, and organizational politics.
MAN 6905 (MAN 693) INDEPENDENT STUDY IN MANAGEMENT (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty sponsor and division chairman required CR/NC only.
MAN 6930 (MAN 694) MASTER'S SEMINAR IN MANAGEMENT (1-5) An examination of recent research findings in selected areas of current concern. Emphasis is placed on readings, active discussion, and small short-term action and research projects. Students may make a preliminary selection of the master's thesis or project topic.
MAN 6930 (MAN 695) MASTER'S PROJECT IN MANAGEMENT (1-10) Each student is required to develop and conduct an individual research project or thesis on a topic of interest. The topic shall be chosen in consultation with a faculty member in the School.
MAN 6930 (MAN 697) SPECIAL TOPICS IN MANAGEMENT (5) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty tutor and division chairman required. Grade option.

## MASTER OF BUSINESS ADMINISTRATION PROGRAM

ACC 6011 (MBA 605) FINANCIAL ACCOUNTING ANALYSIS (5) A survey of the principles and procedures of accounting. The course covers both financial and management accounting. The principal emphasis is on the potential uses, as well as limitations, of accounting information. No credit will be given to students who have had undergraduate or graduate equivalents. ECP 6704 (MBA/ECO 606) MANAGERIAL ECONOMICS (5) The application of microeconomic and macroeconomic concepts to decision making within the organization; supply and demand, market structure and market behavior in specific industries; basic aggregate economic models and forecasting. Prerequisite: MBA 607 or equivalent.
QMB 6603 (MBA 607) QUANTITATIVE METHODS IN MANAGEMENT (5) Introduction to basic quantitative tools for the analysis of problems arising in the management of organizations and the application of these tools to real-life problems. No credit will be given to students who have had undergraduate or graduate equivalents.
MAN 6713 (MBA 615) WORLD OYNAMICS AND THE ORGANIZATION (5) A macro examination of economic, political, and cultural variables affecting the oganization. Emphasis will be placed on social indications, societal forecasting and organizational responses to those changes, given the nature and rate of change in different societies.
MAN 6725 (MBA 616) THE ORGANIZATION AND THE INTRA-NATIONAL ENVIRONMENT (5) A comparative analysis of particular public and private organizations in specific cultures and their interaction with other institutions; particular attention to environmental and institutional constraints on the organization, especially the contrasting of the goals of the organization with mores of the society.
MAN 6205 (MBA 617) ORGANIZATIONAL ANALYSIS (5) Study of concepts, theory, research, and operational problems of management. Emphasis is upon analyzing the management processes of planning, organizing, leading, and controlling and their relationship to the nature of the task, technology and the environment.
MAN 6721 (MBA 625) MANAGERIAL DECISION-MAKING (5) This course will investigate and analyze the decision problems that managers face in business, volunteer organizations, government, and the public sector. Emphasis in the course will be placed on providing a variety of decision-making experiences for the student. Prerequisite: MBA 607 or equivalent.
MAN 6830 (MBA 626) ORGANIZATION INFORMATION SYSTEMS (5) Introduction to information systems and their role in organizations from a user's viewpoint. Survey and application of the basic concepts necessary for understanding information systems. Study of the main activities in the development cycle used to acquire information systems capability. Prerequisite: MBA 617.
ACC 6313 (MBA 627) ACCOUNTING FOR DECISION MAKING (5) A survey of the various uses of accounting information both from the point of view of the management and the investor. The course covers advanced topics in financial accounting, and the techniques utilized in financial analysis. It also emphasizes the differences among alternative accounting principles and their effects on decision-making. Prerequisite: MBA 605 or equivalent.
FIN 6428 (MBA 635) FINANCIAL MANAGEMENT (5) In-depth examination of asset, liability and capital structure management with emphasis on capital budgeting techniques, risk evaluation, working capital management, and methods of short term, intermediate, and long term financing. Prerequisite: MBA 605 or equivalent.
MAR 6716 (MBA 636) MARKETING MANAGEMENT (5) A study of analysis and application of theory and problem solving in marketing management. Emphasis will be on the role of marketing in the organization, planning the marketing effort, management of the marketing organization, control of marketing operations and evaluation of the marketing contribution.
MAN 6501 (MBA 637) OPERATIONS MANAGEMENT (5) This course covers the analysis of design and operations in organizational systems. The systems approach is used to provide a framework or general model of analysis to which specific con-
cepts, quantitative techniques, and tools can be related. The material presented has application to any organization of people and machines, such as hospitals, governmental agencies, service organizations, and industrial concerns. Prerequiste: MBA 607 or equivalent.
MAN 6974 (MBA 695) MASTER'S PROJECT (5) An individualized research project, and report, which may include field experience with a firm or agency, library research, computer programming, or project development. Course only taken in consultation with, and with approval of faculty adviser, division chairperson, and dean.
MAN 6721 (MBA 699) POLICY ANALYSIS (5) The use of cases, guest lectures, and gaming to integrate the analysis and measurement tools, the functional areas and public policy issued. The objective is to develop skill in broad areas of rational decision-making in an administrative context of uncertainty. Prerequisite: Should be taken in the last quarter of Master's Program

## MARKETING

MAR 4713 (MAR 404) CASES IN MARKETING MANAGEMENT (5) 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.
MAR 4153 (MAR 405) RETAILING MANAGEMENT I (5) An examination of the role of retailing in the marketing system. Attention is concentrated on fundamentals for successful retail management. The course emphasizes basic marketing principles and procedures including merchandising, markup-markdown, pricing, stock-turn, and sales and stock planning.
MAR 4154 (MAR 406) RETAILING MANAGEMENT II (5) This course treats the retail marketing concentration in terms of up-to-date merchandise management methods. Emphasis is on elements of profit, open-to-buy planning, return on investment, and inventory control. The course delineates the decisions made by retailing managements and reviews their available strategies. Prerequisite: MAR 405 or consent of instructor.
MAR 4243 (MAR 408) INTERNATIONAL MARKETING (5) The course studies the information required by marketing managers to assist in satisfying the needs of consumers internationally. Special emphasis will be given to the constraints of the international environment.
MAR 4503 (MAR 41D) CONSUMER BEHAVIOR (5) The course offers an introduction to the analysis of the consumer as the basis for the development of the marketing mix.
MAR 4613 (MAR 411) MARKETING RESEARCH (5) An examination of the marketing research process and its role in aiding decision making. Emphasis is placed on evaluation and utilization of research information in making marketing decisions.
MAR 4303 (MAR 413) ADVERTISING MANAGEMENT (5) Advertising in business and society, providing a broad understanding of its social, communicative, and economic purposes; types and functions of advertising; research, media selection, budget determination, and other elements in the total advertising process.
MAR 4344 (MAR 414) ADVERTISING CAMPAIGN MANAGEMENT (5) Strategical approaches to managing advertising campaigns, including selection of approaches, market research, consumer target markets, media, and advertisements; development and control of budgets. Prerequisite: MAR 413 or consent of instructor.
MAR 4343 (MAR 415) PROMOTIONAL STRATEGY (5) The course deals with problems of decision-making in the areas of marketing communication methods, with primary emphasis on advertising.
MAR 4103 (MAR 416) PERSONAL SELLING (5) The development of effective salesmen/customer relationships in emphasized. Selection, training, and motivation of the sales force and the relationship between personal selling and the other elements of marketing strategy are analyzed.
MAR 4203 (MAR 417) MARKETING CHANNELS (5) The course focuses upon institutions, functions, and flows within channels of distribution and their integration into channels systems. Wholesaling and physical activity are emphasized.
MAR 4244 (MAR 418) EXPORT MARKETING (5) This course emphasizes practical approaches to export marketing including marketing strategies by individual firms to serve foreign markets. Operational methods of identifying, establishing, and consolidating export markets with particular attention to the needs of smaller business.
MAR 4213 (MAR 419) TRANSPORTATION LOGISTICS (5) (Same Course as TRA 409) Consideration of transportation logistics and its relationship to production and distribution; characteristics, management, legislation, and public regulation, applied to modes of transportation.
MAR 4453 (MAR 423) INDUSTRIAL MARKETING (5) Marketing in the intermediate consumer environment. Problems met, and strategies for, marketing goods and services to commercial, industrial and governmental markets.
MAR 4773 (MAR 429) REAL ESTATE MARKETING (5) (Same Course as RES 513) The course focuses upon application of marketing concepts and tools within the real estate industry.
MAR 4733 (MAR 431) MARKETING AND THE LAW (5) A policy and operational analysis of legislative acts and judicial interpretations of laws influencing organizations engaged in marketing activities.
MAR 4703 (MAR 433) CURRENT ISSUES IN MARKETING I (5) Intensive study of various topic areas in marketing. Course emphasizes student reading and research with oral and written reports. Students electing to take this seminar may take no more than 5 credit hours of independent study in marketing.
MAR 4704 (MAR 434) CURRENT ISSUES IN MARKETING II (5) Students electing to take this seminar may not take independent study in marketing. Prerequisite: MAR 433.
MAR 4723 (MAR 441) MARKETING OF SMALL BUSINESS ENTERPRISES (5) Designed to develop an understanding of the principles and practices which contribute to the successful marketing operation of a small business enterprise, this course deals with marketing policies, techniques and applications to aid the entrepreneur in this field.
MAR 4054 (MAR 451) MARKETING FOR NON-PROFIT ORGANIZATIONS (5) Marketing techniques as applied to non-profit organizations, including but not limited to, the marketing of such governmental programs as housing, education, health services, transportation, and Social Security.
MAR 4753 (MAR 490) MARKETING GAME COMPETITION (5) Focal point of the course is a computerized marketing management simulation. The course provides an opportunity for the student to participate as a member of the marketing management team of a firm in competition with other firms.
MAR 4907 (MAR 493) INDEPENDENT STUDY IN MARKETING (1-10) Individual conferences, supervised reading, reports on personal investigations. Consent of faculty tutor and divisional chairman required.

MKA 4392 (MAR 494) MARKETING INTERNSHIP (1-10) Full-time supervised work in a selected organization. Prerequisites: At least twenty (20) hours in marketing, consent of instructor and divisional chairman.
MAR 4933 (MAR 497) SPECIAL TOPICS IN MARKETING (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.
MAR 5913 (MAR 593) INDEPENDENT STUDY IN MARKETING (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
MAR 5935 (MAR 597) SPECIAL TOPICS IN MARKETING (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.
MAR 6246 (MAR 608) ADVANCED INTERNATIONAL MARKETING (5) This course discusses the nature and scope of international marketing and explores multinational problems facing firms and other international marketing organizations, together with strategies for foreign market penetration.
MAR 6506 (MAR 610) ADVANCED CONSUMER BEHAVIOR (5) Modern comprehensive models of consumer behavior are utilized as a framework for understanding consumer decision processes.
MAR 6617 (MAR 611 ) ADVANCED MARKETING RESEARCH (5) The role of research in providing information for marketing decision-making including an examination of the research process and the tools available to the researcher.
MAR 6606 (MAR 613) QUANTITATIVE METHODS IN MARKETING (5) A study of the quantitative reasoning process and its usefulness for marketing decision-making. Each of the major decision areas in marketing is examined using existing quantitative models as aids to understanding marketing processes.
MAR 6346 (MAR 615) ADVANCED PROMOTIONAL STRATEGY (5) The course focuses on planning, problem-solving and decision-making as they apply to promotion programs. Primary emphasis is on advertising with discussion of the role of promotion in relation to other elements of the marketing program.
MAR 6706 (MAR 633) CURRENT ISSUES IN MARKETING I (5) Intensive study of various topic areas in marketing. Course emphasizes student reading and research with oral and written reports. Students electing to take this seminar may take no more than 5 credit hours of independent study in marketing.
MAR 6707 (MAR 634) CURRENT ISSUES IN MARKETING II (5) Students electing to take this seminar may not take independent study in marketing. Prerequisite: MAR 633.
MAR 6717 (MAR 690) ADVANCED MARKETING MANAGEMENT (5) Emphasis in the course is upon application and integration of concepts and tools through participation in the marketing management of a firm in competition with other firms. The course's focal point is a computerized marketing management simulation.
MAR 6915 (MAR 693) INDEPENDENT STUDY IN MARKETING (1-10) Individual conferences, supervised reading, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
MAR 6971 (MAR 695) MASTER'S PROJECT (5) An individualized research project, and report, which may include field experience with a firm or agency, library research, computer programming, or project development. Permission of the faculty advisor is required before registering for the course. The course should be taken during the last half of the student's graduate program.
MAR 6936 (MAR 697) SPECIAL TOPICS IN MARKETING (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.

## PUBLIC ADMINISTRATION

PAD 3204 (PAD 301) FINANCING PUBLIC ORGANIZATIONS (5) Financial management in public organizations. The securing of funds through taxes and bond issues, the management of funds and expenditure decisions.
PAD 3702 (PAD 305) ADMINISTRATIVE STATISTICS AND DATA SYSTEMS (5) Quantitative techniques useful to public administration, non-parametric techniques, probability concepts and decision techniques are presented as well as concepts underlying use of data systems.
PAD 3413 (PAD 310) ORGANIZATIONAL GROUP PROCESSES (5) 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 to alienation and motivation in job effectiveness and Public Service.
PAD 3034 (PAD 312) PUBLIC POLICY AND ITS ADMINISTRATION (5) Contemporary theories of policy analysis, the role of social, political and cultural theories as they apply to the analysis and administration of public policies.
PAD 3430 (PAD 320) PERSONAL GROWTH AND ADMINISTRATIVE DEVELOPMENT (5) The administrator as a person, development of interpersonal skills. Self evaluation and career planning, training and education for the public service sector. PAD 3033 (PAD 321) ADMINISTRATORS AND THE LEGISLATIVE PROCESS (5) A study of executive-legislative interactions; the impact of legislation and legislative processes on administrative policy decision-making and implementation; influence of administration on the legislating process.
PAD 3834 (PAD 325) INTERNATIONAL COMPARATIVE ADMINISTRATION (5) This course is conceived as introductory to a wide range of scholarly and practical ("applied") interests. Emphasis on institution building and development administration particularly within the Third World countries.
PAD 4024 (PAD 400) CONCEPTS AND ISSUES IN PUBLIC ADMINISTRATION (5) The function of Administrative Institutions in Society, the growth of administration through the bureaucratic model both as an art and science; contemporary and comparative forms and theories of organization and responsibilities of public servants.
PAD 4110 (PAD 401) ADMINISTRATIVE INTERACTION IN THE PUBLIC SECTOR (5) Definition and analysis of administrative interfaces with multiple and varied public and private organizations. A study of the role expectation, pressures, and opportunities of the administrator in a complex environment.
PAD 4103 (PAD 402) POLITICS OF ADMINISTRATIVE ORGANIZATION (5) The role of political processes in relationship to public organizations and the types of intra- and inter-organizational politics which are unique to public organizations. Effects of these political processes upon organizational performance and their role in promoting or thwarting organizational change.

PAD 4414 (PAO 403) PUBLIC PERSONNEL ADMINISTRATION (5) The general nature of public personnel administration, the development of the civil service system, concepts and issues currently applicable at the Federal State and Local levels of government.
PAD 4104 (PAD 404) ORGANIZATION AND ADMINISTRATIVE THEORY (5) History and development. Historical survey of theories of public organization and of contemporary and emerging theories. With special attention to the role of bureaucratic theory. Case investigation of manifested influence of the bureaucratic model in its various forms at Federal, State and Local government levels.
PAD 4804 (PAD 405) GOVERNMENT AND ADMINISTRATION OF METROPOLITAN AREAS (5) An intensive analysis of administrative problems created by large complex urban areas comprising many political entities. Examines overlapping relationships within municipalities, experience in Dade County system, current trends, and suggested solutions.
PAD 4603 (PAD 406) ADMINISTRATIVE LAW (5) Surveys the principles of law from the perspective of the public administrator, administrative procedure, procedural due process, delegation of legislative power, regulatory administration, conflict-of-interest statutes, etc.
PAD 4432 (PAD 407) ADMINISTRATIVE LEADERSHIP AND BEHAVIOR (5) 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 climate of the situation.
PAD 4032 (PAD 408) PUBLIC CHOICE (5) Some historical analysis on the origin and concept of the public interest in Public Administration. Its various formulations as a concept and its contemporary interpretations. Specific role definitions and concepts of the public interest and public policy.
PAD 4415 (PAD 409) ADMINISTRATION OF PERSONNEL RESOURCES (5) Problems of training in government service and management of human resources development, the concept of civil service career systems, evaluation of public personnel systems, human relations in supervision, and personnel theory are examined.
PAD 4040 (PAD 410 ) PUBLIC VALUES, ETHICS AND MORALITY IN CHANGING ENVIRONMENT (5) Theories of value, ethical systems and their influence of administration, behavior and process; the administrator as an ethical actor, value conflict and resolution, philosophical basis of American thought.
PAD 4223 (PAD 428) BUOGETS AND THE ADMINISTRATIVE PROCESS (5) The theory and practice of various approaches to budgeting e.g. time-item, performance, program and PPBS budgeting. Special emphasis upon the role of the budget in shaping the performance and policy direction of public organizations.
PAD 4905 (PAD 493) INDEPENDENT STUDY IN PUBLIC ADMINISTRATION (1-10) Individual conferences, supervised readings, reports on personal investigations and similar undertakings. Prerequisite: Consent of faculty sponsor and program chairman required.
PAD 5044 (PAD 520) VALUES AND TECHNOLOGY IN MODERN SOCIETY (5) Surveys personal and societal value assumptions in the context of the technological society. Examines organizational-societal value structures and how technology creates rapid change, and new values which are alternatives to our existing values. Also interrelationship of the past, present and future are explored through futurism and forecasting techniques.
PAO 5427 (PAD 561) COLLECTIVE BARGAINING IN THE PUBLIC SECTOR (5) The course deals with the nature and implications of collective bargaining for managers and employees in and students of public organizations. The course emphasizes similarities and differences between the private and public sectors as they apply to collective bargaining.
PAD 5435 (PAD 562) ADMINISTRATOR AND THE ROLE OF WOMEN (5) The course is designed for women and men who are interested in moving into management positions, or who have done so, and want to broaden their understanding of the changing role of women. Classes will allow for experimental as well as academic exploration of the issues. The course will also explore affirmative action programs; how they are designed, implemented, and evaluated.
PAD 5436 (PAD 564) THE PUBLIC ADMINISTRATOR ANO MEOIA RELATIONS (5) Surveys the government-mass communication media relationship and then concentrates on how public managers handle media relations. Emphasis throughout is placed on questions of information handling unique to public organizations, involving, for example, adherence tc Florida's Sunshine Law and the Federal Freedom of Information Act.
PAD 6053 (PAD 600) POLITICAL, SOCIAL AND ECONOMIC CONTEXT OF PUBLIC ADMINISTRATION (5) Examines the context in which public organizations operate, stressing relationship between such organizations and their multifaceted environment. Emphasis is on examining relevant social and cultural mores and patterns, political values and processes, governmental institutions, economic systems, resource availability, and other environmental factors currently significant to public organizations.
PAO 6106 (PAD 601) ORGANIZATION THEORY AND ADMINISTRATIVE BEHAVIOR (5) Historical perspective and philosophical foundations of contemporary and emerging organization theory and administrative behavior with emphasis on concepts of administrative leadership, the organization's members and systems, group dynamics, socio-psychological aspects of organization and management.
PAD 6227 (PAD 602) PUBLIC FINANCE AND THE BUDGETARY PROCESS (5) Examines the theory and practice of public budgeting and its relationship to the administrative processes of control, management and planning. Special emphasis will be given to the social balance question, the kinds and scope of government expenditures, the fiscal role of government in a mixed economy, sources of revenue available to government, administrative, political and institutional aspects of the budget and the budgetary process, and problems and trends in intergovernmental financial relations.
PAD 6706 (PAD 603) RESEARCH METHODS IN COMPLEX PUBLIC ORGANIZATIONS (5) Theories and concepts of research and evaluation. Specific focus given to action components of the research process, design and formulation, strategies and methodological tools for conducting research. What is the role of research in administrative decisions and in testing ways to implement public policy? A review of contemporary critiques on research design.
PAD 6005 (PAD 604) PUBLIC POLICY (5) An intensive analysis of the normative theories of public policy making, with emphasis on the processes by which policy choices are made and implemented by government agencies. The current trends and perspectives of effective policy development, such as participatory democracy, multi-valued choice, rationality versus extrarationality, study of policy environments, and policy roles of proactive public administration, are examined.
PAD 6838 (PAD 610) DEVELOPMENT ADMINISTRATION (5) The role of public administration in national development, with specific attention to theories of economic aid from external sources, and the effects of this aid. Theories and policies of economic and social development are explored and particular attention is given to the role of the United States in strengthening administrative capabilities as important means for achieving developmental goals in selected countries.

PAD 6 B36 (PAD 611) INTERNATIONAL PUBLIC ADMINISTRATION (5) The role of Public Administration Systems around the world and the impact of political and socio-cultural frameworks on administration. Focus on national and state organized politics and economics, problems or possibilities. A review of scope and programs of contemporary international public administration organizations.
PAD 6035 (PAD 621) PUBLIC INTEREST AND THE PUBLIC TRUST (5) Will analyze the meaning of the public interest, using both experimental and cognitive tools. The purpose is to allow individuals in the course to clarify their current definitions of the concept and to be exposed to alternative points of view. The course is intended for everyone in the public sector and all those who have the term "public" in their repertoire of justifications.
PAD 6042 (PAD 622) DEMOCRACY AND THE ADMINISTRATIVE STATE (5) Juxtaposes the contemporary administrative condition of American government with the values of the democratic state. Different approaches to democracy - in practice as well as in theory - will be analyzed and their implications for public organizations and individual administrators examined.
QMB 6603 (PAD 630/MBA 607) QUANTITATIVE METHODS AND COMPUTER SKILLS (5) Introduction to basic quantitative tools for the analysis of problems arising in the management of organizations and the application of these tools to real-life problems. No credit will be given to students who have had undergraduate or graduate equivalents.
CIS 6204/MAN 6830 (PAD 631/MBA 626) MANAGEMENT INFORMATION SYSTEMS (5) Introduction to the application of computers to information processing problems in organizations. This includes a survey of the basic computer hardware and software concepts necessary for users to work with information processing personnel. The rudiments of a computer programming language will be taught and applied to data processing problems. Consideration will also be given to the managerial aspects of information systems planning and development.
PUP 6006 (PAD 633) PUBLIC POLICY ANALYSIS AND EVALUATION (5) A framework for evaluating public policy-making will be presented. The emphasis will be upon criteria and methodologies available for choosing among alternative courses of action. The systems approach, alternative futures and nth-order consequences or policies will be analyzed.
PAD 6417 (PAD 640) PUBLIC PERSONNEL ADMINISTRATION (5) This course focuses on the fundamentals of public personnel administration in general and specific issues of the civil service. Some of the specific issues which will be considered are: the merit system and civil service history and development; manpower development and training; the application of the behavioral approach in personnel administration; unique public personnel management problems; governmental unionization and collective bargaining; and future perspectives of personnel administration.
PAD 6437 (PAD 641) DYNAMICS OF INDIVIDUAL GROWTH (5) This course focuses on the importance of small group theory to the personal growth of the administrator and the role of interpersonal abilities in more effectively serving client groups. The course also deals with the expansion of the phenomenological world view of each student and with a look at existential theory and the dilemma of personal growth.
PAD 6109 (PAD 643) ORGANIZATIONAL DEVELOPMENT AND CHANGE (5) Contemporary approaches to improving the overall effectiveness of public organizations through the utilization of the applied behavioral sciences. Personal and executive development programs, team building, action research, etc. Survey of research on the effects of organizational development programs with special reference to public organizations.
PAD 6816 (PAD 650) REGIONAL AND STATE GOVERNMENT ADMINISTRATION (5) Surveys the historical development of regional administration, analyzes present administrative problems of the states and explores contemporary and suggested remedial policies. Emphasizes the complex problems of the institutional relationships among local, state and regional governments and their implications for public policy-making.
PAD 6807 (PAD 651) URBAN AND MUNICIPAL GOVERNMENT ADMINISTRATION (5) Detailed examination of problems facing the municipal administrators, of the pressures upon the contemporary urban environment and of the administration of large metropolitan areas comprised of numerous political entities. Emphasis will be on determining current trends, discussion of cases and suggested solutions.
PAD 6605 (PAD 660) ADMINISTRATIVE LAW AND PROCEDURES (5) Emphasizes the responsibilities public administrators have under local, state and federal laws. Explores such concepts as client responsiveness under the law, the regulatory process, state administrative law systems, the executive order process, the relationship between administrative law and the checks-and-balance system, discretionary justice and others.
PAD 6043 (PAD 663) GOVERNMENT AND MINORITY GROUP RELATIONS (5) Explores the pressing contemporary issues of the relationship between government and minorities. It examines the clash between established institutional values and minority group values, surveys remedial programs aimed at dealing with the problem. Comparative case studies will be used to analyze public agencies' internal relations with minorities (recruiting, selection, etc.) as well as their different responses to the minority groups they serve.
PAD 6915 (PAD 691) INDEPENDENT RESEARCH IN PUBLIC ADMINISTRATION (1-10) An individualized research project and report which, if feasible, should include field work with a public organization. Permission of a faculty advisor is required before registering for the course which should be taken during the last half of the student's graduate program.
PAD 6946 (PAD 692) PUBLIC ADMINISTRATION INTERNSHIP (1-10) Supervised work in a public or quasi-public organization. Should not be undertaken until completion of required courses in Public Administration Program. Consent of faculty advisor and program chairman required.
PAD 6907 (PAD 693) INDEPENDENT STUDY IN PUBLIC ADMINISTRATION (1-10) Individual conferences, supervised readings, reports on personal investigations and similar undertakings. Consent of faculty sponsor and program chairman required.

## REAL ESTATE AND REGIONAL DEVELOPMENT

REE 3040 (RES 390) INTRODUCTION TO REAL ESTATE (5) Decision making processes for development, financing, marketing, and management of real estate space, economics of regional development and urbanization; public policy issues concerning urban environment and the real estate business. Prerequisite to all other courses in real estate and regional development.
REE 3430 (RES 391) LEGAL ENVIRONMENT OF REAL ESTATE (5) Legal environment of real property ownership, transfer and brokerage; estates in land; sales contracts; mortgage transactions; title; conveyances, landlord and tenant; restrictions and zoning, eminent domain. Prerequisite: RES 390 or permission of instructor.
REE 4905 (RES 493) INDEPENDENT STUDY IN REAL ESTATE (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.

REE 4930 (RES 497) SPECIAL TOPICS IN REAL ESTATE (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.
REE 4200 (RES 500) REAL ESTATE FINANCE (5) Financial analysis and structuring of real estate projects, traditional and creative concepts and mechanisms for the construction financing and permanent financing of residential and income producing property. Prerequisite: RES 390 or permission of instructor.
REE 4710 (RES 503) REGIONAL DEVELOPMENT (5) Measurement and forecasting of economic activity in an urban/regional context; factors influencing economic growth and land allocation. Prerequisite: RES 390 or permission of instructor.
(RES 505) URBAN LAND PLANNING AND USE (5) Theories of city growth and structure, operations of the real estate market in land allocation; application of above concepts to current practices in city and regional planning. Prerequisite: RES 390 or permission of instructor.
REE 4221 (RES 507) VALUATION OF REAL ESTATE (5) Valuation and appraisal framework applied to residential and income producing property; role of computers; valuation theory and process as a guide to business decisions. Prerequisite: RES 390 or permission of instructor.
REE 4301 (RES 509) REAL ESTATE INVESTMENT (5) Fundamentals of acquisition, ownership, and disposition of investment property, taxation and tax shelter, cash flow projections; analysis of specific types of investment property, utilization of computers as a decision-making tool. Prerequisites: RES 390 or permission of instructor.
REE 4730 (RES 511) URBAN LAND ACQUISITION AND DEVELOPMENT (5) Real estate development acquisition of raw land; zoning, subdivision into sites; provision of utilities and services; financing, merchandising of improved sites; emphasis on design and development of residential communities. Prerequisite: RES 390 or permission of instructor.
REE 4800 (RES 513) REAL ESTATE MARKETING (5) Organization and operation of a real estate brokerage office, including selection, training and financing of sales personnel, obtaining and controlling listings, process and methods involved in the selling of real estate; promotion activities, including advertising and public relations; growth problems, professionalism; ethics. Prerequisite: RES 390 or permission of instructor.
REE 4121 (RES 515) REAL ESTATE MANAGEMENT (5) Theories and techniques of professional management of real estate; creating a management plan; merchandising space; economics of alternates; market analysis; the maintenance process; owner-tenant-manager relations; operating budgets; tax consideration; ethics. Prerequisite: RES 390 or permission of instructor
REE 4750 (RES 592) REAL ESTATE AND REGIONAL DEVELOPMENT POLICY (5) A capstone course in integrating all aspects of real estate and regional development learned in previous courses; projects, cases and field trips; to be taken in senior year. Prerequisite: Permission of instructor.
REE 6111 (RES 670) INCOME PROPERTY APPRAISAL (5) Valuation and appraisal framework applied to income properties; capitalization; rates and techniques; discounting and compound interest; mortgage-equity analysis. Ellwood analysis; role of computers; valuation as a guide to business decisions.
REE 6020 (RES 671) INOUSTRIAL REAL ESTATE I (5) General overview of industrial real estate focusing on types of activities; locational requirements, financing techniques; brokerage; government influence; current trends; technological change; characteristics of industrial buildings.
REE 6021 (RES 672) INDUSTRIAL REAL ESTATE II (5) Introduction to investment and valuation problems in industrial real estate; topics include taxation and investment analysis; discounted cash flow techniques; appraisal framework applied to income properties; computer will be utilized in approaching the above problems.
REE 6820 (RES 674) INDUSTRIAL 8ROKERAGE (5) Distinctions between industrial brokerage and general real estate brokerage; role and functions of the industrial broker; industrial brokerage practice; negotiating and leasing; regulations and ethics.
REE 6935 (RES 675) SEMINAR IN INTERNATIONAL REAL ESTATE (5) Current trends and issues affecting industrial real estate on an international level; topics include the multi-national corporation and its location decisions; foreign taxation; international trade and exchange rates.
REE 6295 (RES 685) SEMINAR IN REAL ESTATE FINANCE (5) A study of financial institutions, their methods, and interregional flows of funds in mortgage markets. Further emphasis placed on national economic policies affecting mortgage markets. Prerequisite: Graduate standing and permission of instructor.
REE 6195 (RES 686) SEMINAR IN REAL ESTATE VALUATION THEORY \& PRACTICE (5) A study of the process of property valuation utilizing cost, market and income approaches. The role of computers and mass appraisal techniques will also be examined. Prerequisite: Graduate standing and permission of instructor.
REE 6715 (RES 687) REGIONAL PLANNING AND DEVELOPMENT (5) Methods of measuring and forecasting economic activity and issues in allocating urban land. Techniques for analysis of government policies affecting urban growth and development. Prerequisite: Graduate standing and permission of instructor.
REE 6795 (RES 688) SEMINAR IN URBAN HOUSING POLICY \& PROBLEMS (5) Examining national housing policies and their formulation. The role of the public and private sectors in regard to housing problems. Effectiveness of housing policies. Prerequisite: RES 687 and permission of instructor.
REE 6395 (RES 689) SEMINAR IN REAL ESTATE INVESTMENT AND TAXATION (5) The techniques of real estate investment analysis utilizing present value and cash flow approaches. The impact of Federal taxation on real estate investment decision. Prerequisite: Graduate standing and permission of instructor.
REE 6906 (RES 693) INDEPENDENT STUDY IN REAL ESTATE (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
REE 6946 (RES 695) INDUSTRY PROJECT (5) Advanced individual or group study of specialized problems in the real estate field. Guidance of study to be provided by Real Estate faculty. Prerequisite: Permission of adviser.
REE 6932 (RES 697) SPECIAL TOPICS IN REAL ESTATE (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.

## TRANSPORTATION MANAGEMENT

TRA 4240 (TRA 405) TRANSPORTATION SYSTEMS AND SERVICES (5) Survey and analysis of transportation modes including rail, motor, air, water, pipeline, and mass transit and their impact on the social and economic systems; current problems.
TRA 4510 (TRA 406) MASS TRANSPORTATION AND URBAN PROBLEMS (5) Urban and metropolitan transportation development and requirements, benefits and costs of alternative approaches to mass transit; management techniques and operating principles; policy and regulation.
TRA 4320 (TRA 408) TRANSPORTATION REGULATION (5) Economic and constitutional basis of transport regulation; regulation of industrial traffic and transport modes; scope of regulation; structure and policies of Federal and State regulatory agencies.
TRA 4101 (TRA 410) TRANSPORTATION RATE MAKING (5) Description and analysis of rate making for both passenger and cargo in the various modes of transportation including trucks, railroad, airlines, and ocean transportation. Classes may concentrate on one particular mode for practical applications.
TRA 5203 (TRA 417) PHYSICAL DISTRIBUTION MANAGEMENT (5) Distribution in overall company operations; organization of the traffic function; determination of classification and rates; integration of transportation with production flow, inventory management, warehousing, marketing policies, and plant location.
TRA 4012 (TRA 419) TRANSPORTATION LOGISTICS (5) Consideration of transportation logistics and its relationship to production and distribution; characteristics, management, legislation, and public regulation, applied to modes of transportation.
TRA 4410 (TRA 441 ) AIR TRANSPORTATION (5) A comprehensive introduction to the total air transportation environment including basic areas in general economic characteristics; commercial, private, corporate, and airline categories; government promotion and regulation of the industry, including aircraft manufacturing and operation; air traffic control; and airport support and functions.
TRA 4411 (TRA 442) AIRPORT MANAGEMENT (5) Application of management principles to airport operation with emphasis on unique characteristics of airport finance; government relations and regulations; airline relations and interdependence.
TRA 4412 (TRA 443) AIRCARRIER MANAGEMENT (5) An introduction to the broad scope of airline management practices and policies; particular emphasis on problem analysis in financing, marketing, scheduling, fleet planning, facilities planning, maintenance and general operations.
TRA 4320 (TRA 492) TRANSPORTATION POLICY (5) Consideration of national transportation policy; principal policy issues currently facing the transportation modes.
TRA 4906 (TRA 493) INDEPENDENT STUDY IN TRANSPORTATION (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
TRA 4941 (TRA 495) TRANSPORTATION INTERNSHIP (1-10) Full time supervised work in a selected organization. Prerequisites: At least twenty (20) hours in Transportation, consent of instructor and divisional chairman.
TRA 4936 (TRA 497) SPECIAL TOPICS IN TRANSPORTATION (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.
TRA 5601 (TRA 501) PUBLIC UTILITY PRINCIPLES (5) An analytical and descriptive survey course treating the historical development of public utilities; the economics, legal environment, and organization of public utilities is discussed and analyzed; regulation theory as it applies to electric, gas, water, and communications industries.
TRA 5401 (TRA 507) TRANSPORTATION OPERATIONS ANO CARRIER MANAGEMENT (5) Contemporary management techniques as applied to carriers; emphasis on management problems peculiar to transportation firms; economic analysis of marketing problems, capital formation, costs, pricing, labor relations, and government regulation.
TRA 5245 (TRA 515) TRANSPORTATION LOGISTICS (5) Quantitative methods applied to solving problems in business logistics, mathematical and statistical models; optionization theory and simulation. Problems selected from areas of physical distribution management, inventory control, mode selection, and facility locations.
TRA 6035 (TRA 600) GRADUATE SURVEY OF TRANSPORTATION MANAGEMENT (5) Graduate survey of transportation, its elements, and their impact on society. History, economics, and regulatory principles. Current policies and problems for all the major transportation modes.
TRA 6905 (TRA 693) INDEPENDENT STUDY IN TRANSPORTATION (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
TRA 6936 (TRA 697) SPECIAL TOPICS IN TRANSPORTATION (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.

## URBAN AND REGIONAL AFFAIRS

URP 4006 (URB 401) THE URBAN SCENE (5) Introductory course to the urban phenomenon; historical and contemporary consideration of cities; functions and purposes of cities; economic, social, and cultural aspects of urbanization.
URP 4055 (URB 405) PLANNING \& MANAGEMENT IN AN URBAN ENVIRONMENT (5) General examination of selected aspects of the urban environment that are becoming concerns for policy makers; topics covered include growth and development of urban and metropolitan areas, housing and transportation, the inner city, poverty and racial problems, and urban finance and politics. The purpose is to sharpen conceptions of how business is involved in the urban scene, and what steps it can take to ameliorate it.
URP 4023 (URB 415) URBAN ANO REGIONAL ANALYSIS (5) Theories of urban and regional growth; economics of location and agglomeration; urban and regional social accounting, economic base analysis, input-output models, gravity models, and linear-programming. Urban structure and performance.
URP 4027 (URB 416) URBAN PROBLEMS AND POLICIES (5) Consideration of the scope of the urban agenda; selected problems of contemporary cities; use of benefit-cost analysis, program planning and evaluation, non-market decision-making, user charges, and externalities in an urban environment; interrelation of private and public sectors in managing aspects of the urban system; role and contributions of planners and other professionals.

URP 4905 (URB 493) INDEPENDENT STUDY IN URBAN AND REGIONAL AFFAIRS (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
URP 4930 (URB 497) SPECIAL TOPICS IN URBAN \& REGIONAL AFFAIRS (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman required.
CRP 5057 (URB 503) COMPARATIVE URBAN SYSTEMS (5) Comparative analysis of the major characteristics, similarities, and differences of the urban process as manifested in the United States and abroad.
URP 5881 (URB/UPT 505) URBAN DESIGN (5) Relationship of cities and space; design for urban living; architectural and other aesthetic considerations; human welfare and urban structure; planning methods in the private and public sectors; performance evaluation.
GEO 5605 (URB 510) URBAN GEOGRAPHY (5) Geographical approach to city systems; consideration of the contribution of geographers to urban analysis; field project.
URP 5312 (URB/UPT 511) URBAN LAND USE PLANNING (5) Elements of the general land use plan; location and space requirements; the use of models in planning, development of the land use plan; policy plan; implementation,
DHE 5434 (URB 535) URBAN DEMOGRAPHY (5) Detailed analysis of demographic methods applied to the urban environment
URS 5925 (URB 585) FACULTY-STUDENT WORKSHOP IN URBAN STUDIES (5) Urban studies workshop that gives faculty and students an opportunity to present reports on their current research and listen to invited researchers in urban affairs.
URS 6000 (URB 600) SURVEY OF URBAN AFFAIRS (5) Graduate level survey course, encompassing the dynamics of the urban environment, including urban form and structure, land use patterns, housing, transportation, education, poverty and race, and other policy and problem considerations. Implications of management decisions.
URP 6905 (URB 693) INDEPENDENT STUDY IN URBAN AND REGIONAL AFFAIRS (1-10) Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and divisional chairman required.
URP 6934 (URB 697) SPECIAL TOPICS IN URBAN AND REGIONAL AFFAIRS (1-10) Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and divisional chairman.

## SCHOOL OF EDUCATION

The School of Education offers both bachelors and masters degree programs that meet requirements for certification to be employed as a teacher, counselor, school psychologist, supervisor, or principal in Florida schools.

All degree programs of the School make every effort to recognize the urban and multi-cultural context in which schools in South Florida operate, and the commitment of the University to international understanding. The School also provides service to area schools and other educational agencies in South Florida on a variety of programmatic and operational matters with which they must deal. Research and development activities are carried out by the faculty to improve the effectiveness of both the School's personnel development and service missions.

The School of Education has six divisions, each responsible for specific bachelors and masters programs leading to those degrees and appropriate professional certification. Detailed information on each of the programs of the Divisions is given below.

The School of Education maintains an Office of Student Information and Advisement (D.M. 398). The prospective student is invited to direct inquiries there for general information on careers in Education and on the program in which he or she is interested.

## GENERAL PROGRAM DESIGNS

## UNDERGRADUATE

Undergraduate courses offered by the School of Education are designed to be performance- or competency-based. Typically, all courses include a requirement to spend time in schools as well as class time on campus.

The typical undergraduate student will complete 90 quarter hours in study at Florida International, and all are expected to complete the last 45 hours of their undergraduate study at Florida International University. Twenty quarter hours taken as a Special Student at the University may be applied to a bachelors degree program if the work is applicable to the student's major.

Foundations of Education Requirement: Teacher certification regulations in Florida require completion of one course each in the social and psychological foundations of education. Courses that meet this requirement are offered in the Community College, and the student is urged to complete those courses before enrolling at Florida International. Otherwise, courses in the two areas must be completed at the University and should be taken in the first quarter of registration. The following courses offered at the University meet this requirement:

## Psychological Foundations

$$
\text { DEP } 3002 \text { (PSY 307) Human Growth and Development (5) }
$$

or
EDP 3004 (PSY 305) Introductory Educational Psychology (5)
Social Foundations
SOC 3281 (SOC 343) School and Society (5)
or
EDF 3542 (PHI 326) Philosophies of Education (5)
or
EDF 4521 (HIS 303) Education in History (5)
Reading Competencies Requirement: A Florida Department of Education regulation requires that all persons applying for teacher certification show evidence of having been prepared in specific skills for teaching Reading. All programs in the School are designed to meet this requirement, and the student's advisor will develop his or her program of study accordingly.

Professional Education Core: Every teacher education student, no matter his or her area
of specialization, must enroll in three common courses during the Junior year. This common "core" consists of the following:
EDF 3827 (EDU 305) Schooling in America (5)
EDG 3321 (EDU 311) General Teaching Lab I: Basic Teaching Skills (5)
EDG 3322 (EDU 312) General Teaching Lab II: Human Relation Skills (5)
Subsequent special teaching laboratories and courses build on these core courses to extend and refine understandings and skills. All programs include one full quarter of student teaching.

Bachelors programs typically require course work in the College of Arts and Sciences or one of the other Schools. These courses provide necessary subject matter preparation to go along with professional preparation.

A student graduates with a Bachelor of Science degree and is qualified for a Rank III graduate teacher certificate in a field of specialization.

Professional education courses beyond the core and offered as a part of undergraduate teacher certification programs are open only to a student who has been admitted to a teacher preparation program. Other students may be admitted by permission of the course instructor only.

## GRADUATE

Graduate courses offered by the School are also designed to be performance- or competency-based. Graduate programs are typically designed to require some course work in Education, some in the College of Arts and Sciences or one of the other Schools, and electives in any academic unit.

The specifics of any masters degree program are developed between the student and his or her advisor to reflect individual student interests within the context of professional certification requirements. A typical program will include courses, seminars, and appropriate field experiences.

The typical graduate student will complete 45 quarter hours at Florida International to earn a Master of Science in Education degree. The programs in Counselor Education and School Psychology require 90 quarter hours. As a general rule, a student may transfer 10 quarter hours taken at another accredited college or university toward a 45 -quarter hour masters degree and 15 toward a 90 -quarter hour program at Florida International. Also, 15 quarter hours of work taken as a Special Student at Florida International may be applied to a masters program if applicable to the student's major.

Reading Competencies Requirement: A State Department of Education regulation requires all applicants for certification to show evidence of having been prepared in specific skills for teaching Reading. This may be waived in graduate degree programs for students who can verify that they have received this training at the undergraduate level or in an approved inservice education program. Otherwise, and depending on one's major, either EEL 609 and ERE 606 will be required in the masters degree program.

## ADMISSION

## UNDERGRADUATE

The School will accept as an undergraduate any person who holds an Associate of Arts degree, or its equivalent, and will provide that student with a program leading to the bachelor degree and teacher certification. A student having an Associate of Science degree will also be accepted by the School and will receive assistance in developing a program of studies as required for the bachelor degree sought. Most programs require specific lower division prerequisites. These should be completed in the community college. Otherwise, admission to the School of Education may have to be delayed until this prerequisite coursework has been completed.

SPECIAL NOTE: Beginning with fall quarter, September 1977, a new State University System regulation requires that all applicants for admission to teacher education programs have an overall GPA of 2.50 as well as the Associate degree (or its equivalent).

It is possible for an applicant who fails to meet this criteria to appeal the admission decision and be considered under the Board of Regents' ten per cent policy. This policy allows up to 10 per cent of the undergraduate students seeking admission to a teacher education program for a particular year to be admitted as exceptions to the above criteria.

## GRADUATE

A student applying for admission to graduate study must meet the criteria used in The State University System of Florida. Presently these are either a 3.0 or " $B$ " average in the upper division or a combined score of 1,000 on the Graduate Record Examination (verbal and quantitative aptitude sections). A special CLEP examination may be used in lieu of the GRE test by certain students seeking admission to the masters degree program in Vocational Education.

Unless otherwise specified, masters degree programs require that an applicant hold or qualify for a Florida Rank III certificate in his/her selected major as a condition for acceptance. Exceptions to this are clearly indicated in division statements on graduate admissions. Further, programs may have admission stipulations that go beyond these criteria.

The student should carefully check this catalog and consult with the Division office in the School that is responsible for the academic major in which he or she is interested before applying for graduate admission to the University to be sure that all admissions criteria are known.

## GRADING SYSTEM AND POLICIES

Course work in the School of Education is graded A, B, C, D, CR, NC (see page 16 for further information.)

Undergraduate students must maintain an overall GPA of 2.0 in order to graduate. The grade of $D$ is not accepted toward graduation in any required program of study course, be it in the School of Education or any other unit of the University. Further, a student will not be approved for student teaching with a grade of $D$ in any required program of study course.

Graduate students must maintain an overall GPA of 3.0 in order to graduate. Further, no more than two $C$ grades and no $D$ grades received in courses that are a part of a master's degree program of study will be accepted toward graduation.

# DIVISION OF GENERAL PROFESSIONAL EDUCATION AND EDUCATIONAL ADMINISTRATION 

The Division offers masters programs in Administration and Supervision and the undergraduate "core" courses required for every teacher education student.

## UNDERGRADUATE COURSES

The Division offers the three "core" courses required for every teacher education student: EDU 305, EDU 311, and EDU 312.

## GRADUATE PROGRAMS

The Division offers masters degrees in Elementary School Administration and Supervision, Secondary School Administration and Supervision, and General School Administration and Supervision (combined Elementary and Secondary). The Master of Science degree is awarded on successful completion of all requirements and qualifies for Rank II certification in Administration and Supervision in Florida. As soon as students are admitted to the master's degree program they should see their assigned advisors to plan a program of studies.

Requirements for each of the three programs are outlined below. In addition to the re-
quirements shown below each student must satisfy, prior to obtaining the degree, a state requirement in the teaching of reading. The reading requirement may be satisfied by successful completion of one of the following alternatives: (1) an appropriate course or courses taken as part of the undergraduate program, (2) EEL 609, Instruction in Reading, or ERE 606. Teaching of Reading in the Secondary School, at Florida International University, (3) an approved course taken at another accredited institution, or (4) an approved in-service course.

An applicant to the program in School Administration or Supervision must meet the Board of Regents criteria for admission to graduate study, possess or be qualified for a Florida Rank III graduate certificate and have completed at least one year of successful teaching as a fulltime teacher in an elementary or secondary school. (Service as an aide or substitute does not meet the experience requirement.)

In addition, the Division offers a number of advanced general courses, some of which are requirements of various masters degree programs offered by the School. Among these offerings are courses in Instructional Technology, Instructional Media, Analysis of Teaching, Educational Research, and Comparative and International Education.

## ELEMENTARY SCHOOL ADMINISTRATION AND SUPERVISION

## Campus Location: Tamiami Campus only

DEGREE: Master of ScienceQuarter Hours
Core Requirements ..... 16
EDA 6061 (EDA 605) The Organization and Operation of Public School Systems ..... 4
EDS 6050 (EDA 608) Supervision in Education ..... 4
EDG 6250 (EDA 609) Curriculum Development ..... 4
EDF 5481 (EDU 507) Analysis and Application of Educational Research ..... 4
Other Courses ..... 23-25
EDA 6510 (EDA 606) The Administration of an Elementary School ..... 4
EDG 6285 (EDA 615) Curriculum Evaluation andImprovement in Urban School Systems4EDS 6115 (EDA 616) Staff Development Programs inUrban School Systems4
EDA 6223 (EDA 617) Emerging Designs for School Organization and Staff Utilization ..... 4
EEC 6262 (EEL 605) Curriculum Design for Childhood Education ..... 4
EDA 6943 (EDA 695) Supervised Field Experience ..... 3-5
Electives: from Education, School of Business and Organizational Sciences, or College of Arts and Sciences ..... 4-6
SECONDARY SCHOOL ADMINISTRATION AND SUPERVISION
Campus Location: Tamiami Campus only
DEGREE: Master of Science
Quarter Hours
16
Core Requirements
4
EDA 6061 (EDA 605) The Organization and Operation of Public School Systems
4
EDS 6050 (EDA 608) Supervision in Education
4
EDG 6250 (EDA 609) Curriculum Development4
Other Courses ..... 23-25
EDA 6530 (EDA 607) The Administration of a Secondary School ..... 4
EDG 6285 (EDA 615) Curriculum Evaluation and Improvement in Urban School Systems ..... 4
EDS 6115 (EDA 616) Staff Development Programs in Urban School Systems ..... 4
EDA 6223 (EDA 617) Emerging Designs for School Organization and Staff Utilization ..... 4
ESE 6215 (EDS 625) Secondary School Curriculum ..... 4
EDA 6943 (EDA 695) Supervised Field Experience ..... 3-5
Electives: from Education, School of Business and Organizational Sciences, or College of Arts and Sciences ..... 4-6

## GENERAL SCHOOL ADMINISTRATION AND SUPERVISION

Campus Location: Tamiami Campus onlyDegree: Master of ScienceQuarter Hours
Core Requirements ..... 16
6EDA 6061 (EDA 605) The Organization and Operation ofPublic School Systems4
EDS 6050 (EDA 608) Supervision in Education ..... 4
EDG 6250 (EDA 609) Curriculum Development ..... 4
EDF 5481 (EDU 507) Analysis and Application ofEducational Research4
Other Courses ..... 4

(EDA 606) The Administration of an Elementary

(EDA 606) The Administration of an Elementary  School  School (EDA 607)
School
EDA 6530 (EDA 60ל) The Administration of a Secondary
EDA 6530 (EDA 60ל) The Administration of a Secondary4
EDG 6285 (EDA 615) Curriculum Evaluation and Improvement in Urban School Systems ..... 4
EDS 6115 (EDA 616) Staff Development Programs in Urban School Systems ..... 4
EDA 6223 (EDA 617) Emerging Designs for School Organization and Staff Utilization ..... 4
(EDA 617) Emerging Designs for School
EEC 6262 (EEL 605) Curriculum Design for Childhood Education ..... 4
ESE 6215 (EDS 625) Secondary School Curriculum ..... 4
EDA 6943 (EDA 695) Supervised Field Experience ..... 3-5
$\square$
$\square$
31-334

## COURSE OFFERINGS

## GENERAL PROFESSIONAL EDUCATION

[^2]EDF 5481 (EDU 507) ANALYSIS AND APPLICATION OF EDUCATIONAL RESEARCH (4) (F,W,S,SS) Competencies required for the design, implementation, and evaluation of educational research, including problem formulation and analysis, sample selection, instrument selection, formulation of research design and procedure, and data analysis.
EDF 5955 (EDU 508) FIELD STUDY ABROAD (5-10) (ARR) Development of international and cross-cultural understandings of educational philosophies and systems through planned travel and study abroad.
EDF 5710 (EDU 509) NATIONAL EDUCATIONAL SYSTEMS: A COMPARATIVE ANALYSIS (4) (W) Examination of educational structures and guiding educational objectives in a limited number of both developed and developing countries. Analysis of the responses of national educational systems to common educational issues.
EDF 5724 (EDU 510) AFRICAN EDUCATIONAL SYSTEMS: A COMPARATIVE APPROACH (4) (S). Contemporary trends and issues of education in selected independent African countries with historical analysis of colonial educational policies and practices.
EDF 5720 (EDU 514) LATIN AMERICAN EDUCATION: AN HISTORICAL AND CONTEMPORARY OVERVIEW (4) (S) Historical and current development of Latin American education and analysis of the principal forces shaping this development. EDF 5780 (EDU 515) INTERCULTURAL EDUCATION: NATIONAL AND INTERNATIONAL PERSPECTIVES (4) (F) Analysis of concepts and programs of intercultural and international education. Consideration of the role of education in fostering intercultural understanding both nationally and internationally.
EME 5315 (EDU 516) INSTRUCTIONAL MEDIA (4) (W) Development of competencies required for effective selection and utilization of instructional media. Consideration of criteria for sources, selection, evaluation and methods of implementing media.
EDF 5430 (EDU 517) MEASUREMENT AND EVALUATION IN EDUCATION (4) (F) Competencies required for the design, construction or selection, and evaluation of measuring instruments.
EDF 5216 (EDU 518) AFFECTIVE LEARNING IN THE CLASSROOM (4) (S) A behavioral approach to affective teaching techniques, including theoretical background, behavioral definitions, writing affective objectives, and evaluation of affective learning in the classroom. A field experience will be included.
EDF 5905 (EDU 595) INDIVIDUAL STUDY (1-5) (ARR.) The student plans and carries out an independent study project unCer direction. For topics directly related to content of EDU courses. May not substitute for regular course offerings. Prerequisite: Written permission of the chairman of the division and then approval of the instructor.
EDF 6486 (EDU 605) RESEARCH METHODS IN EDUCATION: EXPERIMENTAL DESIGN AND ANALYSIS (5) (W) Competencies required for the design and analysis of complex educational problems, including formulation of pre-experimental, true experimental, quasi-experimental, and factorial designs, and related analyses. Prerequisite: EDU 507.
EOF 6215 (EDU 606) APPLICATION OF LEARNING THEORY TO INSTRUCTION (4) (W) Competencies required for analysis of learning theories of selected theorists and application of these theories to components of an instructional system.
EDG 6925 (EDU 697) WORKSHOP IN GENERAL PROFESSIONAL EDUCATION (3-5) (ARR). Offers an opportunity for school personnel to participate in a problem-oriented workshop in fields of general professional education.

## EDUCATIONAL ADMINISTRATION AND SUPERVISION

EDA 6061 (EDA 605) THE ORGANIZATION AND OPERATION OF PUBLIC SCHOOL SYSTEMS (4) (F,SS) Examines the public school system as a complex formal organization, identifying the dynamics of community-school interactions, goal clarification and program evaluation, procurement and allocation of resources, and the legal context within which the school system operates.
EDA 6510 (EDA 606) THE ADMINISTRATION OF AN ELEMENTARY SCHOOL (4) (F,S) Development of competencies required to assume the role of principal of an elementary school, with particular attention to the urban setting. Prerequisite: EDA 605.

EDA 6530 (EDA 607) THE ADMINISTRATION OF A SECONDARY SCHOOL (4) (F, S) Development of competencies required to assume the role of principal of a secondary school, with particular attention to the urban setting. Prerequisite: EDA 605.
EDS 6050 (EDA 608) SUPERVISION IN EDUCATION (4) (W,SS) Examines supervision as a process and the supervisory role in an educational setting, with particular attention to the development of supervision skills necessary to facilitate both individual and group change.
EDG 6250 (EDA 609) CURRICULUM DEVELOPMENT (4) (W,SS) Development of basic technical constructs of curriculum. Planning of reality-based educational programs at all levels of schooling.
EDG 6285 (EDA 615) CURRICULUM EVALUATION AND IMPROVEMENT IN URBAN SCHOOL SYSTEMS (4) (W,SS) Development of skills in curriculum evaluation and strategies for improvement of on-going curriculum. Prerequisite: EDA 609.
EDS 6115 (EDA 616) STAFF DEVELOPMENT PROGRAMS IN URBAN SCHOOL SYSTEMS (4) (F,SS) Identification and analysis of various staff training strategies and techniques used in an educational setting with an emphasis on defining staff problems and the processes by which such problems are solved.
EDA 6223 (EDA 617) EMERGING DESIGNS FOR SCHOOL ORGANIZATION AND STAFF UTILIZATION (4) (W,SS) Critical analysis of alternatives to traditional school organization and staffing and possible future alternatives in public education.
EDA 6943 (EDA 695) SUPERVISED FIELD EXPERIENCE (3-5) (F,W,S) Development of supervisory skills by undertaking an arranged field-based assignment. Prerequisites: The student must be in a master's degree program in educational administration or supervision at this university. Prerequisite: Completion of all required program courses.
EDA 6930 (EDA 696) SEMINAR IN SCHOOL ADMINISTRATION/SUPERVISION (3) (S) In-depth study of selected issues and developments in school administration and supervision, including an examination of related research.
EDA 6928 (EDA 697) WORKSHOP IN SCHOOL ADMINISTRATION/SUPERVISION (3-5) (ARR.) Offers an opportunity for experienced school administrators and supervisors to participate in a problem-oriented workshop.
EDA 6905 (EDA 698) INDIVIDUAL STUDY IN SCHOOL ADMINISTRATION/SUPERVISION (1-5) (ARR.) For advanced students wishing to undertake an individual project directly related to school administration or supervision. May not substitute for regular course offerings. Prerequisites: (1) The student must be in a master's degree program in educational administration or supervision at this university, and (2) Written permission of the chairman of the division and then approval of the instructor.

## DIVISION OF CHILDHOOD EDUCATION

The Division offers programs at the bachelors and masters levels. All programs satisfy teacher certification standards of the State of Florida.

## UNDERGRADUATE PROGRAMS

A student enrolled in the Division may pursue a bachelors degree program in Elementary Education.

Students desiring certification in Early Childhood Education can meet the requirement satisfying the area of concentration in Early Childhood Education.

A student major in the Division is, upon admission to the University, assigned an advisor who will assist the student in planning a program of study. The program of study must comply with the degree requirements of the University, and will reflect the career goals of the student. Upon completion of the program of study, the student is awarded a Bachelor of Science Degree, and qualifies for Rank III Certification in the State of Florida. The typical program of study is outlined below.

## STUDENT TEACHING AND LABORATORY EXPERIENCES

All undergraduate courses offered by the Division require a minimum of three (3) hours per week, per course, of observation and participation in designated schools. These experiences are a required segment of all courses.

The student teaching assignment is fulfilled in designated schools under the direction of classroom teachers and University faculty. This experience is on a full-time basis for a complete quarter. Permission will be contingent upon successful completion of all other requirements specified in the program of study. In general, the student is expected to enroll for student teaching in the senior year. Student teaching is not offered in the Summer quarter.

An application for student teaching may be obtained from the Office of Student Information and Academic Advising in the School of Education, and should be returned to that office early in the quarter following completion of 135 quarter hours of credit and no later than two quarters prior to the time of registration for student teaching.

## ELEMENTARY EDUCATION, GRADES 1-6

Campus Location: Tamiami and North Miami Campuses
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Required Courses: An Associate of Arts Degree or equivalent preparation in basic general education. A student must complete equivalents of the courses noted below. Otherwise they must be completed at the University.

MAE 4810 and MAE 4811 (MAS 401) and (MAS 402)
Art Skills
Music Skills
Two science courses selected from Biological and/or Physical Sciences. Foundations of Education (see p. 159).

UPPER DIVISION PROGRAM
Professional Education:
EDF 3827 (EDU 305) Schooling in AmericaEDG 3321 (EDU 311) General Teaching Laboratory I5
EDG 3322 (EDU 312) General Teaching Laboratory II ..... 55
(EEL 307) Health and Physical Education for Children ..... 5ARE 3314 (EEL 318) Experiencing Art In The ElementarySchool5

Quarter Hours 75
MUE 3113 (EEL 319) Experiencing Music In The Elementary School 5
RED 4310 (EEL 401) Communication Skills I ..... 5
RED 4311 (EEL 402) Communication Skills II ..... 5
LAE 4312L (EEL 403) Communication Skills III ..... 5
SSE 4354L (EEL 411) Inquiry in Social Studies in Elementary School ..... 5
MAE 4312 (EEL. 413) Inquiry in Mathematics In The Elementary School ..... 5
SCE 4310 (EEL 414) Inquiry In Science In The Elementary School ..... 5
EDE 4943 (EEL 425) Student Teaching ..... 15

Each Elementary Education major must complete a study program in an area of concentration consisting of at least 15 quarter hours to extend the student's background of information and understanding in an area of his or her choice. A wide variety of choices exists. The student should consult with his or her advisor for this information.

## GRADUATE PROGRAMS

Masters programs are offered in the areas of Elementary Education, Early Childhood Education, and Reading Education. The programs are designed to prepare professional educators for the role of master teacher and leadership roles in these areas.

Applicants for admission to programs in Elementary Education and Early Childhood Education must: (1) hold or qualify for a Florida Rank III certificate in Elementary Education, and (2) satisfy scholastic aptitude as determined by the Graduate Admissions standards.

Requirements for admission to the Masters in Reading Program are: (1) completion of an appropriate undergraduate teacher education program, (2) satisfactory scholastic aptitude as determined by the Graduate Admission standards and (3) three years of teaching experience after completion of the undergraduate degree.

Upon completion of his or her program, the student is awarded the Master of Science degree and qualifies for Rank II certification in the State of Florida.

A student must file a program of study with his or her advisor. The program of study must comply with the general masters degree requirements and reflect the career goals of the student. A typical program of study consists of 45 quarter hours of course work. Generally, ten quarter hours of graduate study from another accredited college or university may be transferred if applicable to the student's program.

## ELEMENTARY EDUCATION

Campus Location: Tamiami and North Miami Campuses.
DEGREE: Master of Science

## Quarter Hours

General Professional Education: ..... 12EEC 6262 (EEL 605) Curriculum Design For ChildhoodEducation4
EDF 5481 (EDU 507) Analysis And Application Of Educational Research ..... 4
One course in sociology or psychology (consult advisor) ..... 4
Area of Specialization:24
EDE 6053 (EEL 606) Educational Programs For OlderChildren4
RED 6147 (EEL 609) Instruction in Reading ..... 4
(Other courses to be selected from among EEL course listings) ..... 16
Electives:9

## EARLY CHILDHOOD EDUCATION

Campus Location: Tamiami and North Miami Campuses.
DEGREE: Master of Science
Quarter Hours
General Professional Education: 12
EEC 6262 (EEL 605) Curriculum Design For Childhood 4
EDF $5481 \begin{gathered}\text { (EDU 507) Analysis \& Application Of Educational } \\ \text { Research }\end{gathered}$
One course in sociology or psychology (consult advisor) 4
Area of Specialization:
EEC 6205 (ECE 606) Education Programs For Younger $\quad$ Children
RED 6656 (ECE 609) Instruction in Reading 4
(Other courses to be selected from ECE course listings) 16
Electives:
9

## READING

Campus Location: Tamiami and North Miami Campuses.

4
EEC 6262 (EEL 605) Curriculum Design For Childhood Education

4
EDF 5430 (EDU 517) Measurement And Evaluation In Education
Area of Specialization:
4
(Courses to be selected in consultation with your advisor)
Electives:

## 4

## COURSE OFFERINGS

Note-Each course requires a minimum of 3 hours per week in laboratory and field work.
-_ (EEL 307) HEALTH AND PHYSICAL EDUCATION FOR CHILDREN (5) (F,W,S,SS) Designed to provide competencies necessary for the development and implementation of programs concerning use of leisure time and maintenance of personal health and family life. Prerequisites: EDU 305, EDU 311, and EDU 312.
ARE 3314 (EEL 318) EXPERIENCING ART IN THE ELEMENTARY SCHOOL (5) (F,W,S,SS) Designed to provide the student with competencies necessary for the development and implementation of art experiences in the elementary curriculum. Prerequisites: EDU 305, EDU 311, EDU 312, Art skills or equivalent.
MUE 3113 (EEL 319) EXPERIENCING MUSIC IN THE ELEMENTARY SCHOOL (5) (F,W,S,SS) Designed to provide the student with competencies necessary for the development and implementation of music experiences in the elementary curriculum. Prerequisites: EDU 305, EDU 311, EDU 312, Music skills or MUE 375.
RED 4310 (EEL 401) COMMUNICATION SKILLS I (5) (F,W,S,SS) Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of reading. Prerequisites: EDU 305, EDU 311, and EDU 312. RED 4311 (EEL 402) COMMUNICATION SKILLS II (5) (F,W,S,SS) Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children using language arts activities to enhance communications skills. Prerequisite: EEL 401.
LAE 4312 (EEL 403) COMMUNICATION SKILLS III (5) (F,W,S,SS) Designed to implement and expand upon the teaching competencies of EEL 401 and EEL 402 in a classroom management practicum. Prerequisites: EEL 401 and EEL 402.
SSE 4354L (EEL 411) INQUIRY IN SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (5) (F,W,S,SS) Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children using social studies as a mode of inquiry. Prerequisites: EDU 305, EDU 311, EDU 312.
MAE 4312 (EEL 413) INQUIRY IN MATHEMATICS IN THE ELEMENTARY SCHOOL (5) (F,W,S,SS) Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children using mathematics as a mode of inquiry. Prerequisites: EDU 305, EDU 311, EDU 312, MAS 401 and MAS 402 or equivalent.

SCE 4310 (EEL 414) INQUIRY IN SCIENCE IN THE ELEMENTARY SCHOOL (5) (F,W,S,SS) Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children using science as a mode of inquiry. Prerequisites: EDU 305, EDU 311, and EDU 312.
EDE 4943 (EEL 425) STUDENT TEACHING (15) (F,W,S) A field experience in an elementary school where the student serves as a teacher associate, demonstrating competencies acquired throughout the program. Prerequisite: All EEL courses.
EDE 4202 (EEL 451) BILINGUAL SCHOOL CURRICULUM AND ORGANIZATION (5) (F) Development of a theoretical understanding of the nature of bilingualism, a rationale for bilingual education, and a set of principles and skills for organizing bilingual/bicultural curriculum experiences in the elementary school. Prerequisites: EDU 305, EDU 311, EDU 312.
LAE 4810 (EEL 452) TEACHING ENGLISH AS A SECOND LANGUAGE (5) (W) Development of instructional skills, techniques, and strategies for teaching English as a second language in the elementary school. Prerequisites: EDU 305, EDU 311, EDU 312, and English proficiency.
FLE 4871 (EEL 453) TEACHING SPANISH-S (5) (S) Development of understandings and teaching skills needed in presenting integrated non-official language/language arts programs which would consider factors of languages and cultures in contrast. Prerequisites: EDU 305, EDU 311, EDU 312, \& Spanish proficiency.
FLE 4870 (EEL 454) TEACHING SPANISH AS A SECOND LANGUAGE (5) (SS) Development of instructional skills, techniques, and strategies for teaching Spanish to non-native speakers of Spanish in the elementary school. Prerequisites: EDU 305, EDU 311, EDU 312, \& Spanish proficiency.
LAE 5414 (EEL 518) CHILDREN'S LITERATURE (5) (F) Designed to develop a critical analysis of the purposes, strategies and evaluative techniques of literature for children. Prerequisites: EEL 401, EEL 402.
MAE 5519 (EEL 525) OIAGNOSIS AND REMEDIATION IN MATHEMATICS (4) (F) Strategies for studying symptoms, causes and consequences for children in the teaching of elementary school Mathematics, supervised case study; theoretical models. Prerequisite: EEL 413.
EEC 6262 (EEL 605) CURRICULUM DESIGN FOR CHILDHOOD EDUCATION (4) (F,SS) A study of curriculum theory, construction and evaluation.
EDE 6053 (EEL 606) EDUCATIONAL PROGRAMS FOR OLDER CHILDREN (4) (W) Programs developed for older children; curriculum trends based on contemporary psychological, educational and sociological research.
EEC 4301 (ECE 401) EARLY CHILDHOOD EDUCATION PROGRAMS (5) (F,S) Philosophy and theories of early childhood education; physical, emotional, social and mental development. Observation and participation are required. Senior class status required.
EEC 4204 (ECE 402) CURRICULUM AND INSTRUCTION IN EARLY CHILDHOOD EDUCATION (5) (W,S) Practical considerations of basic principles, experiments, research and trends related to early childhood education; materials and techniques of teaching and working with parents. Observation and participation are required. Senior class status required.
EEC 4611 (ECE 403) TRENOS IN EARLY CHILDHOOD EDUCATION (5) (F,W) To develop an understanding of and the skills for dealing with critical issues; assessing the progress of contemporary programs locally and nationally; and recommending solutions for current problems.
EEC 6205 (ECE 606) EDUCATION PROGRAMS FOR YOUNGER CHILDREN (4) (W) Programs developed for young children; curriculum trends based on contemporary psychological, educational and sociological research.
EEC 5911 (ECE/EEL 595) INDIVIDUAL STUDY IN EARLY CHILDHOOD/ELEMENTARY EDUCATION (1-5) (F,W,S,SS) Individual investigation in the area of instruction. Permission of instructor.
SSE 6347 (ECE/EEL 607) INSTRUCTION IN SOCIAL LEARNING (4) (S) Refinement of skills related to program development, methods of teaching, selection of materials and review of research.
LAE 6319 (ECE/EEL 608) INSTRUCTION IN LANGUAGE ARTS (4) (W) Refinementof skills related to program development, methods of teaching, selection of materials and review of research.
RED 6656 (ECE/EEL 609) INSTRUCTION IN READING (4) (F,SS) Refinement of skills related to program development, methods of teaching, selection of materials and review of research.
MAE 6318 (ECE/EEL 615) INSTRUCTION IN MATHEMATICS (4) (W,SS) Refinement of skills related to program development, methods of teaching, selection of materials and review of research.
SCE 6117 (ECE/EEL 616) INSTRUCTION IN SCIENCE (4) (F) Refinement of skills related to program development, methods of teaching, selection of materials and review of research.
MUE 6240 (ECE/EEL 617) INSTRUCTION IN MUSIC (4) (S) Refinement of skills related to program development, methods of teaching, selection of materials and review of research.
ARE 6246 (ECE/EEL 618) INSTRUCTION IN ART (4) (S) Refinement of skills related to program development, methods of teaching, selection of materials and review of research.
EEC 6942 (ECE/EEL 695) SUPERVISED FIELD EXPERIENCE IN EARLY CHILDHOOD/ELEMENTARY EDUCATION (5-15) (W,S) Field work in educational institutions and organizations.
EEC 6932 (ECE/EEL 696) SEMINAR IN EARLY CHILDHOOD/ELEMENTARY EDUCATION (3) (W) Advanced study of critical issues and problems in early childhood/elementary education.
EEC 6926 (ECE/EEL 697) WORKSHOP IN EARLY CHILDHOOD/ELEMENTARY EDUCATION (3-5) An opportunity for teachers to continue to develop competency in a specified area under the guidance of a specialist in selected fields.
-_ (ERE 503) ANALYSIS AND PRODUCTION READING MATERIALS (5) (S) Exploration, creation and evaluation of basic reading materials, commercial and non-commercial. Prerequisite: EEL 401 or equivalent.
RED 6546 (ERE 601) DIAGNOSIS OF READING DIFFICULTY (5) (F) Technique for analyzing and clarifying reading difficulties. Prerequisite: EEL 401 or its equivalent. Permission of instructor.
RED 6548 (ERE 602) PROGRAMS OF REMEDIATION IN READING (5) (W) A course demonstrating corrective and remedial procedures; application of specific psychological, pedagogical, and psychotherapeutic techniques. Prerequisites: EEL 401 and ERE 601 or their equivalents. Permission of instructor.
RED 6333 (ERE 606) TEACHING READING IN THE SECONDARY SCHOOL (4) (W) Development of skills necessary to identify reading problems in the classroom. Emphasis on how to use reading inventories and diagnostic tests as well as material and

RED 6747 (ERE 625) RESEARCH IN READING (4) (W) A course to study significant research in reading, research methodology; planning and research in reading. Permission from instructor required. Prerequisites: EDU 507, EDU 517.
RED 6805 (ERE 626) PRACTICUM IN READING (4) (S) An analysis of reading difficulties through various teaching techniques and programs.
RED 6247 (ERE 628) ORGANIZATION AND SUPeRVISION OF READING PROGRAM (4) (F) The organization and supervision of reading programs, problems of organization and supervision; continuity of school wide programs; emphasis on leadership responsibilities. Prerequisites: EDU 507, EDU 517.
RED 6845 (ERE 629) CLINICAL PROCEDURES IN READING (4) (SS) Supervised experience, resulting in diagnosis, prescription and evaluation of particular children in a clinical setting.

## DIVISION OF SECONDARY EDUCATION

The Division offers bachelors degree programs for the preparation of teachers for teaching in secondary schools, art and music in grades 1-12, and masters degree programs designed for the continued professional development of teachers.

Unlike traditional programs in secondary education, which emphasize course completion as a sufficient condition for awarding a degree, the programs of the Division emphasize demonstrated performance in specific teaching skills as the main criterion for awarding a degree.

## UNDERGRADUATE PROGRAMS


#### Abstract

Mathematics Education Modern Language Education<br>Physics Education<br>Social Studies Education

A student enrolled in the Division may pursue the following programs: General: Grades 1-12 Art Education Music Education Secondary Education: Grades 7-12 Biology Education Chemistry Education English Education History Education A student major in the Division is, after being admitted to the University, assigned an advisor in his or her teaching field who will assist the student in constructing a program of study. The program of study must comply with the University's degree requirements and reflect the career goals of the student. Upon completion of the program of study, the student is awarded a Bachelor of Science degree with a major in a specific subject matter area, and qualifies for the appropriate Rank III Certification in the State of Florida.

All courses taken in the College of Arts and Sciences which are to be applied to an Education Major must be evaluated using the letter grade system.

Students wishing to obtain a second major or second degree in the College of Arts and Sciences should consult an advisor in the field of study they wish to pursue.


## STUDENT TEACHING AND LABORATORY EXPERIENCES

Most courses offered by this Division require observation and participation in selected schools. These experiences are a required segment of certain courses and are identified in each course description.

The student teaching assignment is fulfilled in designated field centers under the direction of classroom teachers and University faculty. This experience is on a full-time basis for a complete quarter. Permission to student teach will be contingent upon completion of all other requirements specified in the program of study. Students may be assigned to student teach during the Winter or Spring Quarter of the senior year. There is no student teaching in the Summer Quarter.

Application for student teaching is the responsibility of the student. Necessary forms may be obtained from the Office of Student Information and Academic Advising in the School of Education, and should be returned to that office early in the quarter following completion of 135
quarter hours of credit and no later than two quarters prior to the time of registration for student teaching.

## ART EDUCATION GRADES 1-12

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Required Courses: 1) An Associate of Arts degree in art, or (a) Art History Survey (6 semesters hours) and (b) Basic and Figure Drawing ( 6 semester hours) and (c) Two and Three Dimensional Design ( 6 semester hours) and 2) Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the Student's Upper Division Program.
UPPER DIVISION PROGRAM:
Subject Matter Specialization:
Quarter Hours
ARH 4470 (ARH 475) Contemporary Art, 5
Art History Elective
ART 3510C (FIA 325) Painting 5
ART 3702C (FIA 335) Sculpture 5
ART 3150C (FIA 337) Jewelry and Metals 5
ART 3401C (FIA 345) Printmaking 5
ART 3601C (FIA 355) Photography 5
ART 3111C (FIA 361) Ceramics 5
Art Elective 5
Professional Education
EDF 3827 (EDU 305) Schooling in America K-14 5
EDG 3321 (EDU 311) General Teaching Laboratory I 5
EDG 3322 (EDU 312) General Teaching Laboratory II 5
Reading Requirement
RED 4325 (EDS 401) Special Teaching Laboratory; Reading 5
Special Methods and Student Teaching:
A student must complete the 10 quarter hours of foundations courses, and all core courses before enrolling in 400 level special methods courses.
EAR 405 and EAR 416 Must be taken in sequence before EAR 425.
ARE 4316 (EAR 405) Special Teaching Laboratory: Art in Grades K-6

5
(minimum prerequisite or corequisite of 30 hours required in subject matter specialization)
ARE 4341 (EAR 416) Special Teaching Laboratory: Art in Grades 7-12

5
(minimum prerequisite or corequisite of 30 hours required in subject matter specialization)
ARE 4940 (EAR 425) Student Teaching in Art 15
90

## MUSIC EDUCATION: GRADES 1-12

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION
Required Courses: An Associate of Arts degree in Music or the following recommended courses: applied, 12 quarter hours; history 6 quarter hours; organizations, 6 quarter hours; techniques secondary instruments, 6 quarter hours; theory, 18 quarter hours;
sight-singing, 6 quarter hours; Foundations in Education, 10 quarter hours. If Foundations in Education requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.

## UPPER DIVISION PROGRAM

Subject Matter Specialization:
Applied Music (Five quarters; $1 / 2$ hour lessons on major
instrument each quarter)
Conducting Basic 2
Beginning Instrumental or Choral 2
Form and Analysis 5
Counterpoint 5
Guitar 2
Twentieth Century Music History 5
Orchestration or Choral Techniques 5
Organizations (5 quarters) 10
Professional Education:
EDF 3827 (EDU 305) Schooling in America K-14 5
EDG 3321 (EDU 311) General Teaching Laboratory I 5
EDG 3322 (EDU 312) General Teaching Laboratory II 5
Reading Requirement:
RED 4325 (EDS 401) Special Teaching Laboratory: Reading 5
Special Methods and Student Teaching:
A student must complete the 10 quarter hours of foundations courses and all core courses before enrolling in 400 level special methods courses. A student must enroll for EMU 305, 406 and EMU 425 in consecutive quarters.

- (EMU 305) Special Teaching Laboratory I (music)
5
MUE 4341 (EMU 406) Special Teaching Laboratory II (music)
5
(minimum prerequisite or corequisite of 30 hours required in subject matter specialization)
MUE 4940 (EMU 425) Student Teaching (Elementary \& Secondary)
15
Electives:
Sufficient number of hours to make a total of 90 quarter hours at Florida International.


## BIOLOGY EDUCATION: GRADES 7-12

Campus Location: Tamiami campus only
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Required Courses: 12 quarter hours ( 8 semester hours) of biology; 12 quarter hours ( 8 semester hours) of general chemistry; 12 quarter hours ( 8 semester hours) of general physics; mathematics through analytical geometry; and Foundatiors of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the students upper division program.
UPPER DIVISION PROGRAM:
Quarter Hours
Subject Matter Specialization:
Genetics
5
Biochemistry 7
Molecular Biology 7
Developmental Biology ..... 5
Electives in Biology* ..... 10
Organic Chemistry ..... 7
Quantitative Analysis ..... 5
Professional Education:40
EDF 3827 (EDU 305) Schooling in America K-14 ..... 5
EDG 3321 (EDU 311) General Teaching Laboratory। ..... 5
EDG 3322 (EDU 312) General Teaching Laboratory II ..... 5
Reading Requirement:
RED 4325 (EDS 401) Special Teaching Laboratory: Reading ..... 5
Special Methods and Student Teaching:A student must complete ten (10) quarter hours of founda-tions courses and all core courses before enrolling in 400level special methods courses. A student must enroll for(EDS 408) and (EDS 425) in consecutive quarters.
SCE 4330 (EDS 408) Special Teaching Laboratory: Science
(minimum prerequisite or corequisite of 30hours required in subject matterspecialization)5
LAE 4942 (EDS 425) Student Teaching ..... 15
Electives:
Sufficient number of hours to make a total of 90 quarter hours at Florida International.
90
*BSC 300, 305, 306, 308, 364, 374, 380, and 480 are not applicable to this requirement.

## CHEMISTRY EDUCATION: GRADES 7-12

Campus Location: Tamiami campus only
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Required Courses: 12 quarter hours ( 8 semester hours) of general chemistry; 12 quarter hours ( 8 semester hours) of general physics, mathematics through Calculus I and Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.
Recommended Courses: Organic Chemistry

## UPPER DIVISION PROGRAM:

| Subject Matter Specialization | Quarter Hours |  |
| :--- | ---: | ---: |
| Organic Chemistry I and II | 10 | $36-38$ |
| Organic Chemistry Laboratories | 4 |  |
| Quantitative Analysis and Laboratories | 5 |  |
| Physical Chemistry and Laboratory | 7 |  |
| Electives in Chemistry | $5-7$ |  |
| Calculus II | 5 | 40 |
| Professional Education: | 5 |  |
| EDF 3827 (EDU 305) Schooling in America K-14 | 5 |  |
| EDG 3321 (EDU 311) General Teacing Laboratory I | 5 |  |
| EEG 3322 (EDU 312) General Teaching Laboratory II |  |  |
| Reading Requirement: | 5 |  |
| RED 4325 (EDS 401) Special Teaching Laboratory: Reading | 5 |  |
| Special Methods and Student Teaching: |  |  |
| A student must complete ten (10) quarter hours of founda- |  |  |
| tions courses and all core courses before enrolling in 400 |  |  |
| level special methods courses. A student must enroll for |  |  |
| (EDS 408) and (EDS 425) in consecutive quarters. |  |  |

SCE 4330 (EDS 408) Special Teaching Laboratory: Science (minimum prerequisite or corequisite of 25 hours required in subject matter specialization 5
LAE 4942 (EDS 425) Student Teaching 15
Electives:
Sufficient number of hours to make a total of 90 quarter hours at Florida International.

## ENGLISH EDUCATION: GRADES 7-12

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Required Courses: two courses in freshman English, two courses beyond freshman English in literature, one course in oral interpretation, and one course in advanced 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). Foundations of Education ( 10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.

## UPPER DIVISION PROGRAM:

| Subject Matter Specialization: | Quarter Hours |
| :---: | :---: |
| ENG 3500 (ENG 320) Introductory Linguistics | 5 |
| (ENG 552) Modern Grammars (prerequisite ENG 320) | 5 |
| LAE 4430 (EDS 417) Adolescent Literature | 5 |
| Literary Criticism | 5 |
| Shakespeare | 5 |
| Communications electives | 10 |
| Literature electives | 10 |
| Professional Education: | 40 |
| EDF 3827 (EDU 305) Schooling in America K-14 | 5 |
| EDG 3321 (EDU 311) General Teaching Laboratory I | 5 |
| EDG 3322 (EDU 312) General Teaching Laboratory II | 5 |
| Reading Requirement: |  |
| RED 4325 (EDS 401) Special Teaching Laboratory: Reading | 5 |
| Special Methods and Student Teaching: |  |
| A student must complete ten (10) quarter hours of foundations courses and all core courses before enrolling in 400 level special methods courses. A student must enroll for EDS 405 and EDS 425 in consecutive quarters. |  |
| LAE 4943 (EDS 405) Special Teaching Laboratory: English (minimum prerequisite or corequisite of 30 hours required in subject matter specialization) | 5 |
| LAE 4942 (EDS 425) Student Teaching | 15 |
| Electives: <br> Sufficient number of hours to make a total of 90 quarter hours at Florida International. | 5 |

HISTORY EDUCATION: GRADES 7-12
Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science

## LOWER DIVISION PREPARATION:

Required Courses: 1) Two courses in history. 2) One course in the social sciences beyond freshman social science core (select from anthropology, economics, geography, political science or sociology). 3) Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.
UPPER DIVISION PROGRAM:

Subject Matter Specialization:

1. History 301 Introduction to History
2. U.S. History at 300,400 , or 500 level
3. History other than U.S.
4. U.S. Goverment (POS 343 or POS 421)

Professional Education:
15
EDF 3827 (EDU 305) Schooling in America K-14 5
EDG 3321 (EDU 311) General Teaching Laboratory I 5
EDG 3322 (EDU 312) General Teaching Laboratory II 5
Reading Requirement:
RED 4325 (EDS 401) Special Teaching Laboratory: Reading
Special Methods and Student Teaching:
5
A student must complete the 10 hours of foundations courses and all core courses (EDU 305, 311, and 312) before enrolling in EDS 409. A student must enroll for EDS 409 and EDS 425 in consecutive quarters, either a fall-winter or a winter-spring quarter sequence.
SSE 4384C (EDS 409) Special Teaching Laboratory: Social Studies 5
LAE 4942 (EDS 425) Student Teaching 15
Electives:
Sufficient number of hours to make a total of 90 quarter hours at Florida International. It is recommended that the student consider a double major which combines a major in history education with a major in social studies, international relations, political science, economics, anthropology, sociology or history. The student must consult with the history education advisor about these requirements.

40
5
10
20
5
5

5

Quarter Hours

## MATHEMATICS EDUCATION: GRADES 7-12

Campus Location: Tamiami Campus only.
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Required Courses: Trigonometry, analytic geometry, calculus (at least one term). Foundations of Education ( 10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.
UPPER DIVISION PROGRAM:

Subject Matter Specialization:
35 quarter hours beyond calculus, including at least 10 quarter hours in probability and statistics, and 5 quarter hours in computer science.

Professional Education:
EDF 3827 (EDU 305) Schooling in America K-14 5
EDG 3321 (EDU 311) General Teaching Laboratory I 5
EDG 3322 (EDU 312) General Teaching Laboratory II 5
Reading Requirement:
RED $4325 \begin{gathered}\text { (EDS 401) Special Teaching Laboratory: } \\ \text { Reading }\end{gathered}$
Special Methods and Student Teaching:
A student must complete ten (10) quarter hours of foundations courses and all core courses before enrolling in 400 level special methods courses. A student must enroll for EDS 406 and EDS 425 in consecutive quarters.
MAE 4333C (EDS 406) Special Teaching Laboratory: Mathematics (minimum prerequisite or corequisite of 30 hours required in subject matter specialization)

5
LAE 4942 (EDS 425) Student Teaching 15
Electives:
Sufficient number of hours to make a total of 90 quarter hours at Florida International.

## MODERN LANGUAGE EDUCATION: GRADES 7-12

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Four semesters of elementary and intermediate modern language (may be waived, at the discretion of the advisor, for native speakers of the target language) and Foundations of Education ( 10 quarter hours). If foundations requirements are not met at the lower division they must be taken in addition to the 90 quarter hours required in the student's upper division program.
UPPER DIVISION PROGRAM:

## Quarter Hours

Subject Matter Specialization:
Phonetics or Contrastive Phonology 5
Intro. Linguistics or Linguistics in Target Language 5
Civilization 5
Syntax/Composition (MOL 325 or MOL 326) 5
Literature in Target Language 10
MOL Electives 15
Professional Education:
EDF 3827 (EDU 305) Schooling in America K-14 5
EDG 3321 (EDU 311) General Teaching Laboratory I 5
EDG 3322 (EDU 312) General Teaching Laboratory II 5
Reading Requirement:
RED 4325 (EDS 401) Special Teaching Laboratory: Reading
Special Methods and Student Teaching:
A student must complete the 10 quarter hours of foundations courses, and all core courses before enrolling in 400 level special methods courses. A student must enroll for EDS 407 and EDS 425 in consecutive quarters.
FLE 4375 (EDS 407) Special Teaching Laboratory:
Modern Languages (minimum prerequisite
or corequisite of 20 hours required in
subject matter specialization).

Sufficient number of hours to make a total of 90 quarter hours at Florida International.

## PHYSICS EDUCATION: GRADES 7-12

Campus Location: Tamiami campus only
DEGREE: Bachelor of Science

## LOWER DIVISION PREPARATION:

Required Courses: 12 quarter hours of general physics; 12 quarter hours ( 8 semester hours) of general chemistry; mathematics through Calculus II, and Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.
Remarks: Linear algebra, a prerequisite for multi-variable calculus (section 1 below) may be taken at the lower division or at Florida International.

## UPPER DIVISION PROGRAM:

Subject Matter Specialization:
Quarter Hours
Physics 301, 302, 303
Junior Physics Laboratory 301L-303L 15
$\begin{array}{lr}\text { Junior Physics Laboratory 301L-303L } & 6 \\ \text { Modern Physics } & 10\end{array}$
Electives in Physics 5
Multivariate Calculus 5
Professional Education:
EDF 3827 (EDU 305) Schooling in America K-14
EDG 3321 (EDU 311) General Teaching Laboratory I 5
40

EDG 3322 (EDU 312) General Teaching Laborato PII 5
Reading Requirement:
RED 4325 (EDS 401) Special Teaching Laboratory: Reading

5
Special Methods and Student Teaching:
A student must complete ten (10) quarter hours of foundations courses and all core courses before enrolling in 400 level special methods courses. A student must enroll for EDS 408 and EDS 425 in consecutive quarters.
SCE 4330 (EDS 408) Special Teaching Laboratory:
Science (minimum prerequisite or corequisite of 25 hours required in subject matter specialization) 5
LAE 4942 (EDS 425) Student Teaching 15
Electives:
9
Sufficient number of hours to make a total of 90 quarter hours at Florida International

## SOCIAL STUDIES EDUCATION: GRADES 7-12

Campus Location: Tamiami campus only
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Required Courses: 1) Two courses in history. 2) One course in the social sciences beyond freshman social science core (select from anthropology, economics, geography, political
science or sociology). 3) Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower divison, they must be taken in addition to the 90 quarter hours required in the student's upper division program.
UPPER DIVISION PROGRAM:

| Subject Matter Specialization: | Quarter Hours 30 |  |
| :---: | :---: | :---: |
| History | 10 |  |
| Political Science (POS 343 or POS 421) | 5 |  |
| Geography (INR 334) | 5 |  |
| Economics | 5 |  |
| Anthropology or Sociology | 5 |  |
| Professional Education: |  | 15 |
| EDF 3827 (EDU 305) Schooling in America K-14 | 5 |  |
| EDG 3321 (EDU 311) General Teaching Laboratory I | 5 |  |
| EDG 3322 (EDU 312) General Teaching Laboratory II | 5 |  |
| Reading Requirement: <br> RED 4325 (EDS 401) Special Teaching Laboratory: Reading | 5 | 5 |
| Special Methods and Student Teaching: |  | 20 |
| A student must complete the 10 hours of foundations courses, and all core courses (EDU 305, 311 and 312) before enrolling in EDS 409. A student must enroll for EDS 409 and EDS 425 in consecutive quarters, either a fall-winter or a winter-spring quarter sequence. |  |  |
| SSE 4384C (EDS 409) Special Teaching Laboratory: Social Studies | 5 |  |
| LAE 4942 (EDS 425) Student Teaching | 15 |  |
| Electives: |  | 20 |
| A minimum of 65 quarter hours at the lower and upper divisions combined must be completed in the social studies subject matter specialization for certification. Electives must include sufficient quarter hours in United States history (10), history other than United States (15), political science (10), geography (10), economics (10), anthropology (5) and sociology (5) to meet social studies certification requirements. It is recommended that the student consider a double major which combines a major in social studies with a major in history, history education, international relations, political science, economics, anthropology or sociology. The student must consult with the social studies advisor about these requirements. |  |  |

## GRADUATE PROGRAMS

Masters programs are offered by the Division in the following specialized areas:
Art Education Music Education English Education Mathematics Education Science Education Social Studies Education
A student must file a program of study with his or her advisor. The program of study must comply with the general masters degree requiements and reflect the career goals of the student.

Upon completion of his program, the student is awarded the Master of Science degree and qualifies for Rank II Certification in the State of Florida.

Requirements for admission to programs in Secondary Education are: (1) hold or qualify for a Florida Rank III Certificate in the area selected, (2) satisfactory scholastic aptitude as determined by the Graduate Admission standards, (3) evidence of satisfactory record in the teaching field, and (4) three letters of recommendation and a written autobiography.

A typical program of study consists of 45 quarter hours of course work. Generally, ten quarter hours of graduate study from another accredited college or university may be transferred if applicable to the student's program.

All courses taken in the College of Arts and Sciences which are to be applied to an Education Major must be evaluated using the letter grade system.

Note: If students have not met the reading requirement for certification, they will be required to take RED 6333 (ERE 606) (See p. 160).

## ART EDUCATION

Campus Location: Tamiami Campus onlyDEGREE: Master of Science
Education, including Art Education: ..... 201. EDF 5481 (EDU 507) Analysis and Application ofEducational Research4
2. ARE 6140 (EAR 605) Curriculum and Instruction in Art ..... 4
3. Select one of following: ..... 4- (EAR 505) Art for Exceptional Children andYouthEEC 6262 (EEL 605) Curriculum Design for ChildhoodEducation
ESE 6215 (EDS 625) Secondary School Curriculum
4. ARE 6262 (EAR 607) Organization and Coordination ofSchool and Community Art Programs4
5. ARE 6706 (EAR 609) Seminar in Art Education Contemporary Issues and Research ..... 4
Subject Matter Specialization:Five graduate art courses, including one art history:Art History (5)Studio Art (16)(4 quarter hours credit for each studio course)Electives:
(Minimum) 49

## ENGLISH EDUCATION

Campus Location: Tamiami Campus only
DEGREE: Master of Scence
Quarter hours
Education: ..... 16
EDF 5481 (EDU 507) Analysis and Application of Educational Research ..... 4
LAE 6339 (EDS 614*) Teaching English in the Secondary School ..... 4
ESE 6215 (EDS 625) Secondary School Curriculum ..... 4
LAE 6935 (EDS 639) Seminar in English Education ..... 4
*These courses to be taken in sequence
Teaching Field: English ..... 20
Electives: ..... 9

## MATHEMATICS EDUCATION

Campus Location: Tamiami Campus only
DEGREE: Master of Science

## Education:

EDF 5481 $\begin{gathered}\text { (EDU 507) Analysis and Application of } \\ \text { Educational Research }\end{gathered}$
MAE 6336 (EDS 609) Teaching Mathematics in the
MAE 6899 (EDS 616) Seminar in Mathematics Education 4
ESE 6215 (EDS 625) Secondary School Curriculum 4
Teaching Field: Mathematics
20
Electives: In Education and/or Mathematics 9
45

## MUSIC EDUCATION

Campus Location: Tamiami Campus only
DEGREE: Master of Science

## Education:

Quarter Hours
16
ESE 6215 (EDS 625) Secondary School Curriculum or
EEC 6262 (EEL 605) Curriculum Design for Childhood Education
EDF 5481 (EDU 507) Analysis and Application of Educational Research

4

- (EMU 616) Methodology of Music Teaching 4
(EMU 617) Seminar in Music Education 4
Teaching Field: Courses in music including
MUH 5375
(MUS 517) Twentieth Century Music
MUT 5325 (MUS 526) Arranging
MUG 5105 (MUS 534) Advanced Conducting 2
Electives:
4

4
4
9

45

## SCIENCE EDUCATION

Campus Location: Tamiami Campus only
DEGREE: Master of Science
Quarter Hours
$\begin{array}{llll}\text { Education: } \\ \text { EDF 5481 } & \text { (EDU 507) Analysis and Application of } \\ \text { Educational Research } \\ \text { SCE } 6635 & \text { (EDS 617) Teaching Science in the Secondary } \\ \text { School } & 4 & \\ \text { ESE 6215 } & \text { (EDS 625) Secondary School Curriculum } & 4 & \\ \text { SCE 6933 } & \text { (EDS 649) Seminar in Science Education } & 4 & \\ \text { Teaching Field: } \\ \text { Biology or Chemistry or Physics } \\ \text { or } \\ \text { One Course in Each of the Following Areas: Biology, Chemis- } \\ \text { try, Physics (For Junior High Science Teachers) } & 4 & \mathbf{2 0} \\ \text { Electives: }\end{array}$

SSE 6633 (EDS 619) Teaching Social Studies in the Secondary School 4
ESE 6215 (EDS 625) Secondary School Curriculum 4
EDF 5481 (EDU 507) Analysis and Application of Educational Research 4
SSE 6939 (EDS 629) Seminar in Social Studies Education 4
Teaching Field: Graduate level social science and history 20
Electives: In Education and/or Teaching Field

## COURSE OFFERINGS


#### Abstract

\section*{ART EDUCATION}

ARE 4316 (EAR 405) SPECIAL TEACHING LABORATORY: ART IN GRADES K-6 (5) (F,S) Development of instructional skills, techniques, and strategies for teaching art in the elementary school. Laboratory and field participation required. Prerequisites: EDU 305, EDU 311, EDU 312. Minimum prerequisite or corequisite of 30 hours required in subject matter specialization. ARE 4341 (EAR 416) SPECIAL TEACHING LABORATORY: ART IN GRADES 7-12 (5) (F,W) Development of instructional skills, techniques and strategies for teaching art in the junior and senior high school. Laboratory and field participation required. Prerequisites: EDU 305, EDU 311, EDU 312, EAR 405. Minimum prerequisite or corequisite of 30 hours required in subject matter specialization. ARE 4940 (EAR 425) STUDENT TEACHING IN ART (15) (W,S) Supervised teaching in an elementary and secondary school. Prerequisites: EDU 305, EDU 311, EDU 312, EDS 401, EAR 405, EAR 416, and 30 quarter hours of the course work required in Art. ARE 5251 (EAR 505) ART FOR THE EXCEPTIONAL CHILD (5) (W,SS) Development of appropriate instructional art skills, techniques, and strategies as related to the exceptional child. Observation and field participation required. ARE 5905 (EAR 595) DIRECTED STUDY IN ART EDUCATION (1-5) Individual investigation and research in one or more areas of art education. Prerequisite: consent of professor. ARE 6140 (EAR 605) CURRICULUM AND INSTRUCTION IN ART (4) (W) Examination of theoretical bases of curriculum development in art education. Analysis of objectives, content, methods and materials for art instruction in the elementary, junior and senior high school. Prerequisite: EDU 505. ARE 6262 (EAR 607) ORGANIZATION AND COORDINATION OF SCHOOL AND COMMUNITY ART PROGRAMS (4) (F,SS) Procedures for the organization, coordination and evaluation of school, community, and in-service art programs, with particular attention to the urban multi-cultural setting.


ARE 6706 (EAR 609) SEMINAR IN ART EDUCATION: CONTEMPORARY ISSUES AND RESEARCH (4) (S) Examination of current issues and review of research in art education literature. Delineation and application of individual research problem. Prerequisite: EDU 507.
ARE 6926 (EAR 697) WORKSHOP IN ART EDUCATION (3-5) Production and application of materials and techniques in art education in a laboratory or field setting.

## MUSIC EDUCATION

_ (EMU 305) SPECIAL TEACHING LABORATORY I (5) (W,SS) Development of instructional skills, techniques, and strategies for school music performance organizations through laboratory and field experiences. Prerequisites: EDU 305,311, 312.

MUE 4341 (EMU 406) SPECIAL TEACHING LABORATORY II (5) (F,W) Field-based methods, materials and instructional skills course which prepares students for internship in an elementary and secondary school setting. Prerequisites: EDU 305, 311, 312 and EMU 305. Minimum prerequisite or corequisite of 30 hours required in subject matter specialization.
MUE 4940 (EMU 425) STUDENT TEACHING (15) (W,S) Supervised teaching in an elementary school ( 5 weeks) and a secondary school ( 5 weeks). Prerequisites: EDU 305, EDU 311, EDU 312, EMU 305, EDS 401 , EMU 406 and 30 quarter hours of the coursework required in music.
MUE 5907 (EMU 595) DIRECTED STUDY IN MUSIC EDUCATION (1-5) (ARR) Individual investigation in one or more areas of music education.
(EMU 616) METHODOLOGY OF MUSIC TEACHING (4) (W,SS) Analysis of methods, programs and materials for teaching music in the public schools, and development of music pedagogy skills.
(EMU 617) SEMINAR IN MUSIC EDUCATION (4) (F,S) Seminar in music programs in the United States and foreign countries, and current issues and problems facing the music educator.
MUE 6925 (EMU 697) WORKSHOP IN MUSIC EDUCATION (1-5) (ARR) Applications of materials and tochniques in music education in a laboratory or field setting.

## SECONDARY EDUCATION: GRADES 7-12

RED 4325 (EDS 401) SPECIAL TEACHING LABORATORY: READING (5) (F,W,S) Development of instructional skills, techniques, and strategies for teaching reading in the junior and senior high school. Attention to attaining competence in subjectmatter related reading skills.
LAE 4331 (EDS 405) SPECIAL TEACHING LABORATORY: ENGLISH (5) (F,W) Development of instructional skills, techniques, and strategies for teaching English in the junior and senior high school. Prerequisites: EDS 305, EDU 311, and EDU 312. Field experience required. Minimum prerequisite or corequisite of 30 hours in subject matter specialization.

MAE 4333C (EDS 406) SPECIAL TEACHING LABORATORY: MATHEMATICS (5) (W) Development of instructional skills, techniques, and strategies for teaching mathematics in the junior and senior high school. Prerequisites: EDU 305, EDU 311, and EDU 312. Field experience required. Minimum prerequisite or corequisite of 25 hours in subject matter specialization. FLE 4375 (EDS 407) SPECIAL TEACHING LABORATORY: MODERN LANGUAGES (5) (F,W) Development of instructional skills, techniques, and strategies for teaching modern languages in the junior and senior high school. Prerequisites: EDU 305, EDU 311, and EDU 312. Field experience required. Minimum prerequisite or corequisite of 20 hours in subject matter specialization.
SCE 4330 (EDS 408) SPECIAL TEACHING LABORATORY: SCIENCE (5) (W) Development of instructional skills, techniques and strategies for teaching biological and physical sciences in the junior and senior high schools. Prerequisites: EDU 305, EDU 311, and EDU 312. Field experience required. Minimum prerequisite or corequisite of 25-30 hours in subject matter specialization.
SSE 4384C (EDS 409) SPECIAL TEACHING LA8ORATORY: SOCIAL STUDIES (5) (F,W) Development of instructional skills, techniques, and strategies for teaching history and social science in the junior and senior high school. Prerequisites: EDU 305, EDU 311, and EDU 312. (Field experience required.)
LAE 4430 (EDS 417) EXPERIENCING ADOLESCENT LITERATURE IN THE JUNIOR-SENIOR HIGH SCHOOL (4) (S) An examination of the most familiar types of literature found in the secondary school English Curriculum today, and the development of strategies for organizing and providing a variety of literary experiences for students who differ in intellectual abilities and literary tastes.
LAE 4942 (EDS 425) STUDENT TEACHING (15) (W,S) Supervised teaching in a junior or senior high school. Prerequisites: EDU 305, EDU 311, EDU 312, EDS 401 appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization.
ESE 5908 (EDS 595) INDIVIDUAL STUDY (1-5) (ARR) The student plans and carries out an independent study project under direction. Prerequisites: Consent of chairman of the division.
MAE 6336 (EDS 609) TEACHING MATHEMATICS IN THE SECONDARY SCHOOL (4) (F) Analysis of methods, programs, and materials for teaching mathematics in the junior and senior high school and development of teaching skills.
LAE 6339 (EDS 614) TEACHING ENGLISH IN THE SECONDARY SCHOOL (4) (F) Analysis of methods, programs and materials or teaching English in the junior and senior high school and development of teaching skills.
MAE 6899 (EDS 616) SEMINAR IN MATHEMATICS EDUCATION (4) (S) Designed to provide the advanced student with deeper understanding of the current state of Mathematics Education. Major emphasis on current trends and curriculum projects on the national and international levels, as well as evaluation and research related to these trends.
SCE 6635 (EDS 617) TEACHING SCIENCE IN THE SECONDARY SCHOOL (4) (F) Analysis of methods, programs and materials for teaching science in the junior and senior high school and development of teaching skills.
SSE 6633 (EDS 619) TEACHING SOCIAL STUDIES IN THE SECONDARY SCHOOL (4) (F) Analysis of methods, programs, and materials for teaching social studies in the junior and senior high school and development of teaching skills.
ESE 6215 (EDS 625) SECONDARY SCHOOL CURRICULUM (4) (W,SS) Examination of programs, trends, and developments in curriculum and instruction in the secondary school. Consideration and evaluation of innovations.
ESE 6425 (EDS 628) RESEARCH IN SECONDARY EDUCATION (1-4) (ARR) Examination and evaluation of research studies in secondary education. Prerequisite: At least one course in research methods or equivalent competency. Determination of equivalent competency will be made by the instructor.
SSE 6939 (EDS 629) SEMINAR IN SOCIAL STUDIES EDUCATION (4) (S) Designed for advanced students, the readings and discussions will focus on policy issues and recent research in social studies education. Though primarily for experienced social studies teachers and supervisors, the course is open to administrators and others with the consent of the instructor.
LAE 6935 (EDS 639) SEMINAR IN ENGLISH EDUCATION (4) (S) Designed for advanced students, the readings and discussions will focus on policy issues and recent research in English education. Though primarily for experienced English teachers and supervisors, the course is open to administrators and others with the consent of the instructor.
SCE 6933 (EDS 649) SEMINAR IN SCIENCE EDUCATION (4) (S) Analysis of research trends and selected topics in Science Education. Mainly for graduate students in secondary Science Education. Individual needs and interests will determine the fine structure of the course content.
ESE 6947 (EDS 695) SUPERVISED FIELD EXPERIENCE (5-15) (ARR) Field work in an educational institution or organization. Prerequisite: consent of chairman of the division.
ESE 6935 (EDS 696) SEMINAR IN SECONDARY EDUCATION (1-4) (ARR) Analysis of selected problems in secondary education.
ESE 6925 (EDS 697) WORKSHOP IN SECONDARY EDUCATION (3-5) (ARR) Production and application of materials and techniques in a laboratory or field setting. Prerequisite: consent of instructor.

## DIVISION OF PSYCHO-EDUCATIONAL SERVICES

Programs sponsored by the Division train specialists to help individuals experiencing academic or social adjustment problems in the schools. Competency domains are specified for

## IN FIELD MAJORS

The following program of study is for the student who holds an undergraduate degree in Special Education from Florida International University. A student with an undergraduate major in Special Education from another institution must plan a program with his/her academic advisor to insure having the entry skills for this program.

Quarter Hours
General Professional Education: 4
EDF 5481 (EDU 507) Analysis \& Application of . Educational Research
Area of Specialization 4
*NOTE: One to three of the following courses depending on the student's preparation:
EEX 6612 (*EEC 610) Diagnostic Teaching: Systems \& Behavioral Models

4
EEX 6227 (*EEC 611) Diagnostic Teaching: Educational $\begin{gathered}\text { Assessment }\end{gathered}$
EEX $6106 \begin{gathered}\text { (*EEC 612) Diagnostic Teaching: Acquisition of } \\ \text { Reading \& Language Skills }\end{gathered}$
EEX 6846 (*EEC 613) Diagnostic Teaching: Advanced Practicum

4 Electives:



EEX 6736 (*EEC 614) Diagnostic Teaching: Consultation \& Leadership Skills

4
*NOTE: One of the following three courses depending upon area of certification pursued:
EMR 6852 (*EEC 615) Advanced Theory and Practice:
EMR 6852 (*EEC 615) Advanced Theory and Practice:
Mental Retardation or
ELD 6323 (*EEC 616) Advanced Theory and Practice: Specific Learning Disability

EED 6226 (*EEC 617) Advanced Theory and Practice:
Behavior Disorders
(EEC 695) Supervised Field Experience in
EEX 6863 (EEC 695) Supervised Field Experience in Special Eduçation 5
(PPS 600) Professional Problems, PPS 600) Professional Problems, 1
A1

EEX 6211 (PPS 621) Assessment of Behavior I (PPS 620) Professional Problems, II 2

EGC 6616 (PPS 626) Program Evaluation in PsychoEducational Services 4
EGC 6605 (PPS 630) Professional Problems, III
EX 6736 (*Eracticum or 2

## OUT OF FIELD MAJORS

A student eligible for or holding a Rank III certificate in other areas of education should consult with an academic advisor for evaluation of entry competencies to the program. If entry competencies cannot be demonstrated either on the basis of course equivalents, work experience or actual performance tests, the student will be asked to complete one or more of the following courses in addition to those listed above:

Quarter Hours


ELD 4322C (EEC 408) Educational Planning for Specific Learning Disability
or
EED 4227C (EEC 409) Educational Planning for Behavior Disorders
EEX 6051 (EEC 608) Exceptional Children and Youth

# EEX 6863 <br> (EEC 695) Supervised Field Experience in <br> Special Education <br> 5-10 <br> EGC 6707 (PPS 601) Behavior Counseling and Consultation, I <br> 5 <br> NOTE: Two to five of the following courses depending on the <br> student's preparation: EEC 610, 611, 612, 613, 614. 8-20 

## COUNSELOR EDUCATION

The program in counselor education requires 90 quarter hours of credit. The first 45 hours are largely generic in nature and lead to the development of competencies in individual and group counseling and other social and behavioral change techniques; consultation; program organization and evaluation; and coordination of school and community-centered interventions. Training patterns are more differentiated during the last 45 hours and lead to specialization in the following areas: a) counseling in the elementary schools; b) counseling at the secondary school level; c) counseling in higher education; d) vocational counseling; and e) community counseling.

The school counseling programs qualify the student for certification in "Guidance" in the State of Florida and meet the standards for preparation of counselors recommended by the American Personnel and Guidance Association.
Campus Location: Tamiami Campus only
DEGREE: Master of Science


The student should consult with his or her academic advisor for guidance in selecting electives appropriate for specialization in school, vocational or community counseling.

## SCHOOL PSYCHOLOGY

The program in school psychology requires 90 quarter hours of credit and six quarters of graduate study. In general, the competencies to be demonstrated by the student completing this program are derived from the following concepts of role behaviors for the school psychologist: behavioral/educational assessment and planning; counseling and child-centered consultation with teachers, parents and agency representatives; staffing, liaison, referral and case management; program development and evaluation; inservice education; administrative consultation and community development.
Campus Location: Tamiami Campus only
DEGREE: Master of Science

| General Professional Education:* | 4 |
| :---: | :---: |
| EDF 5481 (EDU 507) Analysis and Application of Educational Research | 4 |
| *The student should consult with his or her academic advisor to establish whether additional requirements must be met in general professional education |  |
| Area of Specialization: | 69-75 |
| EGC 5405 (PPS 506) Introduction to Counseling | 5 |
| (PPS 600) Professional Problems, 1 | 2 |
| EGC 6707 (PPS 601) Behavioral Counseling and | 5 |
| EGC 6708 (PPS 602) Behavioral Counseling and Consultation II | 5 |
| EGC 6508 (PPS 610) Human Interaction I | 5 |
| EGC 6725 (PPS 611) Human Interaction II | 5 |
| (PPS 620) Professional Problems, II | 2 |
| EGC 6725 (PPS 621) Assessment of Behavior I | 5 |
| EGC 6709 (PPS 622) Assessment of Behavior II | 5 |
| EGC 6895 (PPS 629) Advanced Practica in Pupil Personnel Services: Psycho-Educational |  |
| Assessment and Consultation | 5 |
| EGC 6605 (PPS 630) Professional Problems, III | 2 |
| EGC 6616 (PPS 626) Program Evaluation in PsychoEducational Services | 4 |
| EGC 6890 (PPS 695) Supervised Field Experience in Pupil Personnel Services | 15 |
| One to three of the following courses depending upon the student's background: |  |
| EEC 611, 612, 613 | 4-12 |
| Electives: | 11-17 |

Electives:
A student with an undergraduate major in education is encouraged to select electives in the Social and Behavioral Sciences. An undergraduate major in Psychology or similar area is encouraged to build his or her competencies in education.

## COURSE OFFERINGS

## SPECIAL EDUCATION

EEX 3010C (EEC 306) INTRODUCTION TO EXCEPTIONAL CHILDREN AND YOUTH (5) (F,W, SS) Signifcant concepts in relation to the learning and adjustment problems of exceptional children and youth. Field experiences required.

SPA 3000 (EEC 309)) INTRODUCTION TO LANGUAGE DEVELOPMENT ANO COMMUNICATION DISORDERS (5) (F,W,SS) Skills in assessing and classroom programming for language development and various speech and language disorders of children.
EEX 3221 (EEC 315) ASSESSMENT OF EXCEPTIONAL CHILDREN AND YOUTH (5) (S,SS) Competencies in assessment of the basic modalities of learning (visual, auditory, haptic and perceptual-motor processes) and the language areas of reading, writing, spelling and arithmetic.
EEX 3202 (EEC 316) FOUNOATIONS OF EXCEPTIONALITY (5) (W,SS) Basic concepts in relation to the biological, genetic, psychological and social foundations of handicapping conditions as they apply to classroom behavior.
EEX 4241 (EEC 405) ACADEMIC SKILLS FOR EXCEPTIONAL CHILDREN, I (5) (F,S) Competencies in the selection, adaptation and preparation of appropriate instructional materials in arithmetic, art, music, science and social studies, including skill with audio-visual equipment and other multi-media approaches. Prerequisites: EEC 306, EEC 309, EEC 315 and EEL 401.
EEX 4242 (EEC 406) ACADEMIC SKILLS FOR EXCEPTIONAL CHILDREN, II (5) (W, SS) Skills in a systems approach to individualized instruction in the classroom, including design and implementation of teaching strategies in all academic skill areas. Field experience required. Prerequisites: EEC 405 and EEC 411.
EMR 4360 (EEC 407) EDUCATIONAL PLANNING FOR THE MENTALLY RETARDED (5) (W,SS) Concepts and skills used in planning educational, prevocational and vocational programs for the mentally retarded. Laboratory experiences required. Prerequisites: EEC 405 and EEC 411.
ELD 4322C (EEC 408) EDUCATIONAL PLANNING FOR SPECIFIC LEARNING DISABILITY (5) (W,SS) Concepts and skills with various models of curriculum, instructional and classroom designs for individuals with specific learning disabilities. Laboratory experiences required. Prerquisites: EEC 406 and EEC 411.
EED 4227C (EEC 409) EOUCATIONAL PLANNING FOR BEHAVIOR DISORDERS (5) (W,SS) Concepts and skills with various models of curriculum, instructional and classroom design for individuals with social and emotional adjustment problems. Laboratory experiences required. Prerequisites: EEC 405 and EEC 411.
EEX 4601 (EEC 411) BEHAVIORAL APPROACHES TO CLASSROOM LEARNING (5) (F,S) Concepts and skills for building and modifying social and academic behaviors. Skills in precision teaching, behavior modification and the functional analysis of behavior. Prerequisite: EEC 405.
EEX 4611 (EEC 412) BEHAVIORAL APPROACHES TO CLASSROOM LEARNING II (5) ( $W$, SS) Concepts and skills necessary for the management and maintenance of classroom behavior, including token economies and parent/teacher consultation. Fieid experience required. Prerequisite: EEC 411.
EEX 4861 (EEC 425) STUDENT TEACHING (15) (F,S) A field experience in a program for exceptional children, demonstrating competencies learned throughout the program.
EEX 4905 (EEC 498) INOIVIDUAL STUOY IN SPECIAL EDUCATION (1-10) ( $F, W, S, S S$ ) Concepts or competencies contracted for between an undergraduate student and an instructor in accordance with the student's individual needs.
EEX 6051 (EEC 608) EXCEPTIONAL CHILDREN AND YOUTH (4) (F,SS) Significant concepts in relation to the learning and adjustment problems of exceptional children and youth. Field experience and graduate project required.
EEX 6612 (EEC 610) DIAGNOSTIC TEACHING: SYSTEMS AND BEHAVIORAL MODELS (4) (F,SS) Skills in the application of diagnostic data to various instructional strategies and behavioral models.
EEX 6227 (EEC 611) DIAGNOSTIC TEACHING: EDUCATIONAL ASSESSMENT (4) (F,W,SS) Skill in application of assessment theory to classroom diagnosis and development of instructional objectives.
EEX 6106 (EEC 612) DIAGNOSTIC TEACHING: ACQUISITION OF LANGUAGE AND READING SKILLS (4) (W,SS) Concepts in acquisition and development of language and reading skills.
EEX 6846 (EEC 613) DIAGNOSTIC TEACHING: ADVANCED PRACTICUM (4) (S,SS) Application of diagnostic teaching models to individualized, remedial and compensatory instructional programs.
EEX 6736 (EEC 614) DIAGNOSTIC TEACHING: CONSULTATION AND LEADERSHIP SKILLS (4) (S,SS) Skills in parent consutation and education.
EMR 6852 (EEC 615) ADVANCED THEORY AND PRACTICE: MENTAL RETARDATION (4) (S,SS) Major concepts in the area of mental retardation and skills in their application to education.
ELD 6323 (EEC 616) ADVANCED THEORY AND PRACTICE: SPECIFIC LEARNING DISABILITY (4) (S,SS) Major concepts in the area of specific learning disability and skills in their application to education.
EED 6226 (EEC 617) ADVANCED THEORY AND PRACTICE: BEHAVIOR DISORDERS (4) (S,SS) Major theories in the area of behavior disorders, and skills in their application to education.
EEX 6863 (EEC 695) SUPERVISED FIELO EXPERIENCE IN SPECIAL EOUCATION (5-15) (F,W,S,SS) Demonstration of the full range of competencies in Diagnostic Teaching learned throughout the program. Internship placements in a variety of field settings.
EED 6937 (EEC 696) SEMINARS IN SPECIAL EDUCATION (4, repeatable to 12) (F,W,S,SS) A. Topics in Mental Retardation B. Topics in Specific Learning Disability C. Topics in Behavior Disorders

EEX 6927 (EEC 697) WORKSHOP IN SPECIAL EDUCATION (1-10) (VAR) Selected, competencies in special education developed in shor-term, intensive workshops.
EEX 6906 (EEC 698) INDIVIDUAL STUDY IN SPECIAL EDUCATION (1-10) (F,W,S,SS) Concepts or competencies contracted for by graduate students with an instructor.

## PUPIL PERSONNEL SERVICES

EGC 5405 (PPS 506) INTRODUCTION TO COUNSELING (5) (F,W,SS) Major theoretical concepts in counseling. Competencies in relationship-building, interviewing, role-playing, simulation and micro-counseling.
EGC 5305 (PPS 508) EDUCATIONAL AND VOCATIONAL GUIDANCE (5) (W,SS) Conce.jts and skills pertaining to vocational development, information systems, career education programs, educational-vocational counseling, and socio-psychological influences on career development. special education.
( EGC 6707 (PPS 601) BEHAVIORAL COUNSELING AND CONSULTATION (5) (F,W,SS) Concepts and skills in using behavior modification: functional analysis of behavior, precision teaching, token economies, contigency contracting, parent and/or teacher consultation.
EGC 6708 (PPS 602) BEHAVIORAL COUNSELING AND CONSULTATION II (5) (W,S) Extended laboratory experiences stressing the development of skills in behavioral approaches to individual and group counseling, consultation, parent education, and in-service training. Prerequisite: PPS 601 or equivalent.
EGC 6508 (PPS 610) HUMAN INTERACTION I: GROUP PROCESS LABORATORY (5) (F,W) Concepts, research and theory relative to small group process. Students will participate in small face-to-face task groups with an emphasis on developing competencies in diagnosis and intervention in small groups.
EGC 6725 (PPS 611) HUMAN INTERACTION II: ANALYSIS OF GROUP PARTICIPATION (5) (W,S) Participation in an ongoing group with attention given to examination of processes of small group phenomena such as interpersonal communication, norms, decision-making, leadership, authority and membership. Prerequisite: PPS 610.
EGC 6709 (PPS'612) HUMAN INTERACTION III: ORGANIZATIONAL CONSULTATION (5) (S) Theoretical concepts and skills in organizational development and change. Competencies in systems diagnosis and assessment, consultation, agenda setting, team building, decision-making and feedback. Prerequisite: PPS 611.
(P) 6 (PPS 620) PROFESSIONAL PROBLEMS II (2) (S) Concepts and competencies for effective role development in a multi-cultural, multi-ethnic environment for the psycho-educational professions.
EEX 6211 (PPS 621) ASSESSMENT OF BEHAVIOR (5) (F,W,SS) Basic concepts in assessment theory and competencies in using a variety of standardized tests in assessing and writing educational prescriptions for children with disorders in visual, auditory and haptic processing, in language or integrative systems.
EGC 6255. (PPS 622) ASSESSMENT OF BEHAVIOR II (5) (W) Concepts and skills in the assessment of intelligence with a particular emphasis on the problems of assessing mental retardation, giftedness, and minority groups. Prerequisite: PPS 621.
EGC 6616. (PPS 626) PROGRAM EVALUATION IN PUPIL PERSONNEL SERVICES (4) (F,S) Evaluation skills in student's area of specialization, including competencies in designing evaluation proposals and conducting an actual program evaluation. Prerequisite: EDU 507.
EGC 6203 (PPS 627) MEASUREMENT AND APPRAISAL IN COUNSELING (4) (S,SS) Concepts and skills related to the use of tests and other kinds of appraisal procedures in counseling. Particular emphasis upon career and vocational choice processes. Laboratory experiences included.
if 27 (PPS 628) ADVANCED PRACTICA IN COUNSELING AND CONSULTATION (5) (W) Advanced competencies in counseling and consultation.
EGC 6895 (PPS 629) ADVANCED PRACTICA: PSYCHO-EDUCATIONAL ASSESSMENT AND CONSULTATION (5) (S) Advanced competencies in psycho-educational assessment.
FEGC 6605 (PPS 630) PROFESSIONAL PROBLEMS, III (2) (W,S) Competencies in regard to the development of major role and service models and the application of budgeting systems, and legal and ethical standards in a psycho-educational setting.
EGC 6890 (PPS 695) SUPERVISED FIELD EXPERIENCE IN PUPIL PERSONNEL SERVICES (4 repeatable to 12) (F,W,S) Demonstration of the full range of competencies learned throughout the program in Counseling or School Psychology. Internship placements in a variety of field settings.
LEGC 6936 (PPS 696) SEMINARS IN PUPIL PERSONNEL SERVICES (4, repeatable to 12 ) (F,W,S,SS) Special topics in relation to counseling or school psychology.
EGC 6925 (PPS 697) WORKSHOP IN PSYCHO-EDUCATIONAL SERVICES (1-10) (VAR) Selected competencies in counselor education or school psychology developed in short-term, intensive workshops.
EGC 6905 (PPS 698) INDIVIDUAL STUDY IN PUPIL PERSONNEL SERVICES (1-10) (F,W,S,SS) Competencies contracted for between a student and an instructor in accordance with the student's individual needs.

## DIVISION OF HEALTH, PHYSICAL EDUCATION, AND RECREATION

The Division offers bachelors and masters degree programs. All courses of the programs are performance based, are self-paced, and allow considerable individualized instruction.

## UNDERGRADUATE PROGRAMS

Programs in the Division relating to teacher education are designed to meet requirements for certification leading to a Bachelor of Science degree in either Health Education or Physical Education. A student receiving a degree in Health Education is certified to teach in Grades 7 through 12; a student receiving a degree in Physical Education is certified to teach in Grades 1 through 12.

A Bachelor of Science degree is also granted to a student completing the Parks and Recreation curriculum. Within the general requirements in this program, the student is given an opportunity to develop a program consistent with his or her interests and career goals.

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION
Required: Foundations of Education, (10 quarter hours). Completion of lower division Health Education program, Personal Health.
UPPER DIVISION PROGRAM:

| Subject Matter | Specialization: | Quarter Hours |  |
| :---: | :---: | :---: | :---: |
| HUN 3122 | (DIN 301) Nutrition and Culture | 4 |  |
| HSC 3300 | (HSM 304) Health \& Social Service Delivery Systems | 5 |  |
| APB 3253 | (BSC 306) Biological Basis of Human Sexuality | 5 |  |
| MCB 3013 | (BSC 310) General Microbiology | 5 |  |
| SOP 3932 | (PSY 311) Psychology of Drug Abuse | 5 |  |
|  | (EPR 320) Environmental Health | 5 |  |
|  | (BSC 373) Human Anatomy or | 5 |  |
| PCB 3703 | (BSC 374) Physiology | 5 |  |
| HES 4001 | (HED 407) Community Health | 5 |  |
| HES 4160 | (HED 411) Critical Issues in Health Education | 5 |  |
| Professional Educ | ucation: |  | 40 |
| EDF 3827 | (EDU 305) Schooling in America | 5 |  |
| EDG 3321 | (EDU 311) Teaching Lab I | 5 |  |
| EDG 3322 | (EDU 312) General Teaching Lab II | 5 |  |
| RED 4325 | (EDS 401) Special Teaching Lab: Reading | 5 |  |
| HES 4303 | (HED 405) Special Teaching Lab: Health |  |  |
|  | Education | 5 |  |
| HES 4940 | (HED 425) Student Teaching | 15 |  |

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## PHYSICAL EDUCATION, GRADES 1-12

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science

## LOWER DIVISION PREPARATION

Required: Foundations of Education, ( 10 quarter hours). Completion of lower division Physical Education program, personal health, skill courses in dance, gymnastics, and aquatics plus two or more activities from both individual sports and team sports. Additional activity courses are recommended.
UPPER DIVISION PROGRAM:
Quarter Hours
Subject Matter Specialization:
PET 3310 (PHE 305) Kinesiology 5
PET 3360 (PHE 306) Exercise Physiology 5
PET 3202 (PHE 308) Man and Movement 5
PET 3640C (PHE 309) Adapted Physical Education 5
PCB 3703 (BSC 374) Physiology 5
(PHE 408) Physical Education for Primary Grades 5
(PHE 411) Motor Learning 5
(PHE 412) Physical Education for Intermediate
Grades
PET 4510 (PHE 436) Evaluation in Physical Education 5
HES 4001 (HED 407) Community Health 5
or
HES 4160 (HED 411) Critical Issues in Health 5
Professional Education:
EDF 3827 (EDU 305) Schooling in America ..... 5
EDG 3321 (EDU 311) Teaching Lab 1 ..... 5
EDG 3322 (EDU 312) General Teaching Lab I ..... 5
RED 4325 (EDS 401) Special Teaching Lab: Reading ..... 5PET 4450L (PHE 405) Special Teaching Lab: PhysicalEducation5
PET 4945L (PHE 425) Student Teaching ..... 15
PARKS AND RECREATION
Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION
Required Courses: Introductory sociology and mathematicsRecommended Courses: It is recommended that the student desiring to enter the Parksand Recreation curriculum be a graduate of a two-year program in recreation leadership orits equivalent.
UPPER DIVISION PROGRAM:
Subject Matter Specialization:
Quarter HoursHFT 3403 (HRM 301) Management Accounting for theHospitality Industry5LEI 3542 (PRM 305) Principles of Park and RecreationManagement5
LEI 3630 (PRM 307) Care and Maintenance of Grounds ..... 5
LEI 3524 (PRM 350) Personnel Management in Parks and Recreation ..... 5
MAN 3002 (BUA 309) Organization and Management ..... 5
LEI 3437 (PRM 375) Program Development in Parks andRecreation Management5
HFT 3453 (HRM 320) Hospital Industry Management ..... 5
LEI 4590 (PRM 497) Seminar in Parks and Recreation Management ..... 5
LEI 4940 (PRM 425) Internship ..... 15-30
Advised Electives:
Students will take 20-35 quarter hours of electives after con-20-35sultation with their advisor.

## GRADUATE PROGRAMS

The Division offers a Master of Science degree in Curriculum and Instruction with an emphasis in Health Education, Physical Education, or Parks and Recreation Administration. A minimum of 45 quarter hours is required to complete the programs.

An applicant wishing to enroll in Health Education or Physical Education must: (1) have a 3.0 GPA in upper division work or score 1,000 or more on the Graduate Record Examination, and (2) possess or qualify for Florida Rank III certification in the area selected.

To enter the program in Parks and Recreation Administration, a student must: (1) have a 3.0 GPA in upper division work or score 1,000 or more on the Graduate Record Examination, and (2) possess a bachelor's degree and have appropriate undergraduate preparation in Recreation.
NOTE: Students who have already met the reading requirement as an undergraduate or through in-service education may substitute an elective for ERE 606 (See p. 160).

## HEALTH EDUCATION

Campus Location: Tamiami Campus onlyDEGREE: Master of ScienceProfessional Education:EDF 5481 (EDU 507) Analysis and Application of Educational Research ..... 4
EDG 5325 (EDU 506) Analysis of Teaching ..... 4
EDF 5216 (EDU 518) Affective Learning in the Classroom ..... 4
RED 6333 (ERE 606) Reading in the Secondary Schools ..... 4
Area of Specialization.
HES 5205 (HED 505) Current Concepts in Community Health ..... 4
HES 5327 (HED 506) Health Curriculums in Public Schools ..... 4
HES 5326 (HED 507) Educational Approaches to Health Problems ..... 4
CLP 5185 (PSY 561) Current Issues in Mental Health or ..... 5
SOC 5255 (SOC 587) Sociology of Mental Health ..... 5
HUN 5801 (DIN 500) Recent Research in Nutrition or ..... 4
HUN 5611 (DIN 503) Nutrition Education in the Community ..... 4
Quarter Hours1621
Electives: ..... 8

## PHYSICAL EDUCATION

Campus Location: Tamiami Campus onlyDEGREE: Master of ScienceProfessional Education:EDF 5481 (EDU 507) Analysis and Application ofEducational Research4
RED 6333 (ERE 606) Reading in the Secondary School ..... 4
Area of Specialization:32
PET 6535 (PHE 698) Survey of Research in Physical Education ..... 4
PET 4510 (PHE 436) Evaluation in Physical Education ..... 4
PET 5238C (PHE 506) Perceptual Motor Learning ..... 4
PET 5256C (PHE 535) Sociology of Sport ..... 4
PET 5125 (PHE 509) History of Sport ..... 4
PET 5925C (PHE 505) Creative Workshop in Physical Education ..... 4
PET 5426 (PHE 507) Curriculum Development in Physical Education ..... 4
PET 6932 (PHE 696) Seminar in Physical Education ..... 4
Electives:8


(PRM 509) Program Development in Parks and Recreation ..... 4
PAD 6106 (PAD 601) Organization Theory and Administrative Behavior ..... 5
Areas of Specialization:
PAD 6417 (PAD 640) Public Personnel Administration ..... 5PAD 6227 (PAD 602) Public Finance and the BudgetaryProcess5
(PRM 550) Seminar in Parks, Recreation, and Athletic Management ..... 4
LEI 5907 (PRM 595) Individual Study ..... 1-5
LEI 6922 (PRM 695) Supervised Field Experiences inParks and Recreation5-15
Electives:18-3214

## HEALTH EDUCATION

HES 4303 L (HED 405) SPECIAL TEACHING LABORATORY: HEALTH EDUCATION (5) (W) This course is designed to develop competencies directly associated with classroom teaching. Students will be expected to demonstrate these competencies in a variety of public school situations.
HES 4001 (HED 407) HEALTHFUL LIVING: COMMUNITY (5) (F) Students will display their competencies in community health by identifying, observing, and discussing aspects of health that affect society such as ecology and pollution.
HES 4160 (HED 411) CRITICAL ISSUES IN HEALTH EDUCATION (5) (S) The student will display competencies by distinguishing between and interpreting aspects of health which appear to be most important to society including legislative issues and public opinion.
HES 4940 (HED 425) STUDENT TEACHING (15) (F,W,S) During the student's internship he or she will demonstrate those competencies which are characteristic of a competent health education teacher.
HES 5205 (HED 505) CURRENT CONCEPTS IN COMMUNITY HEALTH (4) (W) Students will examine the attitudes of people with various social backgrounds and will demonstrate in discussions how these different attitudes relate to the formulation of community health programs.
HES 5327 (HED 506) HEALTH CURRICULUMS IN PUBLIC SCHOOLS (4) (S) Students will develop and analyze various health curriculums and validate their appropriateness to various age groups.
HES 5326 (HED 507) EDUCATIONAL APPROACHES TO HEALTH EDUCATION (4) (W) Students will select various modern techniques and tools for teaching elementary health education and employ these techniques and tools in a classroom setting. HES 5908 (HED 595) INDIVIDUAL STUDY (1-5) (F,W,S,SS) Designed for individuals to work independently on health education topics of their choice under the direction of faculty member. Permission of the instructor and division chairman is needed. HES 6943 (HED 695) SUPERVISED FIELD EXPERIENCE (5-15) (F,W,S,SS) A practical study pursued in an educational environment at a university, agency or school approved by the faculty. Approval to enroll will be granted upon submission of an acceptable proposal stating objectives and desired outcomes of such an experience.

## PHYSICAL EDUCATION

PET 3310 (PHE 305) KINESIOLOGY (5) (S) This course is designed to provide students the opportunity to demonstrate in a teaching situation the application of various principles of movement.
PET 3360 (PHE 306) EXERCISE PHYSIOLOGY (5) (W) Students will be expected to apply various aspects of the functioning of the human body to the development of physical education programs and the teaching of specific sport skills.
PET 3202 (PHE 308) MAN AND MOVEMENT (5) (S) Students will examine the socio-psychological implications of sport and physical activity and apply this knowledge to the physical education curriculum.
PET 3640C (PHE 309) ADAPTED PHYSICAL EDUCATION (5) (W) Competencies to be achieved include both a physiological and psychological understanding of atypical children and the ability to apply this knowledge in practical situations.
PET 4450 L (PHE 405) SPECIAL TEACHING LABORATORY: PHYSICAL EDUCATION (5) (F,W) This course is designed to develop competencies directly associated with classroom teaching. Students will be expected to demonstrate these competencies in a variety of public school situations.
(PHE 408) PHYSICAL EDUCATION FOR PRIMARY GRADES. Designed to provide students with competencies necessary for the development and implementation of physical education programs in grades $K-3$. A three-hour per week field experience in an elementary school is required.
$\qquad$ (PHE 411) MOTOR LEARNING (5) Students will demonstrate a knowledge and application of the physiological and psychological factors affecting motor skill acquisition and performance.
(PHE 412) PHYSICAL EDUCATION FOR INTERMEDIATE GRADES. Designed to provide students with competencies necessary for the development and implementation of physical education programs in grades 4-6. A three-hour per week field experience in an elementary school is required. Prerequisite: PHE 408.
PET 4622C (PHE 416) ATHLETIC INJURIES (5) (F) Students will demonstrate the proper care and prevention of athletic injuries through the application of acceptable training techniques.
PET 4945L (PHE 425) STUDENT TEACHING (15) (F,W,S) During the student's internship he or she will demonstrate those competencies which are characteristic of a competent physical education teacher.

PET 4510 (PHE 436) EVALUATION IN PHYSICAL EDUCATION (5) (W) Students will demonstrate the competencies in motor skill testing, Grading, and analysis of written test scores that are necessary for successful teaching in physical education.
PET 5925 (PHE 505) CREATIVE WORKSHOP IN PHYSICAL EDUCATION (4) (W) Students will create materials and teaching techniques for physical education. These materials and techniques will then be utilized in practical classroom situations.
PET 5238 (PHE 506) PERCEPTUAL MOTOR LEARNING (4) (S) Students will demonstrate knowledge and understandings of various approaches to and theories of perceptual motor learning with special emphasis in physical education. Perceptual motor tasks will be performed as well as taught by the students.
PET 5426 (PHE 507) CURRICULUM DEVELOPMENT IN PHYSICAL EDUCATION (4) (W) Students will develop their own curricula after examining and discussing modern curriculum theory. A problem-solving approach will be employed as students test their programs at various grade levels in the public schools.
PET 5125 (PHE 509) HISTORY OF PHYSICAL EDUCATION AND SPORT (4) (S) Students will study the history of sport and will take part in writing their own review of sport from a chosen time in history.
PET 5256 (PHE 535) SOCIOLOGY OF SPORT (4) (F) Students will demonstrate a thorough understanding of the sociological bases of sport and will actively engage in a field study involving a particular phase of sport and society.
PET 5906 (PHE 595) INDIVIDUAL STUDY ( $1-5$ ) ( $F, W, S$ ) Students will work independently on a topic concerning some phase of physical education or sport under the guidance of a faculty member. Registration is by permission of advisor.
PET 6944 (PHE 695) SUPERVISED FIELD EXPERIENCE (5-15) (F,W,S) Students may use this course to become involved in an in-depth study, research project, or a variety of other activities under the guidance of a faculty member.
PET 6932 (PHE 696) SEMINAR IN PHYSICAL EDUCATION (4) (W) Students will participate in the exploration, examination and discussion of problems, issues and trends in physical education and sport.
PET 6535 (PHE 698) SURVEY OF RESEARCH IN PHYSICAL EDUCATION (4) (S) Following a survey of research in physical education, students will demonstrate competencies in applying this knowledge to teaching situations in the public schools.

## PARKS AND RECREATION

LEI 3542 (PRM 305) PRINCIPLES OF PARK AND RECREATION MANAGEMENT (5) (F) An exploration of the field of recreation and parks including career areas. Students will be expected to demonstrate competency in the knowledge of management responsibilities and supervisory level principles and theory.
ORH 3230 (PRM 307) CARE AND MAINTENANCE OF GROUNDS (5) (W) A study of procedures for maintaining outdoor facilities. Students will be expected to display competence in proper maintenance of areas normally found in parks and recreation centers.
ORH 3220 (PRM 309) TURF GRASS MANAGEMENT (5) (F) A practical approach to the care and maintenance of special grasses such as those found on golf courses and other recreational facilities.
PAZ 3232 (PRM 350) PERSONNEL MANAGEMENT IN PARKS AND RECREATION (5) (W) After a study of how individuals work with one another in a management setting students will demonstrate competencies necessary for hiring staff, conducting group dynamics, communicating to the public, and administering democratically.
PAZ 3235 (PRM 375) PROGRAM DEVELOPMENT IN PARKS AND RECREATION MANAGEMENT (5) (S) Students will attain competencies centered around developing objectives, planning a program, and implementing and administering the program.
PAZ 4940 (PRM 425) INTERNSHIP (15) ( $F, W, S, S S$ ) An on the job training program designed to enable students to develop those competencies which can only be gained from practical experience.
PAZ 4930 (PRM 497) SEMINAR IN PARKS AND RECREATION MANAGEMENT (5) (S) A discussion of current problems, issues and trends in parks and recreation management which will help the student develop those competencies necessary to deal with every day aspects of particular programs.
LEI 5510 (PRM 505) PROGRAM ADMINISTRATION IN PARKS AND RECREATION (4) (F) A detailed analysis of administrative procedures and responsibilities in connection with Parks \& Recreation facilities and personnel.

- (PRM 509) PROGRAM DEVELOPMENT IN PARKS AND RECREATION (4) (W) The development of specific programs in parks and recreation with emphasis on special programs for young children, retardates, handicapped, and the elderly.
- (PRM 550) SEMINAR IN PARKS AND RECREATION ADMINISTRATION (4) (S) A discussion of current problems, issues, and trends in administration of parks and recreation programs.
LEI 5907 (PRM 595) INDIVIDUAL STUDY IN PARKS AND RECREATION ADMINISTRATION (1-5) (F,W,S) An opportunity for individuals interested in various aspects of park and recreation administration to work on their own under the close supervision of an advisor. Permission of the instructor and department chairman required.
LEI 6922 (PRM 695) SUPERVISED FIELD EXPERIENCES IN PARKS AND RECREATION ADMINISTRATION (5-15) (F,W,S) A practical experience for individuals interested in administrative responsibilities. Permission of the instructor and department chairman required.


## DIVISION OF VOCATIONAL AND ADULT EDUCATION

The Division prepares and services professional personnel whose major functions are to teach, coordinate, supervise and administer vocational and adult education programs in schools, and other public and private agencies. Programs of preparation utilize a multi-school approach across academic disciplines within the University. The Division utilizes performancebased curricula to develop competencies at the undergraduate and graduate levels. In addition to formal degree programs, the Division offers courses for specific areas of certification in vocational, and adult teacher/administration certification.

## UNDERGRADUATE PROGRAMS

The Division offers undergraduate preparation leading to the degree of Bachelor of Science in Education with specialized majors in the following areas: Industrial Arts Education, Technical Education, Vocational Home Economics Education, Vocational Industrial Education. Although the programs are designed for entry into the field of public education, a candidate may seek employment in business, industry or other private agencies.

Applicants for admission are required to have an Associate Degree or equivalent course work. For specific entrance requirements consult the general admission statement for undergraduate students in this catalog. Because of the wide range of entry level competencies and career goals, each student in consultation with his or her advisor plans a program of study during the first quarter of enrollment.

Programs in Health Related Occupations and Business Education are presently being planned for implementation. For specific information concerning these programs, contact the Division chairperson.

## VOCATIONAL HOME ECONOMICS EDUCATION

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science

## LOWER DIVISION PREPARATION:

Required Courses: Foundations of Education (10 quarter hours).
Recommended Courses: With reference to subject matter specialization, the student is required to have for certification 65 quarter hours in the areas listed below under Technical Preparation. These may be earned in courses in both the lower and upper divisions. It is recommended that as many of the basic courses in these areas as possible be taken in the lower division.

UPPER DIVISION PROGRAM:

|  | Quarter Hours 50 |
| :---: | :---: |
| EDF 3827 (EDU 305) Schooling in America | 5 50 |
| EDG 3321 (EDU 311) General Teaching Laboratory I | 5 |
| EDG 3322 (EDU 312) General Teaching Laboratory II | 5 |
| HEE 3302 (HEE 305) Home Economics Educational Planning | 5 |
| RED 4325 (EDS 401) Special Teaching Lab: Reading | 5 |
| HEE 4104 (HEE 405) Instruction in Vocational Home Economics | 5 |
| HEE 4944 (HEE 406) Special Teaching Laboratory HEE 4940 (HEE 425) Student Teaching | $\begin{gathered} 5 \\ 15 \end{gathered}$ |
| Technical Preparation: Total of 65 quarter hours needed from lower and upper division | (65) |
| Housing and Home Furnishing* | 10 |
| Management and Family Economics** | 10 |
| Family and Child Development** | 15 |
| Food and Nutrition** | 15 |
| Textiles and Clothing* | 15 |
| *Courses offered in the School of Technology |  |
| **Courses offered in the School of Health and Social Services |  |
| Advised Electives: | 5 |
| Sub-specialty area of concentration |  |
| Competencies may be developed in one of the following six fields: |  |
| 1. One area of consumer and homemaking education |  |
| 2. One area of wage-earning home economics |  |
| 3. Education for the handicapped |  |

4. Education for the culturally disadvantaged
5. Education for the adult learner
6. Educational settings in business, industry or public service agencies

## INDUSTRIAL ARTS EDUCATION

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Required Courses: Foundations of Education (10 quarter hours).
Recommended Courses: With reference to the technical preparation outlined below the student is encouraged to take basic courses in each area in the lower division.
UPPER DIVISION PROGRAM:
Quarter Hours
Professional Education 45
EDF 3827 (EDU 305) Schooling in America
5
EDG 3321 (EDU 311) General Teaching Laboratory I 5
EDG 3322 (EDU 312) General Teaching Laboratory II 5
EVT 3165C (EVO 306) Course Planning in Vocational $\begin{aligned} & \text { Education }\end{aligned}$
RED $4325 \begin{gathered}\text { (EDS 401) Special Teaching Laboratory: } \\ \text { Reading }\end{gathered}$
EIA 4360 (EIA 405) Instruction in Industrial Arts 5
EVT 4940 (EVO 425) Student Teaching 15 Technical Preparation:

Required: A minimum of 45 quarter hours are required for certification with a minimum of 10 quarter hours in each of the following areas:

## CONSTRUCTION

BCN 3702 (IAT 305) Construction Technology 5
ETC 4252 (IAT 405) Construction Processes 5
BCN 4251C (IAT 420) Architectural Drafting 5
MANUFACTURING
ETI 3417C (IAT 306) Manufacturing Technology 5
ETI 4421C (IAT 419) Materials Processing 5
EDT 4525C (IAT 415) Drafting I 5
or
ETD 4526C (IAT 416) Drafting II 5
ETM 4823C (IAT 409) Materials of Industry 5
BCN 4033 (IAT 406) Industrial Research and
Development

## GRAPHIC COMMUNICATIONS

ARV 3210 (IAT 307) Reprographics 5
ARV 4250 (IAT 407) Planographics 5
(IAT 408) Photographics 5

## POWER

ETM 4407 (IAT 417) Mechanical Power Systems I 5
ETE 4562 (IAT 418) Electrical/Electronics Systems 5

Advised Electives: Enough electives should be taken to equal a minimum of 90 quarter hours.

## POST-SECONDARY TECHNICAL EDUCATION

Campus Location: Tamiami Campus onlyDEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:Required Courses: Foundations of Education, ( 10 quarter hours).Recommended Preparation: Technical preparation in the student's intended area ofteaching such as electronics technology, architectural technology, dental hygiene, com-mercial art, electronic data processing, electro-mechanical technology and other occupa-tions requiring training beyond the twelfth grade.
UPPER DIVISION PROGRAM:
Professional Education: ..... 73-83
EDF 3827 (EDU 305) Schooling in America ..... 5
EVT 5078 (EVO 509) Technical Education in American Society ..... 4
EDG 3321 (EDU 311) General Teaching Laboratory I ..... 5
ADE 5385 (EAD 509) Adult Teaching and Learning ..... 4
EDG 3322 (EDU 312) General Teaching Laboratory II ..... 5
EVT 3165C (EVO 306) Course Planning in Vocational Education ..... 5
RED 4325 (EDS 401) Special Teaching Laboratory: Reading ..... 5
EVT 4949 (EVO 407*) Supervised Occupational Experience ..... 5-15
*For the student who lacks acceptable occupational ex-perience in the area to be taught.
or
EVT 4990 (EVO 412) Credit by Examination ..... 5-45
EVT 5460 (EVO 504) Educational Media ..... 5
EDG 4941 (EVO 406) Special Teaching Laboratory ..... 5
EVT 4940 (EVO 425) Student Teaching; Technical Education ..... 15
Advised Electives: Science, mathematics, technology, psy- chology or sociology ..... 10
Free Electives: Enough electives should be taken to equal a min- imum of 90 quarter hours ..... 10

## VOCATIONAL INDUSTRIAL EDUCATION

Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Required Courses: Foundations of Education (10 quarter hours).
Recommended Preparation: Technical preparation in the student's intended area of teaching such as air conditioning and refrigeration, automotive repair, commercial foods preparation, cosmetology, electronics, machine shop trades and other trade and industrial occupations.

| Professional Education: | Quarter Hours 65-75 |
| :---: | :---: |
| EDF 3827 (EDU 305) Schooling in America | 5 |
| EVT 3065 (EVO 305) Foundations of Vocational Education | 5 |
| EDG 3321 (EDU 311) General Teaching Laboratory I | 5 |
| EDG 3322 (EDU 312) General Teaching Laboratory II | 5 |
| RED 4325 (EDS 401) Special Teaching Lab: Reading | 5 |
| EVT 3165C (EVO 306) Course Planning in Vocational | 5 |
| EVT 3815C (EVO 308) Vocational Education Laboratory |  |
| Management and Safety | 5 |
| EVT 4949 (EVO 407*) Supervised Occupational | 5-15 |
| *For students who lack acceptable occupational experience in the area to be taught. |  |
| or |  |
| EVT 4990 (EVO 412) Credit by Examination | 5-45 |
| EVT 5460 (EVO 504) Educational Media | 5 |
| EDG 4941 (EVO 406) Special Teaching Laboratory: Voc.Ind. Ed | 5 |
| EVT 4940 (EVO 425) Student Teaching; Voc.-Ind. Ed | 15 |
| dvised Electives: | 10 |
| SOC 4265 (SOC 455) Man, Society and Technology |  |
| SOC 5261 (SOC 581) Industrial Sociology | 5 |
| or |  |
| INP 3002 (PSY 350) Industrial Psychology |  |
| EGC 5305 (PPS 508) Educational and Vocational |  |
| Guidance | 5 |
| Free Electives: | 10 |
| Enough electives should be taken to equal a minimum of 90 quarter hours. |  |

## PROFESSIONAL CERTIFICATE PROGRAMS

The Division offers programs for Rank III and Rank II vocational professional certification. A student in any of these programs should enroll in the University as a professional certificate student in Vocational Education.

The Standard Certificate Rank III program in vocational teacher education is designed to qualify the practicing vocational education teacher for employment in comprehensive secondary schools, vocational skill centers, and/or technical institutes.

The Post Standard Professional Certificate Rank II program in Vocational Teacher Education is designed to extend to the practicing vocational education teacher certification for teaching in comprehensive secondary schools, vocational skill centers, and technical institutes.

## RANK III VOCATIONAL TEACHER CERTIFICATION EDUCATION

The Standard Certificate in Rank III (valid for 3 years) will be issued by the State Teacher Certification Office to an individual having: (a) three years full-time teaching experience in vocational industrial education subjects, and (b) 30 quarter hours in professional education and vocational teacher education courses. Specific requirements can be found in Section 42 of the State Teacher Certification Guide. Planned programs of preparation completed for certification requirements may be applied to degree requirements.


## POST STANDARD RANK II VOCATIONAL TEACHER CERTIFICATION EDUCATION

The Post Standard Certificate in Rank II (valid for 10 years) will be issued by the State Teacher Certification Office to an individual: (a) who has completed 30 quarter hours required in Rank III Vocational teacher certification courses, (b) who has been employed as a teacher in public or non-public schools in Florida for three years, and (c) earned 54 quarter hours of college credit in vocational teacher education and general education and/or general professional education and/or technical education courses.

The 54 quarter hours of course work is planned so that (a) a minimum of 18 and a maximum of 27 quarter hours are earned in professional vocational education courses, and (b) a minimum of 18 and a maximum of 27 quarter hours are earned in general education or general professional education and/or technical education. A candidate is urged to consult with a university advisor to formulate a program of study for approval by the State Teacher Certification Office prior to starting his or her program.

## GRADUATE PROGRAMS

The Division offers graduate course work leading to the degree Master of Science in Education in either Curriculum and Instruction or Administration and Supervision in Vocational Education or Adult Education.

Requirements for admission to the graduate program in either Curriculum and Instruction or Administration and Supervision for Vocational Education are that the applicant must hold or qualify for a Rank III Florida Teaching Certificate and (1) have an upper division undergraduate grade point average of 3.0 or " B " average, or (2) have a combined score of 1,000 on the graduate record examination (verbal and quantitative aptitude sections, or (3) for vocational-industrial and technical education programs only, have a combined score of 2250 on the general examination of the "College level examination program" (CLEP) with a minimum score of 400 on each section.

Requirements for admission to the graduate program in Curriculum and Instruction in Adult Education are that the applicant must have a bachelor degree and (1) have an undergraduate grade point average of 3.0 or " B " average, or (2) have a combined score of 1,000 on the graduate record examination (verbal and quantitative aptitude sections).

Requirements for admission to the graduate program in Administration and Supervision in Adult Education are that the applicant must hold or qualify for a Rank III Florida Teaching Certificate and (1) have an upper division undergraduate grade point average of 3.0 or " B " average, or (2) have a combined score of 1,000 on the graduate record examination (verbal and quantitative aptitude sections).

Students are urged to contact the admission office or the Division for further information.
Areas of emphasis available, along with typical programs of study, follow here.
Note: Students who have already met the reading requirement ( $\mu .160$ ) as an undergraduate or through in-service education may substitute an elective for ERE 606.
VOCATIONAL HOME ECONOMICS EDUCATION
Campus Location: Tamiami Campus only
DEGREE: Master of Science in Education
Quarter Hours
Required Core: ..... 20-24HEE 5335 (HEE 505) Trends in Vocational HomeEconomics Education4
EVT 5168 (EVO 507) Curriculum Development in Vocational and Technical Education ..... 4
HEE 6911 (HEE 605) Research in Home Economics Education ..... 4
HEE 6126 (HEE 606) Teaching Home Economics in the Secondary School ..... 4
HEE 6937 (HEE 696) Seminar in Home Economics Education ..... 4
RED 6333 (ERE 606) Teaching Reading in the Secondary SchoolArea of Professional Emphasis: With program advisor's approval,a student may select courses in subject matter of Home Eco-nomics chosen from offerings outside of the School of Educa-tion, based on professional competencies needed.15
Electives: The candidate will be encouraged to make selectionson the basis of individual needs and career goals.6-10

## VOCATIONAL INDUSTRIAL EDUCATION

Campus Location: Tamiami Campus only
DEGREE: Master of Science

| Required Core: EVT 5669 |  | Quarter Hours 20-24 |  |
| :---: | :---: | :---: | :---: |
|  | (EVO 506) Trends and Issues in Vocational Education | 4 |  |
| EVT 5168 | (EVO 507) Curriculum Development in |  |  |
|  | Vocational Education | 4 |  |
| EVT 5766 | (EVO 527) Evaluation in Vocational and |  |  |
|  | Technical Education | 4 |  |
| EVT 6760 | (EVO 616) Research in Vocational and Adult Education | 4 |  |
| EVT 6930 | (EVO 696) Seminar in Vocational Education | 4 |  |
| RED 6333 | (ERE 606) Teaching Reading in the Secondary School | 4 |  |
| Area of Professional Emphasis: A student under the direction of |  |  |  |
| his or her advisor, may develop professional competencies in |  |  |  |
| his or her area of emphasis through school-based field ex- |  |  |  |
| periences, s pendent study | minars, methods courses, workshops, or indey. |  | 12-17 |
| Technical Electives: The candidate will be encouraged to select |  |  |  |
| courses that will increase his or her subject area technical |  |  |  |

## TECHNICAL EDUCATION

Campus Location: Tamiami Campus only

DEGREE: Master of Science
Quarter Hours
Required Core: ..... 20-24
EVT 5669 (EVO 506) Trends and Issues in Vocational Education ..... 4
EVT 5168 (EVO 507) Curriculum Development in Vocational Education ..... 4
EVT 5766 (EVO 527) Evaluation in Vocational and Technical Education ..... 4
EVT 6760 (EVO 616) Research in Vocational and Adult Education ..... 4
EVT 6930 (EVO 696) Seminar in Vocational Education ..... 4
RED 6333 (ERE 606) Teaching Reading in the Secondary School ..... 4Area of Professional Emphasis:EVT 5078 (EVO 509) Technical Education in AmericanSociety4
ADE 5385 (EAD 509) Adult Teaching and Learning ..... 4
Technical Electives:
The candidate will be encouraged to select courses that willincrease his or her subject area technical competence.
Advised Electives for Non-education Graduates:EDF 5710 (EDU 509) National Educational Systems: AComparative Analysis (4)4-5
orSOC 5284 (SOC 582) Sociology of Education (5)EXP 5406 (PSY 547) Theories of Learning (5)orEDF 6215 (EDU 606) Application of Learning Theory toInstruction (4)
INDUSTRIAL ARTS EDUCATION
Campus Location: Tamiami Campus only
DEGREE: Master of Science
Required Core:EVT 5669 (EVO 506) Trends and Issues in VocationalEducation4
EVT 5161 (EVO 507) Curriculum Development in Vocational Education ..... 4EVT 5766 (EVO 527) Evaluation in Vocational and
Technical Education ..... 4
EVT 6760 (EVO 616) Research in Vocational and Adult Education ..... 4
EVT 6930 (EVO 696) Seminar in Vocational Education ..... 4
RED 6333 (ERE 606) Teaching Reading in the Secondary School ..... 4
Area of Professional Emphasis:
EIA 5811 (EIA 528) Equipment and Facilities Planning ..... 412-16
EIA 6931 (EIA 605) Analysis of Industrial Arts Education ..... 4The student, under the direction of his or her advisor, may de-velop professional competencies in an area of emphasisthrough seminars, methods courses, workshops, or inde-pendent study.Technical Electives: The student is encouraged to select coursesthat will increase his or her subject area technical com-petence.

## ADMINISTRATION AND SUPERVISION

## Area of Emphasis: Vocational Education

Admission to graduate programs in the Division requires adherence to the general standards as specified in the Admission Requirements for Graduate Students in this division. In addition, an applicant must have completed at least one (1) year of successful teaching experience as a teacher of vocational education classes. Under certain conditions, an applicant not meeting the minimum requirements, and who has appropriate professional background and aspirations, may be considered on an individual basis by the Division faculty.

Each graduate student, in consultation with his or her chosen advisor, plans a program of study to include a core of professional competencies, an area of emphasis, and electives. The programs require a minimum of 45 quarter hours.

## ADMINISTRATION AND SUPERVISION OF VOCATIONAL EDUCATION

Campus Location: Tamiami Campus only
DEGREE: Master of Science

Quarter Hours
Required Core: 36-40
EVT 5161 (EVO 507) Curriculum Development in Vocational Education

4
$\begin{array}{cc}\text { EVT } 5382 & \text { (EVO 517) Supervision and Coordination of } \\ \text { Vocational Education Program }\end{array}$
EVT 5461 (EVO 526) Community Relations and Resources for Vocational Education

4
EVT 6264 (EVO 606) Administration of Local Vocational Educational Programs

4
EVT 6930 (EVO 696) Seminar in Vocational Education 4
EDA 6061 (EDA 605) The Organization and Operation of Public School System

4
EDA 6530 (EDA 607) The Administration of Secondary $\begin{gathered}\text { School }\end{gathered}$
EDS 6050 (EDA 608) Supervision in Education 4
EDG 6250 (EDA 609) Curriculum Development 4
RED 6333 (ERE 606) Teaching Reading in the Secondary School
Area of Professional Emphasis:
EVT 6946 (EVO 695) Supervised Field Experience 4
Electives:
The candidate may select a course(s) that will increase his or her administrative and supervisory competencies.

## ADULT EDUCATION: CURRICULUM AND INSTRUCTION ADMINISTRATION AND SUPERVISION

The Graduate Program in Adult Education is designed for the individual who is serving, or chooses to serve, as learning facilitator, training director, counselor, administrator, curriculum developer and/or researcher in adult and continuing education programs in business and industry, public schools, hospitals, governmental agencies, community colleges, universities, civic organizations, military service or other agencies. Graduate programs of study are designed in relation to an individual's specific interests, needs, and career goals.

## ADMINISTRATION AND SUPERVISION OPTIONS:

A. Public School Administration (leads to Florida Rank II certificate)
B. General Administration/Non-Public School Administration (Non-certification program)

## Quarter Hours

Required Core: to be selected with an advisor from the following: ..... 24-28
ADE 5081 (EAD 507) Principles and Practices of Adult Education ..... 4
ADE 5260 (EAD 508) Organization and Administration of Adult Education ..... 4
ADE 5385 (EAD 509) Adult Teaching and Learning ..... 4
ADE 5180 (EAD 519) Program Development in Adult and Vocational Education: Community/Institutional Level ..... 4
EDF 5481 (EDU 507) Analysis and Application of
Educational Research ..... 4
RED 6333 (ERE 606) Teaching Reading in the Secondary School ..... 4
EAD course as elective ..... 4
Area of Professional Emphasis: ..... 12
Option A: Public School Administrator Certification (12)EDA 6061 (EDA 605) The Organization and Operation ofPublic School System4
EDS 6050 (EDA 608) Supervision in Education ..... 4
EDG 6250 (EDA 609) Curriculum Development ..... 4

        orOption B: General Administration/Non-Public SchoolAdministration (12) Administratively related courses maybe selected from education, business, management,public administration or other areas in consultation withadvisor.
    Electives: The candidate will be encouraged to select coursesthat will increase his or her competence in a teachingspecialty or a supportive social/behavioral science:
CURRICULUM AND INSTRUCTION
Campus Location: Tamiami Campus only
DEGREE: Master of Science
Required Core: ..... 24
ADE 5081 (EAD 507) Principles and Practices of Adult Education ..... 4
ADE 5260 (EAD 508) Organization and Administration of Adult Education ..... 4
ADE 5385 (EAD 509) Adult Teaching and Learning ..... 4
ADE 5180 (EAD 519) Program Development in Adult andVocational Education:Community/Institutional Level 4
ADE 5383 (EAD 520) Program Development in Adult Education: Instructional/Activity Level ..... 4
EAD course as elective ..... 4
Area of Professional Emphasis: ..... 12EVT 5168 (EVO 507) Curriculum Development inVocational Education4
or
EDG 6250 (EDA 609) Curriculum Development ..... 4
EDF 5287 (EDU 505) Instructional Technology ..... 4
EDF 5481 (EDU 507) Analysis and Application of Educational Research ..... 4

The candidate will be encouraged to select courses that will increase his or her competence in a teaching specialty or a supportive social/behavioral science.

## COURSE OFFERINGS

## VOCATIONAL EDUCATION

EVT 3065 (EVO 305) FOUNDATIONS OF VOCATIONAL EDUCATION (5) (F,S) Competency: A knowledge of the history of vocational education on the national, state, and local levels.
EVT 3165C (EVO 306) COURSE PLANNING (5) (F,W,S) Competency: Basic knowledge and skill of analyzing planning and organizing bodies of knowledge for instructional purposes.
EVT 3815C (EVO 308) VOCATIONAL EDUCATION LABORATORY MANAGEMENT AND SAFETY (5) (W) Competency: Knowledge and skill of analyzing, planning, organizing, and controlling laboratory environments and students safe learning activities.
EDG 4941 (EVO 406) SPECIAL TEACHING LABORATORY (5) (F,W) Competency: Knowledge of institutional structure, organization, policies, and roles of school personnel with actual teaching experience in their areas of specialization. Prerequisites: EDU 311 and EDU 312.
EVT 4949 (EVO 407) SUPERVISED OCCUPATIONAL EXPERIENCES (5-15) (ARR) Competency: Development of occupational skill via field based workexperience in industry, business, or government agency in an occupation in which the student is preparing to teach.
HES 4280 (EVO 408) OCCUPATIONAL SAFETY AND HEALTH (OSHA) (5) (S) Competency: Knowledge of the history, implications and applications of the Occupational Safety and Health Act of 1970 . For vocational and technical teachers, industrial employees, and management personnel.
EVT 4365 C (EVO 409) INSTRUCTIONAL STRATEGIES AND EVALUATION IN VOCATIONAL AND TECHNICAL EDUCATION
(5) (F) Competency: Knowledge and skill in analyzing, planning, developing, executing, and evaluating, classroom and laboratory teaching and learning activities.
EVT 4668 (EVO 410 ) EMERGING EMPHASIS IN CAREER EDUCATION (5) (F) Competency: A knowledge of current trends and issues in reference to developing and integrating career education into current elementary and secondary educational programs.
EVT 4990 (EVO 412) CREDIT BY EXAMINATION (5-45) (ARR) Competency: Demonstration of technical knowledge and skills in an occupational area such as trade, industrial, health, and technical as certified by recognized professional examinations such as the National Occupational Competency Test. Credits cannot be used in lieu of professional program courses.
EEX 4882 L (EVO 419) LABORATORY ACTIVITIES FOR TEACHERS OF THE HANDICAPPED (5) (F) Competency: The use of projects, tools, materials, and equipment to facilitate training the occupationally and physically handicapped and mentally re-

## tarded.

EVT 4940 (EVO 425) STUDENT TEACHING (15) (W,S) Competency: Utilization of instructional knowledges, attitudes, and skills in a variety of instructional situations in vocational educational setting. Prerequisite: EVO 406.
$\qquad$ (EVO 495) Individual Study (1-5) (maximum 10 hrs.) (ARR) Competency: Identifying, researching, and reporting on a special problem of interest to the student. Subject to approval of program advisor.
EVT 5389 (EVO 502) TEACHING CAREER RELATED ACTIVITIES (5) (W,SS) Competency: Integration and articulation of career concepts and activities with regular curriculum.
EVT 5460 (EVO 504) EDUCATIONAL MEDIA (5) (F,W,S,SS) Competency: Knowledge and skill in selecting, developing and utilizing instructional media forms to communicate or demonstrate concepts.
EVT 5669 (EVO 506) TRENDS AND ISSUES IN VOCATIONAL EDUCATION (4) (F,S) Competency: A knowledge of the basic philosophical and curricular trends and issues in vocational-technical education at the international, national, state, and local levels.
EVT 5168 (EVO 507) CURRICULUM DEVELOPMENT IN VOCATIONAL EDUCATION (4) (W) Competency: Basic knowledge and skill of analyzing, planning, organizing and developing curriculum in an area of specialization.
EVT 5078 (EVO 509) TECHNICAL EDUCATION IN AMERICAN SOCIETY (4) (W) Competency: Knowledge of the basic role, and current status of technical education in an industrial democracy.
EVT 5067 (EVO 516) COOPERATIVE VOCATIONAL EDUCATION PROGRAMS (4) (F) Competency: Knowledge and skill in the basic philosophy, principles, and processes and procedures of the cooperative method in vocational and technical education. EVT 5382 (EVO 517) SUPERVISION AND COORDINATION OF VOCATIONAL EDUCATION PROGRAMS (4) (F) Competency: Knowledge and skill in the supervision of personnel and the coordination of work to achieve institutional goals.
EVT 5461 (EVO 526) COMMUNITY RELATIONS AND RESOURCES FOR VOCATIONAL EDUCATION (4) (S) Competency: Knowledge and skill in developing and utilizing community resources and establishing public relations procedures and practices to implement vocational education programs.
EVT 5766 (EVO 527) EVALUATION IN VOCATIONAL AND TECHNICAL EDUCATION (4) (S) Competency: Knowledge and skills in the use of tests and measurements to evaluate teaching and learning effectiveness and the validity of objectives.
EVT 5905 (EVO 595) INDIVIDUAL STUDY (1-15) (ARR) Competency: Identifying, researching, and reporting on a special problem of interest to the student. Subject to approval of program adviser.
EVT 5925 (EVO 597) WORKSHOP IN VOCATIONAL EDUCATION (1-10) Competency: Selected competencies related to: a) Instructional b) Technical

EVT 6264 (EVO 606) ADMINISTRATION OF VOCATIONAL EDUCATION PROGRAMS (4) (S) Competency: Knowledge of the principles practices, functions, and roles of administration in the operation of vocational education programs.
EVT 6760 (EVO 616) RESEARCH IN VOCATIONAL AND ADULT EDUCATION (4) (S) Competency: Knowledge and skill in identifying, defining, collecting, analyzing, and synthesizing research related problems in vocational and adult education.
EVT 6946 (EVO 695) SUPERVISED FIELD EXPERIENCE (4-8) (APR) Competency: Application and refinement of competencies in either classsroom, laboratory, administration and supervision via school based field experiences. Placement is subject to approval of program advisor.
EVT 6930 (EVO 696) SEMINAR IN VOCATIONAL EDUCATION (2-4) (W) Competency: The application of knowledges and skills to solve special instructional, curricular and/or administrative and supervisory problems and issues in vocational education.
EVT 6925 (EVO 697) GRADUATE WORKSHOP IN VOCATIONAL EDUCATION (1-10) (APR) Competency: Selected competencies related to: a) Professional b) Program

## INDUSTRIAL ARTS EDUCATION

EIA 4042 (EIA 403) THE ROLE OF INDUSTRIAL ARTS IN THE SCHOOLS (5) Competency: Knowledge of the basic philosophy, goals, programs, principles, practices, learning environments and the relationship of industrial arts to other school disciplines.
EIA 4360 (EIA 405) INSTRUCTION IN INDUSTRIAL ARTS (5) (F,W) Competency: Applying educational principles, practices, and techniques to the teaching of industrial arts. Prerequisite: EDU 311.
EIA 4941 C (EIA 425) STUDENT TEACHING IN INDUSTRIAL ARTS (15) (W,S) Competencies developed in the utilization of instructional knowledges, attitudes, and skills in Industrial Arts Education instructional situations. Prerequisites: EIA 405; EVO 306
EIA 5811 C (EIA 528) EQUIPMENT AND FACILITIES PLANNING (4) (S) Competency: Utilization of research, design, engineering knowledge and skills to plan laboratory facilities and equipment.
EIA 5905 (EIA 595) INDIVIDUAL STUDY (1-5) (APR) Competency: Identifying, researching, and reporting on a special problem in industrial arts of interest to the student. Subject to approval of program adviser.
EIA 6931 (EIA 605) ANALYSIS OF INDUSTRIAL ARTS EDUCATION (4) (W) Competency: Knowledge of industrial arts at the national, state, and local levels.

## VOCATIONAL HOME ECONOMICS EDUCATION

HEE 3302 (HEE 305) HOME ECONOMICS EDUCATIONAL PLANNING (5) (F,S) Competency: Development and adaptation of curriculum and strategies for the presentation of vocational home economics content in a variety of educational settings. HEE 4104 (HEE 405) INSTRUCTION IN VOCATIONAL HOME ECONOMICS (5) (W,SS) Competency: Applying educational principles, practices and techniques to teaching home economics in varied educational environments. Prerequisites: EDU 311 and HEE 305.
HEE 4944 (HEE 406) SPECIAL TEACHING LABORATORY HOME ECONOMICS (5) (F,W,S) Competency: Knowledge of the educational institution and utilization of teaching skills via mini-teaching experiences within areas of home economics in selected institutions. Prerequisites: EDU 311, 312, HEE 305, 405.
HEE 4940 (HEE 425) STUDENT TEACHING IN HOME ECONOMICS EDUCATION (15) Competencies developed in the utilization of instructional knowledges, attitudes, and skills in Vocational Home Economics Education instructional situations. Prerequisites: HEE 305, 405, 406.
HEE 5335 (HEE 505) TRENDS IN VOCATIONAL HOME ECONOMICS EDUCATION (4) (F,S) Competency: Knowledge of current social, economic and educational issues affecting the field of vocational home economics. Subject to approval of program adviser.
HEE 5150 (HEE 506*) TEACHING FOOD AND NUTRITION (5)
HEE 5360 (HEE 507*) TEACHING CHILD DEVELOPMENT (5)
HEE 5362 (HEE 508*) TEACHING CLOTHING AND TEXTILES (5)
HEE 5363 (HEE 509*) TEACHING FAMILY LIFE EDUCATION (5)
HEE 5364 (HEE 515*) TEACHING HOUSING AND HOME FURNISHINGS (5)
HEE 5361 (HEE 516*) TEACHING CONSUMER EDUCATION AND FAMILY ECONOMICS (5)
HEE 5905 (HEE 595) INDIVIDUAL STUDY (1-5) (F,W,S) Competency: Identifying, researching and reporting on a special problem in vocational home economics. Subject to approval of program adviser.
HEE 5927 (HEE 596) SPECIAL WORKSHOP - HOME ECONOMICS (1-5) Competency: Skill in developing, organizing, teaching, evaluating, and administering programs related to specific aspects of home economics education. Subject to approval of program adviser.
HEE 6911 (HEE 605) RESEARCH IN HOME ECONOMICS EDUCATION (4) Competency: The analysis and application of research pertaining to philosophy, curriculum, evaluations, and teacher education in Home Economics.
HEE 6126 (HEE 606) TEACHING HOME ECONOMICS IN THE SECONDARY SCHOOL (4) Competency: Knowledge of current and evolving methods, programs, and materials to teach and evaluate home economics. Prerequisite: EVO 507 or permission of instructor.
HEE 6943 (HEE 607) SUPERVISION OF STUDENT TEACHERS IN HOME ECONOMICS (4) Competency: Skill in teaching, observing, and evaluating student teachers in vocational home economics.
HEE 6937 (HEE 696) SEMINAR IN HOME ECONOMICS EDUCATION (4) Competency: Application of selected instructional, curricular and/or administrative principles and practices to the solution of problems of special interest to vocational home economics educators. Subject to approval of program adviser.
*Course is designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational methods.

## ADULT EDUCATION

ADE 5081 (EAD 507) PRINCIPLES AND PRACTICES OF ADULT EDUCATION (4) (F,S) Competency: Developing a rationale for and philosophy of adult education, contrasting agencies, programs, and curricula, evaluating adults' educational pursuits, analyzing factors affecting adult education; differentiating adults and youths as learners; planning and appraising programs for adults.
ADE 5260 (EAD 508) ORGANIZATION AND ADMINISTRATION OF ADULT EDUCATION (4) (W) Competency: Analyzing regulations affecting adult education; selecting and training staff; selecting organization patterns appropriate for given programs; executing manageriial responsibilities; arranging for community involvement and administering supportive services.
ADE 5385 (EAD 509) ADULT TEACHING AND LEARNING (4) (W,SS) Competency: Differentiating theories of learning in relation to teaching adults; contrasting characteristics of adults as opposed to youth; evaluating the implications of such distinctions in relation to learning situations appropriate for adults.
ADE 5195 (EAD 51D) DESIGNING EDUCATIONAL PROGRAMS FOR DISADVANTAGED ADULTS (4) (S) Competency: Distinguishing various forms of disadvantagement; analyzing these problems and forces which inhibit their solution; critiqueing responses to these problems; developing training programs, curricula and materials, recruitment strategies, and evaluation designs.
ADE 5180 (EAD 519) PROGRAM DEVELOPMENT IN ADULT AND VOCATIONAL EDUCATION: COMMUNITYIINSTITUTIONAL LEVEL (4) (F,S) Competency: Analyzing variables central to program and community development; analyzing principles and roles requisite for effective group functioning; developing a consensus group philosophy; designing, conducting and interpreting studies of community objectives; mobilizing and integrating resources; planning, conducting and interpreting evaluation studies.
ADE 5383 (EAD 520) PROGRAM DEVELOPMENT IN ADULT EDUCATION: ACTIVITY/INSTRUCTIONAL LEVEL (4) (S) Competency: Analyzing models for instructional esign, identifying and evaluating variables related to such models, developing designs unique for adult learners.
ADE 5925 (EAD 525) WORKSHOP IN ADULT EDUCATION (3-15) (APR) Short-term intensive development of selected operational competencies related to instructional, curricular and/or administrative skills, practices and procedures of special interest to students in adult education.
ADE 5935 (EAD 526-550) SPECIAL TOPICS IN ADULT EDUCATION (1) (APR) "Mini-courses" which provide for an examination of special facets of adult education.
ADE 5960 (EAD 595) INDIVIDUAL STUDY IN ADULT EDUCATION (1-5) (F,W,S,SS) Specialized intensive study in areas of interest to the student. Subject to approval of program adviser.
ADE 5945 (EAD 596) SUPERVISED FIELD EXPERIENCES IN ADULT EDUCATION (1-15) (F,W,S,SS) Internship placements in various on-going adult education programs according to students' needs and interests. On-site supervisory visits are made by program advisor. Joint conferences and seminars involving the student, the program advisor, and appropriate representative of the cooperating agency are also conducted intermittently.
ADE 6930 (EAD 697) SEMINAR IN ADULT EDUCATION (2-4) ( $\$$ ) Provides intensive study of instructional, curricular, and/or administrative principles and practices for the solution of problems of special interest to students in adult education.

## SCHOOL OF HEALTH AND SOCIAL SERVICES

The School of Health and Social Services offers the following eight programs which lead to a Bachelor of Science Degree in the major program of study. The Criminal Justice Program offers a Master of Science Degree in criminal justice. The Dietetics and Nutrition Program also offers a Master of Science Degree in Dietetics. A Master's program in Social Work is in the planning phase.

The School emphasizes an experiential program which is geared toward meeting the total needs of the individual with a primary focus on preventive health, social welfare services, and the criminal justice system. The goal of client-centered care is directed toward the psychosocial, physical and rehabilitative needs of the individual and family unit. Emphasis is placed on the concept of high level wellness of each individual with a community oriented approach to the solution of problems. Thus, the School considers both health and social services inseparable - truly allied fields.

The educational program in the School provides the opportunity to be trained in an interdisciplinary manner within a team-oriented environment, which parallels the responsibility and level of practice expected of professional personnel in the occupational market place. Students enrolled in the programs of the School will receive an enriched program of studies in a broad general education course sequence, core courses common to all helping professions, and specialized professional courses. A clinical affiliation program is given concurrent to theoretic courses, seminars, etc., with specific clinical training and field practice which often emanates in internships at advanced levels in agencies in Florida and other states.

## I. ADMISSION REQUIREMENTS: UNDERGRADUATE

As part of the 90 quarter hours of lower division coursework, the student is required to meet one or a combination of the following:

- Associate of Arts or an Associate of Science degree
- 90 quarter hours of collegiate work from an accredited institution at an acceptable performance level
- General education requirements


## 2. ADMISSION REQUIREMENTS: GRADUATE

The admission policies for the graduate programs in Criminal Justice and the Dietetics and Nutrition are described in the program section of the catalog.
NOTE: Due to the professional and specialized nature of the programs within the School, a student may be admissable to the University but not to a particular program. For program prerequisites, see University Catalogue, call the program or the Office of the Dean.

## II. ADVISEMENT

A student is assigned a faculty advisor upon being admitted to a program and together the student and the advisor plan the program of study. The advisement program for the School is coordinated through the Dean's Office. Students needing pre-advisement may call the Coordinator of Academic Advisement on the Tamiami campus.

## III. CLINICAL AND FIELD EXPERIENCES

As an integral part of the program curriculum, the student is provided supervised learning experiences in community service agencies. The Clinical and Field Work experience is a period of orientation, observation and practice in the delivery of health and social services which is structured concurrently with relevant classroom experiences. Over 150 community organiza-
tions in the State of Florida and other states are utilized for student internship, field practice and clinical experiences.

## IV. THE EXTERNAL DEGREE PROGRAM

The external degree program is a self directed non residential program for the residents of Florida. The program enables the student to take advantage of all educational resources throughout Florida without requiring residence on any campus. The student's previous academic training and life experiences are summarized and individual study plans are designed for each student in the form of an educational contract.

The following programs offer the external degree option: Criminal Justice and Health Science.

## V. CONTINUING EDUCATION

 AND SPECIAL PROGRAMSThe School in concert with the Division of Continuing Education, offers many credit courses in Off-Campus locations in Dade, Broward, and Monroe Counties. The undergraduate degree programs in Criminal Justice and Social Work are offered on the North Miami Campus.

CRIMINAL JUSTICE - Prepares practitioners with a scientific and scholarly blend of social, cultural, behavioral, political, and legal learning experiences as they relate to our justice system.

DIETETICS AND NUTRITION - Prepares practitioners to protect the health of the nation by developing expertise in the composition of foods, their biological and physiological functions and their preparation for utilization. The undergraduate program is fully accredited by the American Dietetic Association. The program also offers a Master of Science degree in dietetics.

HEALTH SCIENCE - Prepares persons to function in several capacities in the health care delivery system. The program contains four options or tracks:

1) The Health Science Management track prepares persons to work in supervisory or middle management positions in hospitals, family health centers, federal health agencies, nursing homes, etc.
2) The education track is designed for students interested in becoming involved in educational processes within health care organizations. This program does not prepare one for teacher certification.
3) The general track allows the student to mold the curriculum around specific career needs.
MEDICAL TECHNOLOGY - Prepares laboratory professionals to conduct the many laboratory tests utilized to aid physicians and others in their diagnosis and treatment of patients. The Program is fully accredited by the National Accreditation Agency for Clinical Laboratory Sciences.

NURSING - The Nursing Program is designed as a non-traditional, upper division undergraduate program leading to the Bachelor of Science Degree in Nursing. The curriculum is organized around the use of the nursing process within a transcultural framework to assist man to increase the effectiveness of his adaptive responses and promote positive movement along the health illness continuum.

OCCUPATIONAL THERAPY - Prepares therapists for medical care and rehabilitation of persons with physical and mental illnesses. Occupational Therapy is oriented toward helping the individual to remain healthy. The therapist employs purposeful activities in a restorative program for the sick and disabled. The program is accredited by the American Occupational Therapy Association and the American Medical Association.

PHYSICAL THERAPY - Prepares practitioners to work with persons who are disabled by illness, accident, or were born with a disability. Therapists plan and implement initial and subsequent treatment programs on the basis of test findings, and upon the referral of a licensed physician. The Program is accredited by the American Physical Therapy Association and the American Medical Association.

SOCIAL WORK - Prepares practitioners to help solve individual, family, group and community problems by providing an understanding or society's major social issues. The emphasis of the program will be the development of skills needed to initiate and implement social policy. The Program is accredited by the Council of Social Work Education.

## CRIMINAL JUSTICE

Criminal Justice is an area of study dealing with the formal mechanisms of social control by which our society exercises constraint over its members. The study of criminal justice is an interdisciplinary one, i.e., it involves law and the social/behavioral sciences. It is concerned with the primary means of social control-the law. It involves the study of crime, the reaction of society to this major social issue and the instrumentalities utilized in treating the problem. Heavily intertwined throughout the entire approach is the pervading issue of social justice.

A wide variety of career opportunities are available in criminal justice at all levels of government. Due to its interdisciplinary approach, the study of criminal justice fills the needs of students seeking careers in teaching, research, law, and the various criminal justice occupations. It also provides in-service personnel with the means for professional advancement.
Campus Location: Tamiami and North Miami Campuses
DEGREE: Bachelor of Science in Criminal Justice
LOWER DIVISION PREPARATION:
Required Courses: None
Remark: The student majoring in Criminal Justice should consult with an academic advisor to ensure that the actual courses selected (1) meet program and degree requirements, and (2) are consistent with the individual's long range academic and career objectives.
Recommended Courses: 1. The student intending to enroll in the Criminal Justice Program is urged to complete an Associate of Arts Degree at the lower division. An entering student is not required to have been enrolled in a pre-criminal justice program. A student having an Associate of Science degree or 90 quarter hours will also be accepted, but must complete general education requirements before the bachelor degree can be awarded.
UPPER DIVISION PROGRAM:
Core Courses: Six courses are required for every student in Criminal Justice. A core course requirement can only be waived by the Chairperson with the recommendation of the student's faculty advisor.
These courses are:
CCJ 3020 (CRJ 300)* Should be taken during first quarter at FIU.
CCJ 3600 (CRJ 301)
CCJ 3100 (CRJ 302)
CCJ 3290 (CRJ 303)
CCJ 4300 (CRJ 306)
CCJ 4700 (CRJ 307)* Should be taken during first or second quarter at FIU.
Area of interest: 20 quarter hours at the 300 level or above in Criminal Justice are required for Criminal Justice majors. Only 10 quarter hours of CRJ 440 will count toward this requirement.
Specific electives: 15 quarter hours at the 300 level are required in Sociology-Anthropology, Psychology, Political Science, Computer Science or Statistics. Any combination of these courses is acceptable.
General Electives: 25 quarter hours are required. No more than 15 hours can be Criminal Justice courses. Relevancy of elective courses will be determined in consultation with the student's advisor or the Chairperson. The faculty retains the prerogative to accept or reject electives taken without approval.

## CRIMINAL JUSTICE PROGRAM

Core Courses:

CCJ 4700 (CRJ 307) Methods of Criminal Justice Research 5
Area of Interest: See explanation above $\quad 20$
Specific Electives: See explanation above 15
General Electives: See explanation above $\mathbf{2 5}$

## PROGRAM HONORS:

Students may qualify for Program honors if they meet the University Academic Honors requirements and have a GPA of 3.5 in their Criminal Justice Courses. Students may qualify for Program High Honors if they meet University Honors requirements for High Honors, have a GPA of 3.75 in the Criminal Justice courses and orally present a paper from CRJ 496 to a faculty committee. Any student applying for these awards must take all of his/her Criminal Justice courses at FIU. Those applying for Program Honors must complete an application before the end of the second week of the quarter in which graduation is expected. Candidates for High Honors must complete an application by the end of the third week of the second quarter before graduation.
The CRJ 496 paper must be completed by the end of the second quarter prior to graduation. This means that CRJ 496 cannot be taken the last quarter if it is to be used for the purposes of obtaining High Honors.
Anyone intending to apply for High Honors must interest a designated faculty member in accepting him/her as an enrollee in CRJ 496 for this purpose. An "Approval Form for Independent Study" can be obtained from the Program office by a candidate before requesting consideration as a prospective High Honors student.

## TRANSFER CREDIT

A student transferring from a four year college may transfer up to 130 quarter hours into the Criminal Justice Program; however, the student must still have 90 quarter hours at the 300 level or above. All work transferred to FIU will be subject for review and approval by the Criminal Justice Chairperson. Courses completed with a grade of "D" will not be transferred.

## DOUBLE MAJORS AND DEGREES

Students must complete the core courses ( 30 hours) plus 20 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 (assuring requirements for two majors have been completed as certified by the appropriate academic units and a minimum of 45 appropriate quarter hours beyond the requirements of one degree have been earned).

## CRIMINALISTICS-CHEMISTRY PROGRAM

Criminalistics-Chemistry Core Requirements:
Same as requirements for bachelor degree in Chemistry. (Degree granted by Department of Physical Sciences).
Internship:
A 5-10 credit internship in the laboratory of a participating criminal justice agency.
Criminal Justice Coursework:
The student should elect 15 credits of Criminal Justice courses in consultation with an advisor in the Department of Criminal Justice.

## CRIMINAL JUSTICE CORE COURSES

[^3]CCJ 3600 (CRJ 301) THE NATURE AND CAUSES OF CRIME (5) Social, cultural, behavioral, political and economic causitive factors in the development of crime. Psychological and sociological considerations involved in criminal behavior. The role of the legislature as policy maker in criminalizing conduct and the limits of the criminal sanction.
CCJ 3100 (CRJ 302) LAW ENFORCEMENT SYSTEMS (5) A conceptual study of the American police system.
CCJ 3290 (CRJ 303) JUDICIAL POLICY MAKING (5) An analysis of judicial systems and their legal, social and political environments. Interrelationships between the prosecutorial and other criminal justice substructures will be examined.
CCJ 4300 (CRJ 306) CORRECTIONAL PHILOSOPHY, THEORY AND PRACTICE (5) Appraisal of correctional methods utilized in the United States and other countries. Prisons, probation, parole, work-release programs, half-way houses, community based correction programs and other techniques are analyzed.
CCJ 4700 (CRJ 307) METHODS OF CRIMINAL JUSTICE RESEARCH (5) Elements of scientific perspective, interaction of research theory and practice. Research design, data collection, analytic and statistical techniques, use of data processing resources and preparation of research reports.

## ELECTIVES

CCJ 3270 (CRJ 304) CRIMINAL PROCEDURE (5) An in-depth study of the 4th through 8th Amendments of the Constitution as they impact upon the Criminal Justice process.
CCJ 3340 (CRJ 308) CORRECTIONAL COUNSELING (5) A course designed to explore the nature and function of counseling within the correctional setting. Prerequisite: CRJ 306 or equivalent.
CCJ 3320 (CRJ 309) COMMUNITY BASED TREATMENT (5) An examination of the various pre-trial and post-trial Community Based Treatment programs. A special emphasis will be placed on the impact these programs have upon the Criminal Justice system and the clients they serve. Prerequisite: CRJ 306 or equivalent.
CCJ 3341 (CRJ 310) CORRECTIONAL TREATMENT (5) A concentrated study of the various institution-based treatment programs. Emphasis will be placed on the impact and operational aspects of these programs.
CCJ 3450 (CRJ 311) INSTITUTIONAL ORGANIZATION AND ADMINISTRATION (5) Analysis of the internal organizational structure and of executive roles and functions in criminal justice agencies. Examines administrative and managerial concepts underlying decision making, policy formulation, operational strategies, and coordination and control procedures. Cases and outside research reports are used for specific analysis.
CCJ 3460 (CRJ 312) MANAGEMENT OF HUMAN RESOURCES (5) Analysis of criminal justice manpower input problemsrecruitment, selection, placement, training, development and control at all levels. Emphasis is placed upon policy issues, research findings, and advanced techniques. Prerequisite: CRJ 311.
CCJ 3470 (CRJ 313) CRIMINAL JUSTICE PLANNING (5) Planning methods applicable to criminal justice agencies are examined. Emphasis is placed on planning as a decision making process for criminal justice agencies. Theories, techniques, and applications will be studied. Prerequisite: CRJ 311 and 312.
CCJ 3291 (CRJ 314) JUDICIAL ADMINISTRATION-CRIMINAL (5) Study of the rules of criminal procedure and evidence affecting the responsibilities of court administrators. Administrative relationships of courts with agencies involved in the criminal justice system will be examined.
CCJ 3461 (CRJ 315) DEVELOPING INTERPERSONAL COMMUNICATION (5) The emphasis of this course is upon the development of interpersonal communication practices that can be effectively utilized in a helping role and on the job to improve interaction among employees and between the employees and the public.
CCJ 3530 (CRJ 321) DELINQUENCY PREVENTION AND CONTROL (5) Social dimensions of juvenile delinquency, its nature, scope and distribution; comparison and analysis of agencies of control and prevention. Prerequisite: CRJ 301.
CCJ 3934 (CRJ 395) CONTEMPORARY ISSUES IN CRIMINAL JUSTICE (2) An extensive examination of selected contemporary issues in criminal justice. May be repeated.
CCJ 4400 (CRJ 403) METHODS OF INSTITUTIONAL CHANGE (5) Analysis of evolutionary and revolutionary changes in political institutions and agencies. Means, methods and techniques for initiating and implementing meaningful change within the criminal justice system.
CCJ 4630 (CRJ 404) COMPARATIVE CRIMINAL JUSTICE SYSTEMS (5) A critical comparative study of the various criminal justice subsystems with those of selected industrialized foreign countries including administration, organization, objectives, principal functions, and levels of control. Prerequisite: CRJ 300.
CCJ 4130 (CRJ 406) POLICE-COMMUNITY RELATIONS (5) A study of the concept of police-community relations, emphasizing the police role in community tension and conflict. Prerequisite: CRJ 302.
CCJ 4281 (CRJ 408) LEGAL ASPECTS OF CORRECTIONS (5) This course addresses the investigation of legal problems from conviction to release. Emphasis will be placed on the legal problems involved in presentence investigations, sentencing, probation, parole, incarceration, and loss and restoration of civil liberties. Prerequisite: CRJ 306.
CCJ 4280 (CRJ 410) LAW AND CRIMINAL JUSTICE (5) The resolution of criminal justice problems through the application of the law. The nature, sanctions and limits of law. Categories of law and schools of jurisprudence.
CCJ 4661 (CRJ 411) TERRORISM AND VIOLENCE IN CRIMINAL JUSTICE (5) An analysis of terrorism and violence in criminal justice. Law and other control mechanisms will be examined.
CCJ 4662 (CRJ 412) CRIMINAL JUSTICE AND THE MINORITY COMMUNITY (5) A general survey of the institutions of justice in the United States and their contact with minority people. The focal point of this course will be the role of racial/ethnic minorities in that system. Prerequisite: CRJ 300.
CCJ 4663 (CRJ 413) WOMEN, CRIME AND THE CRIMINAL JUSTICE SYSTEM (5) Women as deviants, criminals, victims and professionals in the criminal justice system. Prerequisite: CRJ 301
CCJ 4462 (CRJ 414) HUMAN RELATIONS TRAINING (5) An experientially based course that will prepare selected students to present human relations training programs in criminal justice agencies.
CCJ 4330 (CRJ 421) PROBATION AND PAROLE (5) An examination of the treatment of convicted law violators by the correctional field services before and after prison. Prerequisite: CRJ 306.
CCJ 4400 (CRJ 422) ADMINISTRATION OF CORRECTIONAL INSTITUTIONS (5) Theories and techniques of administering
correctional institutions: treatment, security, and custody. Social structure of the prison community and inmate social systems. Case studies. Prerequisite: CRJ 306.
CCJ 4250 (CRJ 430) CRIMINAL JUSTICE AND THE CONSTITUTION (5) A study of constitutional issues as they relate to the administration of criminal justice.
CCJ 4940 (CRJ 440) FIELD WORK AND SPECIAI. PROJECTS (1-15) A course designed to broaden the experiencial base; application of theoretical content to Criminal Justice. Advisor's approval required.
CCJ 4900 (CRJ 495) DIRECTED READINGS IN CRIMINAL JUSTICE (Variable) Extensive reading and analysis of selected literature under faculty supervision. Permission of instructor and program chairperson required.
CCJ 4910 (CRJ 496) INDEPENDENT RESEARCH (Variable) A course designed to provide qualified students with the opportunity to perform meaningful research into some area of criminal justice under the direction of a faculty member. Permission of the instructor required.

## CRIMINAL JUSTICE

## Graduate Program

The Masters of Science Degree in Criminal Justice is a professional degree designed to prepare students for management responsibilities in the criminal justice sector or public sector related activities.

The objectives of the Masters program are:

1. To provide present and future criminal justice managers with the skills needed to function effectively in our ever-changing society.
2. To serve as a catalyst for interdisciplinary research and study of criminal justice and related problems.
3. To provide the criminal justice system with qualified students for academic careers in administration, planning and analysis, and teaching in colleges and universities.
The minimum academic requirement for admission to the Criminal Justice Master's program is graduation from an accredited baccalaureate program. Although it is helpful, students need not have had any formal coursework in Criminal Justice. Competent students from any major field of study are eligible for admission. After initial counseling, a determination will be made regarding any need for remedial course work.

Students having a Bachelor's Degree from an accredited institution and a " $B$ " average or better for the last two years of undergraduate work or a total score of 1000 on the Graduate Record Examination are eligible for unconditional admission to the program. Provisions can be made for admittance as Special Students until admissions criteria have been satisfied. Under certain circumstances exceptions to these standards can be made.

## Campus Location: Tamiami Campus only

Degree: Master of Science in Criminal Justice


#### Abstract

A. Degree Credit Requirements

The Master's Degree in Criminal Justice will require sixty (60) quarter hours of credit. A maximum of ten (10) quarter hours may be transferred into the program from other accredited institutions, subject to the approval of the Graduate Admissions Committee. Candidates have the option of two programs of study, i.e., the thesis and nonthesis options. Those selecting the thesis option are required to complete 50 quarter hours of course work and 10 quarter hours of thesis. The non-thesis option consists of 60 quarter hours of course work and comprehensive written and oral examinations. All candidates must take five core seminars.


B. Specific Program Requirements Are:

Core Courses

CCJ 6055
CCJ 6477
(CRJ 600) Seminar in Criminal Justice
(CRJ 601) Information Systems for Criminal Justice
CCJ 6476
CCJ 6706
(CRJ 602) Criminal Justice Planning
(CRJ 603) Applied Statistical Techniques for Criminal Justice
CCJ 6709 (CRJ 604) Advanced Research Methods
(CRJ 697) Thesis
Electives

5

5
Quarter Hours 5

## 5

5
10

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Administrative Concentration
    CCJ 6467 (CRJ 605) Human Resources Management in
                            Criminal Justice
    CCJ 6457 (CRJ 606) Organizational Development in
                Criminal Justice Agencies
    CCJ 6456 (CRJ 607) Administration and Management of
                Criminal Justice Agencies
    CCJ 6486 (CRJ 608) Labor Relations in the Criminal
        Justice Sector
    CCJ 6716 (CRJ 610) Productivity and Program Evaluation
    CCJ 6485 (CRJ 611) The Criminal Justice Practitioner
                and the Political System
General Electives
CCJ 6945 (CRJ 620) Field Experience in Criminal Justice
    CCJ 6468 (CRJ 621) Intergroup Relations
    CCJ 6635 (CRJ 622) Seminar in Comparative Criminal
        Justice
    CCJ 6105 (CRJ 623) Seminar in Law Enforcement
    CCJ 6305 (CRJ 624) Seminar in Corrections
    CCJ 6495 (CRJ 625) Seminar in Court Administration
    CCJ 6665 (CRJ 626) Seminar in Victimology
    CCJ 6585 (CRJ 627) Seminar in the Concept of Justice
    CCJ 6525 (CRJ 628) Seminar in Juvenile Justice
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3. Additional Procedures:

During the first quarter, all students will select a committee of three graduate faculty members, the student's major faculty advisor being a member and chairperson of this committee. The major advisor and committee will be responsible for overseeing the student's work while in the Master's program. For the final ten quarter hours (10), a student will submit, for the approval of the advisory committee, a thesis proposal. At the completion of the thesis, the advisory committee will make the final judgment on the acceptability of the thesis. The advisory committee may require the candidate to undergo an oral discussion of the thesis.
C. Graduation Requirements

To receive the Master's Degree in Criminal Justice, a student must:

1. Satisfy all University regulations governing graduate study.
2. Meet the requirements of the core and one of the subspecialties programs of study.
3. Complete a minimum of fifty (50) quarter hours of graduate level courses and a thesis. (No more than ten (10) graduate quarter hours can be transferred from other accredited institutions).
4. Successfully complete a written comprehensive examination on criminal justice coursework.

## MASTER OF SCIENCE IN <br> CRIMINAL JUSTICE CORE COURSE

[^4]CCJ 6709 (CRJ 604) ADVANCED RESEACH METHODS (5) The focus will be on the presentation and discussion of reseach methodology of primary interest to criminal justice students. Emphasis will be placed on preparation for thesis research. The requirements for proposal preparation and final thesis report will provide the requisite structure of this course.
CCJ 6971 (CRJ 697) THESIS (10) The completion and defense of the thesis.

## ELECTIVES

CCJ 6467 (CRJ 605) HUMAN RESOURCES MANAGEMENT IN CRIMINAL JUSTICE (5) A study of the various employment practices within criminal justice agencies and their impact upon the development of the criminal justice system.
CCJ 6457 (CRJ 606) ORGANIZATIONAL DEVELOPMENT IN CRIMINAL JUSTICE AGENCIES (5) A course designed to familiarize students with the organizational development methodologies that have relevance to the management of change within criminal justice agencies. Special attention will be given to case studies of the various methodologies utilized by criminal justice agencies.
CCJ 6456 (CRJ 607) ADMINISTRATION \& MANAGEMENT OF CRIMINAL JUSTICE AGENCIES (5) An examination of the criminal justice system from the perspective of administrative and management problems. Emphasis will be on the identification of solution alternatives for those problems having the most significant impact on the components of the criminal justice system.
CCJ 6486 (CRJ 608) LABOR RELATIONS IN THE CRIMINAL JUSTICE SECTOR (5) An examination of the area of collective bargaining for public employees. Special emphasis will be placed on the current status of labor relations law as it impacts on the criminal justice system.
CCJ 6716 (CRJ 610) PRODUCTIVITY AND PROGRAM EVALUATION (5) A systematic review of the problems involved in productivity, improvement in criminal justice agencies and program evaluation.
CCJ 6485 (CRJ 611) POLITICS AND CRIMINAL JUSTICE (5) An analysis of the various criminal justice subsystems as they interrelate with the political system, political feasibility, community control and the relationship to social and economic policy.
CCJ 6945 (CRJ 620) FIELD EXPERIENCE IN CRIMINAL JUSTICE (5) A course designed to provide selected students an opportunity to engage in action-oriented research within a criminal justice agency on a designated reseach project.
CCJ 6468 (CRJ 621) INTERGROUP RELATIONS IN CRIMINAL JUSTICE (5) A study of the theories, strategies and the tactics employed in intergroup relations in criminal justice.
Attention is given to increasing the student's awareness and sensitivity to the dynamic forces within intergroup relations as a means for increasing their productivity as criminal justice practitioners.
CCJ 6635 (CRJ 622) SEMINAR IN COMPARATIVE CRIMINAL JUSTICE SYSTEMS (5) A comparative study of the various criminal justice systems in the United States with similar international governmental and social systems.
CCJ 6105 (CRJ 623) SEMINAR IN LAW ENFORCEMENT (5) An analysis of current major hypotheses and problems in law enforcement. Special topics to be announced at the beginning of each quarter. May be repeated.
CCJ 6305 (CRJ 624) SEMINAR IN CORREOTIONS (5) An analysis of current major hypothesis and problems in corrections. Special topics to be announced at the beginning of each quarter. May be repeated.
CCJ 6495 (CRJ 625) SEMINAR IN JUDICIAL ADMINISTRATION (5) An analysis of current major hypothesis and problems in judicial administration. Special topics to be announced at the beginning of each quarter. May be repeated.
CCJ 6665 (CRJ 626) SEMINAR IN VICTIMOLOGY (5) An in-depth study of the criminal-victim relationship.
CCJ 6585 (CRJ 627) THE CONCEPT OF JUSTICE (5) A study of the philosophical and utilitarian approaches to the definition of justice, and the varied translations of the concepts of justice into concrete action.
CCJ 6525 (CRJ 628) SEMINAR IN JUVENILE JUSTICE (5) Philosophy and procedures of the juvenile courts, dependency, delinquency and family law. Evaluation of juvenile court practices.

## DIETETICS AND NUTRITION

The Department offers a major leading to a baccalaureate degree with a concentration in general dietetics, and courses in nutrition for allied disciplines or for the student who desires a working knowledge of nutrition. The Department also offers a Master of Science degree program in Dietetics with areas of concentration in Therapeutic and Community Dietetics or Dietetic Management. The undergraduate programs are designed to assist the student gain basic practitioner understanding and skills and to achieve his or her career objectives. The graduate program prepares the student to assume leadership responsibilities in health care institutions, community health agencies, or private practice. The graduate program allows for concentration in research or field application.

## UNDERGRADUATE PROGRAMS

The Coordinated Undergraduate program meets the requirements of The American Dietetic Association both for academic preparation for membership and for clinical experience.

The Florida International student must make formal application to the department for the clinical portion of the programs by April 15 of the Spring Quarter before fall admissions.

Clinical courses are sequential and require two years to complete. Clinical experiences are available in several hospitals and other health agencies. A graduate of the clinical portion of the programs is eligible to take the registration examination to become a registered dietitian.

A graduate of the above program is awarded a Bachelor of Science degree. With special planning and advisement, a program of study leading to the Bachelor of Science degree in Dietetics and Nutrition without clinical experience may be arranged.

## GENERAL DIETETICS

Campus Location: Tamiami Campus only.
DEGREE: Bachelor of Science in Dietetics and Nutrition

## LOWER DIVISION PREPARATION:

The student desiring to major in General Dietetics should have completed a large portion of the following: (1) The general education requirements for the baccalaureate degree; (If not included in the lower division general education coursework, at least one course each in psychology, sociology, economics, two courses in English composition or technical writing); (2) two courses in inorganic chemistry; (3) one course in organic chemistry, and (4) one course in business management.
UPPER DIVISION PROGRAM:
Required Courses:NOTE: Courses designated below with an asterisk (*)comprise the clinical component, and must be taken inthe order listed. Clinical experiences are supervised by thecourse instructors. Clinical stations are located inappropriate hospitals, health agencies and school foodservice programs. Courses marked with an asterisk (*) areopen only to students in the coordinated clinical program.Applied courses and practicum must be takenconcurrently with the related didactic courses.
DIE 3005 (DIN 300) Orientation to Dietetics* ++ (Organic Chemistry must be completed
Quarter Hours81-833
before DIN 300 is taken)
HUN 3122 (DIN 301) Nutrition and Culture (or the equivalent) ..... 4HUN 4410 (DIN 405) Nutrition: Infancy ThroughAdolescence4
FSS 3315 (DIN 309) Food Science for Institutions ..... 4
FSS 3215 (DIN 310) Meal Management (or equivalent course in institutional management) ..... 4
DIE 4317 (DIN 440) Dietetics in Community Health* ..... 7
DIE 3245 (DIN 330) Diet Therapy ..... 3
DIE 3275 (DIN 331) Applied Diet Therapy* ..... 6
DIE 3125 (DIN 320) Management of Dietary Systems ..... 3
DIE 3175 (DIN 321) Management of Dietary Systems Practicum* ..... 6
DIE 4296 (DIN 452) Special Problems in General Dietetics* ..... 1-3
DIE 4435 (DIN 450) Dietetic Instruction and Counseling ..... 4
DIE 4436 (DIN 450L) Dietetic Instruction and Counseling Lab ..... 1
DIE 4365 (DIN 441) Dietetic Management of Nutrition Programs (Advanced) ..... 2
DIE 4377 (DIN 442) (Applied) Dietetic Management of Nutrition Programs (Practicum)* ..... 6
HUN 4241 (DIN 401) Nutrition II ..... 4
FOS 4041 (DIN 410) Food Science ..... 4

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\left.\begin{array}{ccc}
\text { DIE } 4536 & \text { (DIN 451) Advanced Clinical Practicum in } \\
\text { Dietetics* }
\end{array}\right] \begin{gathered}
9 \\
\text { DIE } 4506 \quad \text { (DIN 490) Seminar in Dietetics and Nutrition* }
\end{gathered}
$$

(19)

## GRADUATE PROGRAM

Admission to the master program is determined by an evaluation of the applicant's bachelors program. An adequate undergraduate preparation usually includes completion of the minimum requirements for membership in The American Dietetic Association, or an undergraduate major in a closely allied discipline. The graduate admission requirements of the Board of Regents must be met and are as follows: A combined score of 1000 on the Graduate Record Examination (Verbal and Quantitative Aptitude Tests), or at least a "B" average in all upper division coursework.

## DIETETICS

A candidate for the Master of Science degree in Dietetics must complete a minimum of 45 quarter hours of graduate study. Thirty-three of the 45 quarter hours must be taken at Florida International. All graduate coursework must be recent enough to be relevant to the current field of dietetics.

The student's program of study, consistent with his or her career goals, should be planned in consultation with the assigned faculty advisor. The proposed program of study must be filed in the office of the chairman of the department by the end of the first academic quarter of fulltime graduate study.

THERAPEUTIC AND COMMUNITY DIETETICS<br>Campus Location: Tamiami and North Miami Campuses.<br>DEGREE: Master of Science in Dietetics<br>A candidate for the Masters degree in Therapeutic and Community Dietetics must complate the following courses:

Quarter Hours

| DIE 5247 | (DIN 530) Diet in Disease Prevention and Treatment | 4 |
| :---: | :---: | :---: |
| DIE 6937 | (DIN 600) Graduate Seminar in Dietetics | 1 |
| DIE 6568 | (DIN 691) Research Methods in Dietetics | 3 |
| HUN 6811 | (DIN 692) Laboratory Research Methods in Nutrition and Food Science |  |
| or |  |  |
| DIE 6578 | (DIN 693) Field Research Methods in Dietetics | 3 |
| DIE 6908 <br> or | (DIN 695) Supervised Field Study in Dietetics |  |
| DIE 6971 | (DIN 699) Thesis in Dietetics | 5 |
| $\text { HUN } 5245$ or | (DIN 520) Nutrition and Biochemistry |  |
| HUN 6247 | (DIN 690) Nutritional Pathophysiology | 4 |
| $\begin{aligned} & \text { HUN } 6408 \\ & \text { or } \end{aligned}$ | (DIN 601) Nutrition During the Life Cycle |  |
| $\begin{aligned} & \text { FOS } 6044 \\ & \text { or } \end{aligned}$ | (DIN 610) Advanced Food Science |  |
| HUN 6521 | (DIN 640) Advanced Community Nutrition | 4 |
|  | Other DIN Courses | 8-10 |
|  | Courses outside the DIN Program | 12-14 |

## DIETETIC MANAGEMENT

Campus Location: Tamiami and North Miami Campuses.
DEGREE: Master of Science in Dietetics


45

## COURSE OFFERINGS

## UNDERGRADUATE

DIE 3005 (DIN 300) ORIENTATION TO CLINICAL DIETETICS (3) (F) Survey of role and responsibilities of dietitian. Legal and ethical considerations necessary for the student dietitian in clinical experiences. Educational and personal qualifications for specialization in dietetics. Prerequisite: Organic Chemistry or permission of chairman. Clinical component: open only to a student in the coordinated clinical program.
HUN 3122 (DIN 301) NUTRITION AND CULTURE (4) (F) Nutrients and their interrelationships in reference to food habits and needs of various population groups. Introduction to the impact of culture on nutriture and study of personal food pattern development. Recommended for non-majors.
FOS 3004 (DIN 305) FOOD AND THE CONSUMER (4) (W) Study of concerns of purchasing, storage and preparation of food. Consideration of current life style which influences food choices. Designed to give the student skills in purchasing and preparing foods to meet personal, social and physical needs. Demonstration laboratory included. (Recommended for non-majors) FSS 3315 (DIN 309) FOOD SCIENCE FOR INSTITUTIONS (4) (SS) Course will emphasize 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 will be used to strengthen theoretical concepts. No prerequisites.
FSS 3215 (DIN 310) MEAL MANAGEMENT AND SERVICE (4) (F) Development of skills in basic techniques of purchasing, preparation and service of food for individuals and small groups. Includes laboratory and experiences in demonstration techniques. Prerequisite or co-requisite: DIN 301 or permission of instructor.
DIE 3125 (DIN 320) MANAGEMENT OF DIETARY SYSTEMS (3) (F) Survey of various types of institutional food service systems. Will cover management concepts in planning, implementing and evaluating food service systems. Prerequisite: DIN 300 or permission of instructor.
DIE 3175 (DIN 321) MANAGEMENT OF DIETARY SYSTEMS PRACTICUM (6) (F) Provides for developing the skills as listed for DIN 320. Clinical assignments will be made in several food service institutions in this area. Corequisite: DIN 320. Clinical component: open only to a student in the coordinated clinical program.
DIE 3245 (DIN 330) DIET THERAPY (3) (S) Techniques of adjusting nutrients and food intake to accommodate medical treatments and previous nutriture. Menu writing and analysis, translation of dietary prescriptions, techniques of dietary instruction, dietary histories. Prerequisites: DIN 301 or equivalent, Physiology and Biochemistry.
DIE 3275 (DIN 331) APPLIED DIET THERAPY (6) (S) Observation and participation in dietary treatment activities. In clinical institutions, application of menu writing, translation of dietary prescription, technique of dietary instruction and diet history. Clinical component: open only to a student in the coordinated clinical program.
HUN 4241 (DIN 401) NUTRITION II (4) (F) Roles of nutrients in metabolic processes. Effects of excesses and deficiencies. Prerequisites: Organic Chemistry, Physiology and DIN 301 or equivalent.
HUN 4410 (DIN 405) NUTRITION: INFANCY THROUGH ADOLESCENCE (4) (W,S,SS) Nutrient intakes recommended for children in different age groups in respect to social, economic and physical environments. Designed to equip students with lim:ted nutrition information to assess nutrient needs and develop skill in incorporating nutrition information in formal and informal learning situations. Recommended for non-majors.
FOS 4041 (DIN 410) FOOD SCIENCE (4) (S) Physical and chemical changes in food occurring as a result of various methods of processing, preparation, and storage of foods. Legal control, economic considerations, nutrient contributions of mass-produced foods compared with foods prepared on-site. Prerequisites: Organic Chemistry, DIN 301, DIN 310, or equivalents.
FOS 4021 (DIN 415) FOOD ANO NUTRITION SCIENCE (4) (S) An overview of the effects of storage, processing and preparation techniques on food and its ingestion by humans. Laboratory included. Prerequisite: Backgrourni wimiipetency in Food and Nutrition. (Recommended for non-majors)

DIE 4317 (DIN 440) DIETETICS IN COMMUNITY HEALTH (7) (W) Study of community agencies available for nutrition guidance for differing age groups. Observation and participation in activities of community agencies. Prerequisites: Physiology, DIN 301. Clinical component: open only to a student in the coordinated clinical program.
DIE 4365 (DIN 441) DIETETIC MANAGEMENT OF NUTRITION PROGRAMS (2) (W) Advanced concepts of managerial functions of a dietitian working as an institutional consultant, a member of a community nutrition program, a private therapeutic consultant (or) (as well as) full time institutional food service administrator will be covered. A part of the clinical sequence. Advanced standing required. Six hours practicum will be taken concomittantly. Clinical component: open only to a student in the coordinated clinical component.
DIE 4377 (DIN 442) DIETETIC MANAGEMENT OF NUTRITION PROGRAMS PRACTICUM (6) (W) Assignments will be made in various community agencies and institutions for development of beginning professional level competencies in management of nutrition and food service programs. Clinical Component: open only to a student in the coordinated clinical program.
DIE 4435 (DIN 450) DIETETIC INSTRUCTION AND COUNSELING (4) (W) Motivational methods and instructional techniques will be practiced in simulation activities for development of entry level competencies. Recorders and VTR's will be used for feedback and evaluation. Advanced standing in dietetics required.
DIE 4436 (DIN 450L) DIETETIC INSTRUCTION AND COUNSELING LAB (1) (W) Will provide small group video tape recording practice in dietetic instruction and counseling. To be taken with DIN 450 . Prerequisites: Advanced standing in dietetics.
DIE 4536 (DIN 451) ADVANCED CLINICAL PRACTICUM IN DIETETICS (3-9) (S) In-depth study combining theoretical concepts and clinical experience. Learning experience will be planned cooperatively by the student, campus instructor and clinical instructor to meet individual needs and goals of the student. Prerequisite: DIN 441. Clinical component: open only to a student in the coordinated clinical program.
DIE 4296 (DIN 452) SPECIAL PROBLEMS IN GENERAL DIETETICS (1-3) (W) In-depth study of a problem in general dietetics chosen to coincide with student's interest and career goals. Student will develop objectives stated in behavioral terms and demonstrate skills in information gathering, analysis and technical writing. Clinical component: open only to a student in the coordinated clinical program.
DIE 4195 (DIN 453) SPECIAL PROBLEMS IN DIETETIC ADMINISTRATION (1-3) ( $W$ ) 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. Clinical component: open only to a student in the coordinated clinical program.
DIE 4506 (DIN 490) SEMINAR IN DIETETICS AND NUTRITION (3-9)* (S) Study of current dietetic and nutrition problems, and research findings. Prerequisite: DIN 440 or permission of instructor. Clinical component: open only to a student in the coordinated clinical program.

## GRADUATE

HUN 5890 (DIN 500) RECENT RESEARCM IN NUTRITION (4) (S) Updating of nutrition information. Study of current nutrition research. Prerequisite: One recent course in nutrition. Taught alternate springs. Recommended for non-majors.
HUN 5123 (DIN 501) ETHNIC INFLUENCES OF NUTRITURE AND FOOD HABITS (4) (F) Systematic study of the food habits of various cultural groups. Emphasis is placed on methodology, analysis of data, relationship of food habits to nutritional standards and corrective measures. Prerequisite: Competency in food preparation and nutrition. Recommended for non-majors. HUN 5611 (DIN 503) NUTRITION EDUCATION IN THE COMMUNITY (4) (F) (SS) In-depth study of nutrition education information and methods in the community including the nutrition education component of school food service and other congregate meal programs. Prerequisite: Recent courses in nutrition education or permission of instructor. Taught in fall term alternately with DIN 505 . Recommended for non-majors.
HUN 5621 (DIN 505) FOOD, NUTRITION AND COMMUNICATION (4) (F) Covers concepts and techniques for effective professional communication with individuals, groups and other professionals. Emphasis will be placed on differences in approach to communication in small groups vs. mass media. Prerequisite: Advanced standing, competency in food and nutrition knowledge. Taught in fall quarter alternately with DIN 503 . Recommended for non-majors.
HUN 5245 (DIN 520) NUTRITION AND BIOCHEMISTRY (4) (S) Advanced study of the relationship of nutrition and biochemistry with emphasis on digestion, absorption and metabolism of carbohydrates, lipids and proteins. Prerequisites: Physiology, Biochemistry and DIN 401, Nutrition II.
DIE 5247 (DIN 530) DIET IN DISEASE PREVENTION AND TREATMENT (4) (S) Critical study - historical, current, and experimental. Prerequisite: DIN 330 or equivalent.
DIE 5926 (DIN 560) WORKSHOP IN DIETETICS AND NUTRITION (1-5) (SS) Short term intensive development of selective subject matter in dietetics, nutrition and nutrition education techniques and methods suitable for nutrionists, home economists at the graduate level.
DIE 6937 (DIN 600) GRADUATE SEMINAR IN DIETETICS (1) (F,W,S,SS) An exploration of current issues in the field of dietetics and nutrition. Topics will be decided by the class and instructor(s). Each student has an opportunity to lead the discussion. One hour required of all graduate students. Student may repeat up to 3 hours.
HUN 6408 (DIN 601) NUTRITION DURING THE LIFE CYCLE (4) (W) In-depth study of nutrient needs of individuals and groups at different stages of life. Emphasis on nutrient inter-relationships and effects of deficiencies and excesses on metabolism. Prerequisite: DIN 401 or equivalent.
FOS 6044 (DIN 610) ADVANCED FOOD SCIENCE (4) (F) In-depth study of chemical and physical properties of interactive components of selected foods. Emphasis on effects of additive and methods of preparation and preservation. Prerequisite: DIN 410 or equivalent.
DIE 6128 (DIN 620) ADVANCED MANAGEMENT OF DIETARY SYSTEMS (5) (W) Emphasis on management and organizational theory. Innovative projects for the development of management competencies will be developed to meet needs of individual students. Prerequisite: Permission of instructor.
HUN 6521 (DIN 640) ADVANCED COMMUNITY NUTRITION (4) (S) In-depth study of assessment of nutriture in population groups and needs of public for nutrition information. Emphasis on nutrition consultation for health professionals and methods of delivery or dietary care. Prerequisite: DIN 441 or equivalent. Taught spring term alternately with DIN 520.

DIE 6907 (DIN 650) INDIVIDUAL STUDY IN DIETETICS (2-5) (F,W,S,SS) Further study and investigation of a phase of dietetics. Emphasis on recent findings in dietetics and allied disciplines. Prerequisite: Consent of the chairman of the department.
HUN 6247 (DIN 690) NUTRITIONAL PATHOPHYSIOLOGY (4) (W) Systems of the body in relation to the pathological conditions allied to digestion, absorption, metabolism, and other states in which nutrition plays a part in etiology or treatment. Prerequisites: Physiology, DIN 330, DIN 401.
DIE 6568 (DIN 691) RESEARCH METHODS IN DIETETICS (3) (F) Consideration of scientific method and theoretical orientation as applied to research in dietetics. Special consideration given to various techniques of investigation, data collection, data organization and interpretation. Prerequisite: Permission of instructor.
HUN 6811 (DIN 692) LABORATORY RESEARCH METHODS IN NUTRITION AND FOOD SCIENCE (3) (W) Laboratory application of research methods in dietetics. Prerequisites: DIN 691 and consent of department chairman.
DIE 6578 (DIN 693) FIELD RESEARCH METHODS IN DIETETICS (3) (W) Application of field research methods in interpreting and designing research studies. Introduction to interdisciplinary research approaches will be included. Prerequisites: DIN 690 and consent of department chairman.
DIE 6908 (DIN 695) SUPERVISED FIELD STUDY IN DIETETICS (5) (F,W,S,SS) Pre-planned practical experience at the professional level in an area of dietetics. Critical written evaluation by student with frequent consultation and supervision of instructor. Prerequisite: Professional competency in dietetics and permission of the chairman of the department.
DIE 6971 (DIN 699) THESIS IN DIETETICS (5) (F,W,S,SS) By arrangement with student's thesis committee.

## HEALTH SCIENCE

The Department offers three areas of concentration (tracks) leading to the bachelors degree in health science: Health Science Management, Health Science Education and Health Science General Studies.* A fourth tract Health Science - Medical Records Administration will begin during the academic year 1977, subject to the approval of the State Board of Regents. All curriculum is subject to change.
Campus Location: Tamiami and North Miami Campuses.
DEGREE: Bachelor of Science in Health Science
LOWER DIVISION PREPARATION:
Required: an Associate of Science degree in the allied health field, or an Associate of Arts degree (upon approval of the department), or the equivalent.
Recommended: an applicant should have academic preparation in the following fields: economics, college algebra, accounting, social sciences, introduction to statistics.
UPPER DIVISION PROGRAM:
Quarter Hours
Core Courses: required of every Health Science major. 23
HSC 3300 (HSM 304) Health and Social Service Delivery
Systems 5
HSC 4101 (HSM 400) Management for the Health Professions 5
HSC 4201 (HSM 401) Information Systems 5
HSC 4301 (HSM 403) The Team Approach to Service Delivery 3
HSC 3401 (HSM 311) Introduction to Public Health 5
Electives: In addition to the required courses for all Health Science majors and the required core courses in the student's area of concentration (track), electives may be selected from any department within the University. Electives in Health Science are recommended. Internship experiences are also made available to students.

## HEALTH SCIENCE MANAGEMENT TRACK

This program provides in-depth training in health services and health care administration, including supportive courses inthe liberal arts and sciences, and leads to a Bachelor of Science degree. The program is designed to prepare the student to begin a career in health administration at the middle-management level in community hospitals, university medical centers, state and federal health agencies, nursing homes, and voluntary health agencies. The student desiring to proceed directly into graduate study can seek admission into the Health Man-
agement Program leading to a Master of Science in Management-Health Care offered by the School of Business and Organizational Sciences at Florida International. Refer to the appropriate section of this catalog.

Quarter Hours
Required Track Courses: 53
HSC 3300 1. (HSM 304) Health and Social Service Delivery Systems

5
HSC 3401 (HSM 311) Introduction to Public Health 5
HSC 4101 (HSM 400) Management for the Health Professions

5
HSC 4201 (HSM 401) Information Systems 5
HSC 4301 (HSM 403) The Team Approach to Service Delivery

3
HSC 4390 (HSM 480) Issues and Trends in Health Care Delivery

5
HSC $4151 \begin{gathered}\text { (HSM 495) Legal Aspects and Legislation in } \\ \text { Health Care }\end{gathered}$
HSC $4111 \quad \begin{gathered}\text { 2. (HCM/HSM 413) Health Management } \\ \text { Engineering }\end{gathered}$
HSC 4321 (HSM 414) Health Care Systems 5
HSC 5120 (HCM/HSM 517) Human Resource Management in the Health Care Field 5
HSC $4131 \begin{gathered}\text { (HCM/HSM 418) Health Care Financial and } \\ \text { Accounting Management }\end{gathered}$
Electives: may be selected from any department in the Univer-
sity.
90
*This curriculum is currenty under revision and is subject to change.

## HEALTH SCIENCE EDUCATION TRACK

This program is designed to prepare students to work in settings requiring educational skills in health care settings and community colleges. Additional clinical courses are not required. This track does not prepare the student for certification as teachers in public schools grades K-12.

Electives in Health Science, Psychology and Education are recommended.
Quarter Hours
48
HSC 3300 (HSM 304) — Health and Social Service
Delivery Systems
HSC 3401 (HSM 311) - Introduction to Public Health 5
HSC 4101 (HSM 400) - Management for the Health $\begin{gathered}\text { Professions }\end{gathered}$
HSC 4201 (HSM 401) - Information Systems 5
HSC $4301 \begin{gathered}\text { (HSM 403) - The Team Approach to Service } \\ \text { Delivery }\end{gathered}$
HSC 4151 (HSM 495) - Legal Aspects and Legislation in 5
EVT 3081 (EVO 305) - Foundations of Vocational
EVT $3141 \begin{gathered}\text { (EVO 306) - Course Planning in Vocational } \\ \text { Education }\end{gathered}$
EVT 4768 (EVO 409) - Instructional Strategies and Evaluation in Vocational and Technical Education

5
EVT 5460 (EVO 504) - Educational Media 5
Electives

## HEALTH SCIENCE GENERAL STUDIES TRACK

This program is provided for the student who has completed a two-year professional program, and who desires little or no additional clinical training. The student may largely design his or her own program of study to meet particular career needs hn consultation with a faculty advisor.

## Quarter Hours



Electives:

## HEALTH SCIENCE MEDICAL ADMINISTRATION TRACT

This program will be offered subject to the approval of the Florida Board of Regents. The curriculum listed below is tentative and should not be interpreted as the final program of studies. Upon completion of this tract the student will become eligible for registration by the American Medical Records Association.

Prerequisites: Anatomy, physiology, biology and chemistry with laboratory.

## MEDICAL RECORD ADMINISTRATION PROGRAM

|  |  |  |
| :---: | :---: | :---: |
|  | (MRE 301) Medical Terminology | 2 |
|  | (MRE 301L) Medical Terminology, Laboratory | 1 |
|  | (MRE 321) Medical Record Administration I | 3 |
|  | (MRE 321L) Medical Record Administration I, Laboratory | 2 |
| HSC 3300 | (HSM 304) Health and Social Service Delivery |  |
|  | Systems | 5 |
|  | (MRE 331) Fundamentals of Medical Science | 4 |
|  | (MRE 371) Directed Practice I | 2 |
| HSC 4151 | (HSM 495) Legal Aspects and Legislation in |  |
|  | Health Care <br> (ECO) or other elective with permission of | 5 |
|  | Program Director | 5 |
|  | (MRE 322) Medical Record Administration II | 3 |
|  | (MRE 322L) Medical Record Administration II, Laboratory | 2 |
|  | (MRE 332) Fundamentals of Medical Science II | 4 |
|  | (MAS 316) Introduction to Computers and |  |
|  | Computers Application | 5 |
|  | (MRE 333) Fundamentals of Medical Science |  |
|  | III | 4 |
|  | (MRE 372) Directed Practice II | 2 |
| HSC 3401 | (HSM 311) Introduction to Public Health | 5 |


| HSC 4201 | (HSM 401) Information Systems |  |
| :---: | :---: | :---: |
|  | (MRE 421) Medical Record Administration III |  |
|  | (MRE 421L) Medical Record Administration III, Laboratory | 2 |
|  | (MRE 471) Directed Practice III |  |
| HSC 4101 | (HSM 400) Management for the Health |  |
|  | Professions | 5 |
| HSC 4131 | (HSM 418) Health Care Financial and |  |
|  | Accounting Management | 5 |
|  | (MRE 422) Medical Record Administration IV | 3 |
|  | (MRE 422L) Medical Record Administration IV, | 2 |
|  | (MRE 472) Directed Practice IV |  |
| HSC 4111 | (HSM 413) Health Management Engineering | 5 |
| HSC 5120 | (HSM 517) Human Resources Management in Health Facilities | 5 |
|  | (MRE 434) Problems in Medical Record Administration | 2 |
|  | (MRE 940) Internship in Medical Record |  |
|  | Management | 5 |
| HSC 4301 | (HSM 403) The Team Approach to Service |  |
|  | Delivery | 3 |
| HSC 4390 | (HSM 480) Issues and Trends in Health Care |  |
|  | Delivery | 5 |

## COURSE OFFERINGS

-* (HSM 301) TOPICAL INVESTIGATION AND REPORTING IN THE HEALTH SCIENCES (3) This course is designed to aid the student in the development of written communication and investigation skills in the Health Sciences.
HSC 3300 (HSM 304) HEALTH AND SOCIAL SERVICE DELIVERY SYSTEMS (5) Presents the history of, and the fundamental concepts involved in the health and social service delivery system. Includes a review of international health care systems, relevant legislation and federal, state, and local health and social service programs.
HSC 3401 (HSM 311) INTRODUCTION TO PUBLIC HEALTH (5) An overview of the organization of public health systems at various levels, public health history and philosophy, major public health issues and the broader societal environment of public health concerns.
HSC 3051 (HSM 350) THE SYSTEMS'S RESPONSE TO SPECIAL POPULATION GROUPS: MENTAL RETARDATION (3) An examination of changing concepts, trends, research, and community responsibility in the delivery of health and social services to the mentally retarded person.
HSC 3905 (HSM 390) INDIVIDUAL STUDY (1-10) This course is designed to allow students an opportunity to do an in-depth research or action-oriented project under faculty supervision.
HSC 4101 (HSM 400) MANAGEMENT FOR THE HEALTH PROFESSIONS (5) Fundamentals of management underlying the solution of problems of organization and operation of health programs.
HSC 4201 (HSM 401) INFORMATION SYSTEMS (5) Fundamental concepts of statistics, research design and data processing as it relates to health programs.
HSC 4301 (HSM 403) THE TEAM APPROACH TO SERVICE DELIVERY (3) Various models for the team delivery of health and social services will be described and analyzed. The roles and functions of related service professionals will be identified.
HSC 4111 (HCM/HSM 413) HEALTH MANAGEMENT ENGINEERING (5) Basic theory of health systems analysis including information systems development and use of various industrial engineering and operations research tools and techniques. Prerequisite: HSM 401
HSC 4390 (HSM 480) ISSUES AND TRENDS IN HEALTH CARE DELIVERY (5) Analysis of important issues, trends, and problems affecting health care delivery in the U.S. Prerequisite: HSM 304 or permission of instructor.
HSC 4021 (HSM 481) CONSUMER HEALTH AND SAFETY (5) Includes survey of the problems and products influencing the consumer of health services, and study of solutions to prevent and correct fraud.
HSC 4023 (HSM 483) PEOPLE, POWER AND HEALTH (5) The historical, psychological, and philosophical rationale for consumer participation in health settings is explored. Appropriate roles for consumers in the decision making process are developed.
HSC 4061 (HSM 484) FAMILY HEALTH CENTERS: AN OVERVIEW (3) Historical review of Family Health Centers. Considers these centers as an alternative in the delivery of health care. Utilizes lectures and field trips.
HSC 4940 (HSM 490) CLINICAL INTERNSHIP (10) Course provides an opportunity for the student to practice in the clinical setting, the techniques and skill acquired in the classroom.
HSC 4151 (HSM 495) LEGAL ASPECTS AND LEGISLATION IN HEALTH CARE (5) A study of how the law affects health care in the public and private sectors. The course is designed to aid professional and allied health personnel to identify legal issues and utilize preventive measures to avoid legal entanglements. Formal lectures and seminar participation will be utilized.

- (HSM 499) SPECIAL TOPICS IN HEALTH SCIENCE (5) This course is designed to allow the student to investigate special topics of explosive interest in Health Care which will be taught by professors outstanding in the topic field covered. HCA 5611 (HSM/HCM 515) HEALTH PLANNING TECHNIQUES (5) Basic health planning methods and procedures. Functions performed and special support techniques of hospitals, medical public health, nursing homes, educational and similar organizations. Prerequisites: one semester of basic statistics.
HSC 5120 (HSM/HCM 517) HUMAN RESOURCE MANAGEMENT IN HEALTH CARE ORGANIZATIONS (5) The personnel administration function in the health facilities. Includes study of personnel policies and procedures, recruitment, training and retention of employees, personnel relations and benefits programs; motivation in human productiveness, group costs, the study of labor relations in the health field.
For course description of the following 500 and 600 level courses see School of Business and Organizational Sciences.
HCA 5504 (HCM/HSM 502) HEALTH MANAGEMENT TECHNIQUES (5)
EMT 5008C (HCM/HSM 523) INTRODUCTION TO EMERGENCY MEOICAL SYSTEM ADMINISTRATION (5)
EMT 6936 C (HCM/HSM 624) EMERGENCY MEOICAL SEMINAR (5)
- (HCM/HSM 651) MENTAL HEALTH PROGRAM MANAGEMENT (5)
- (HCM/HSM 670) HOSPITAL ADMINISTRATION I (5)
——— (HCM/HSM 671) HOSPITAL ADMINISTRATION II (5)
- (HCM/HSM 690) APPLICATION OF MANAGEMENT SCIENCE IN HEALTH CARE (5)

HCA 6316 (HCM/HSM 683) HEALTH LAW TRENDS (5)

- (HCM/HSM 685) HEALTH CARE FACILITIES ORGANIZATION AND ADMINISTRATION (5)

HCA 6691 (HCM/HSM 687) SEMINAR IN HEALTH MANAGEMENT (1-10)
HCA 6201 (HCM/HSM 688) HEALTH FINANCIAL MANAGEMENT (5)
HCA 6101 (HCM/HSM 689) HEALTH CARE ORGANIZATION (5)

## MEDICAL TECHNOLOGY

The programs offered by the department provide opportunities for the student to learn the scientific principles which are basic to the development, performance, evaluation, and control of laboratory tests as a medical technologist in health evaluations and patient management.

The program is approved by the National Accrediting Agency of Clinical Laboratory Sciences, the American Medical Association, and the American Society of Clinical Pathologists. Graduates of the program are eligible to apply for examination and certification by the Registry of Medical Technologists as M.T. (A.S.C.P.) and for licensure as a Technologist by the State of Florida.
Campus Location: Tamiami Campus only.
DEGREE: Bachelor of Science in Medical Technology LOWER DIVISION PREPARATION:

The student seeking admission to the program should have: (1) completed 90 quarter hours ( 60 semester hours) in an accredited two or four year institution; (2) completeted all of the general education requirements; ( 3 ) a cumulative grade point average of 2.5 (on a scale of 4.0 ); (4) a minimum of a " C " grade in each required science course; and (5) completed the following preparatory courses; two semesters of biology with laboratory, two to three semesters of general chemistry with laboratory, two semesters of organic chemistry with laboratory, two semesters of physics with laboratory, and two semesters of pre-calculus mathematics (college algebra or trigonometry).

## UPPER DIVISION PROGRAM:

The following courses must be completed prior to completion of the Medical Technology Program, and may either precede, or be taken concurrently, with specific phases of the program: general microbiology including laboratory, quantitative analysis including laboratory, immunology, biochemistry (laboratory is elective).

Alternate programs of study maybe arranged on an individual basis for: (i) Graduates of NAACLS approved MLT programs, (ii) Students certified as MLT (ASCP), (iii) Students who present life experience and/or students who present military training.

The program is capped at thirty students. One class of students is admitted each year to begin the program in the Fall Quarter. Applications to the program and all University applications must be received by the program and the Office of Admissions respectively by February 15 th to be considered for the Fall Quarter. Candidates for admission will be interviewed by the faculty. The Medical Technology Program courses and Hospital Practicum are open only to majors of the department and are required of all students complet-
ing the program. Entrance to the Senior Practicum depends on satisfactory evaluations of the student's record by the program faculty. Medical Technology Community Service courses are available to non-majors and community laboratory personnel.

The Medical Technology courses and the Hospital Practicum are required of all students completing the program.

| Required Courses: |  | Quarter Hours$81-86$ |  |
| :---: | :---: | :---: | :---: |
|  | Junior Year |  |  |
| Fall Quarter |  |  | 14(13) |
| MLS 4306C | (MDT 401) Clinical Hematology | 2 |  |
| $\begin{aligned} & \text { MLS 4306L } \\ & \text { or } \end{aligned}$ | (MDT 401L) Clinical Hematology Laboratory | 3 |  |
| MLS 4307L | (MDT 411L) Directed Study in Hematology | 2 |  |
| MLS 4110 | (MDT 471) Hematology Correlations | 2 |  |
| MCB 3013 | (BSC 310) Microbiology Lectures and Laboratory | 7 |  |
| Winter Quarter |  |  | 16(15) |
| MLS 4405 | (MDT 403) Clinical Microbiology | 2 |  |
| $\begin{aligned} & \text { MLS } 4405 \mathrm{~L} \\ & \text { or } \end{aligned}$ | (MDT 403L) Clinical Microbiology Laboratory | 3 |  |
| MLS 4406L | (MDT 413L) Directed Study in Clinical Microbiology | 2 |  |
| MLS 4120 | (MDT 473) Microbiology Correlations | 2 |  |
| PCB 3233 | (BSC 376) Immunology | 5 |  |
|  | (MDT 480C) Advanced Hematology | 4 |  |
| Spring Quarter |  |  | 15(14) |
| MLS 4535C | (MDT 402) Blood Banking and Serology | 2 |  |
| MLS 4535L (MDT 402L) Blood Banking and Serology Laboratory |  | 3 |  |
| or |  |  |  |
| MLS 4536L (MDT 412L) Directed Study in Blood Bankin and Serology (for M.L.T.) |  | 2 |  |
| MLS 4130 | (MDT 472) Blood Banking and Serology Correlations | 2 |  |
| MLS 3430C CHM 3120 | (MDT 375) Medical Parasitology | 3 |  |
|  | (CHE 312) Quantitative Analysis (Lecture and laboratory) | 6 |  |
| Summer Quarter |  |  |  |
| BCH 3030 | (BSC 301) Biochemistry (Lecture only required) Senior Year | 5 |  |
| Fall Quarter |  |  | 16(14) |
| MLS 4625C | (MDT 404) Clinical Chemistry Methods | 4 |  |
| $\begin{gathered} \text { MLS } 4625 \mathrm{~L} \\ \text { or } \end{gathered}$ | (MDT 404L) Clinical Chemistry Laboratory | 4 |  |
| MLS 4626L (MDT 414L) Directed Study in Clinical |  |  |  |
| MLS 4140C | (MDT 474) Clinical Chemistry Correlations | 2 |  |
| MLS 4460 C | (MDT 483) Advanced Microbiology | 4 |  |
| MLS 5934C | (MDT 551) Seminar I | 1 |  |
| Winter Quarter |  |  | 18 |
| MLS 4820 | (MDT 451L) Practicum $A$ | 6 |  |
| MLS 4320C | (MDT 482) Advanced Blood Banking | 4 |  |
| MLS 4755C | (MDT 485) Laboratory Statistics and Quality Control | 2 |  |
| MLS 5935C | (MDT 552) Seminar II | 1 |  |
| PCB 3233 | (BSC 376) Biochemistry (Lecture only required) | 5 |  |
| Spring Quarter |  |  | 16 |
| MLS 4821 | (MDT 452L) Practicum B | 6 |  |
| MLS 4630 C | (MDT 481) Advanced Chemistry | 5 |  |
| MLS 4700C | (MDT 484) Laboratory Management | 2 |  |

MLS 5936C (MDT 553) Seminar II l

## Electives:

MLS 3420L (MDT 309L) Medical Mycclogy 2
MLS 4325 (MDT 421) Selected topics in Hematology 2
MLS 4555 (MDT 422) Selected topics in Blood Banking 2
MLS 4465 (MDT 423) Selected topics in Clinical
Microbiology 2
MLS $4635 \begin{gathered}\text { (MDT 424) Selected topics in Clinical } \\ \text { Chemistry }\end{gathered}$
MLS $4150 \begin{gathered}\text { (MDT 425) Selected topics in Clinical } \\ \text { Correlations }\end{gathered}$
MLS 4190 (MDT 426) Diagnostic Histology 2
MLS 4327L (MDT 491) Independent study in Hematology 1-5
MLS 4557L (MDT 492) Independent study in Blood
Banking
MLS 4467L $\begin{gathered}\text { (MDT 493) Independent study in Clinical } \\ \text { Microbiology }\end{gathered} \quad 1-5$
MLS 4637L (MDT 494) Independent study in Clinical
Chemistry
$\begin{gathered}\text { MLS } 4160 \text { L (MDT 495) Independent study in Clinical } \\ \text { Correlations }\end{gathered} \quad 1-5$

## COURSE OFFERINGS

MLS 3750 (MDT 306) LABORATORY QUALITY CONTROL, SAFETY, AND INSTRUMENT MAINTENANCE (5) (S) Course designed tor the working technologist who wishes to protect himself, his co-workers, and others in his environment from the hazards inherent in laboratory operations, and who wishes to present better evidence of compliance with the various inspection and accreditation organizations which now inspect laboratories. Prerequisite: one year of clinical laboratory experience.
MLS 3700C (MDT 307) MANAGEMENT PROCEDURES FOR LABORATORY EMPLOYEES (2) (SS) Job descriptions, salary schedules, equipment and reagent purchasing, quality assurance programs, work-load recording methods. Individualized projects adapted to meet the needs of facility where student is employed. Prerequisite: one year of clinical laboratory experience.
(MDT 309) MEDICAL MYCOLOGY (2) (F,SS) Study of the essential procedures and criteria in the identification of pathogenic fungi. Recognition of fungal contaminants commonly encountered in clinical specimens. Actinomycetes. Antimycotic agents. Mycoserology. Stains, reagents and media.
MLS 3430C (MDT 375) MEDICAL PARASITOLOGY (3) (S) Classification, morphology and life cycles of medically significant parasites. Emphasis is on microscopic identification, specimen preservation, and infection control. Lecture and laboratory. MLS 4306C (MDT 401) CLINICAL HEMATOLOGY (2) (F) Technical problems involving Hematology, Coagulation, Urinalysis, and Clinical Microscopy. Microscopic identification of normal and abnormal findings. Pitfalls and problems.
MLS 4306L (MDT 401L) CLINICAL HEMATOLOGY LABORATORY (3) (F) Laboratory to accompany MDT 401.
MLS 4535C (MDT 402) BLOOD BANK AND SEROLOGY (2) (S) Diagnostic serological studies for venereal disease and other infections. Blood grouping and compatibility testing. Irregular antibody techniques. Paternity identification. Transfusion problems associated with pregnancy. Immunology prerequisite.
MLS 4535 (MDT 402L) BLOOD BANK AND SEROLOGY LABORATORY (3) (S) Laboratory to accompany MDT 402.
MLS 4405 (MDT 403) CLINICAL MICROBIOLOGY (2) (W) Diagnostic microbiological procedures. Study of clinically significant organisms. Isolation media and biochemical tests for identification. Recognition of normal flora. Anaerobic procedures. Viruses, Fungi, Rickettsiae. Serological typing. Antibiotic sensitivity tests. Prerequiste: General Microbiology. Corequisite: Immunology.
MLS 4405L (MDT 403L) CLINICAL MICROBIOLOGY LABORATORY (3) (W) Laboratory to accompany MDT 403.
MLS 4625 C (MDT 404) CLINICAL CHEMISTRY METHODS (4) (F) Medical laboratory procedures for analysis of carbohydrates, proteins, lipids, enzymes, electrolytes. Renal and liver function profiles. Basic instrumentation. Automated analysis with emphasis on continuous flow. Quality control. Credit for all required chemistry lectures and laboratories except Biochemistry are prerequisite.
MLS 4625 (MDT 404L) CLINICAL CHEMISTRY LABORATORY (4) (F) Laboratory to accompany MDT 404.
MLS 4307 L (MDT 411L) DIRECTED STUDY IN HEMATOLOGY (2) (F) Selected laboratory techniques to accompany MDT 401 for MLT.
MLS 4536L (MDT 412L) DIRECTED STUDY IN BLOOD BANKING AND SEROLOGY (2) (S) Selected laboratory techniques to accompany MDT 402 for MLT.
MLS 4406L (MDT 413L) DIRECTED STUDY IN CLINICAL MICROBIOLOGY (2) (W) Selected laboratory techniques to accompany MDT 403 for MLT.
MLS 4626 (MDT 414L) DIRECTED STUDY IN CLINICAL CHEMISTRY (2) Selected laboratory techniques to accompany MDT 404 (for M.L.T.)
MLS 4325 (MDT 421) SELECTED TOPICS IN HEMATOLOGY (2) (VAR) Current topics in Hematology of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

MLS 4555 (MDT 422) SELECTED TOPICS IN BLOOD BANKING (2) (VAR) Current topics in Blood Banking of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the Instructor.
MLS 4465 (MDT 423) SELECTED TOPICS IN MICROBIOLOGY (2) (VAR) Current topics in Microbiology of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.
MLS 4635 (MDT 424) SELECTED TOPICS IN CLINICAL CHEMISTRY (2) (VAR) Current topics in Clinical Chemistry of particular clinical significance. Review of literature and discussion of the selected topics. Frerequisite: Permission of the instructor. MLS 4150 (MDT 425) SELECTED TOPICS IN CLINICAL CORRELATIONS (2) (VAR) Current topics in Clinical Correlations of particular significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor. MLS 4190 (MDT 426) DIAGNOSTIC HISTOLOGY (2) (F) Control slides; special stains; preparation of tissues for EM; identification of significant tissue features for preparation of surgical slides. For experienced histotechnologists.
MLS 4820/MLS 4 B21 (MDT 451L and 452L) PRACTICUM A AND B ( 6 ) ( $F, W, S$ ) Hospital laboratory experience. Two quarters required. Rotation arranged to include 2 to 3 weeks in each of nine departments. Departmental rotation modified for students with life experience to meet needs or special interest. Rotation will be arranged through the hospital laboratory director and MDT education coordinator. All pre-practicum courses must be completed before admission to hospital rotation.
MLS 4110 (MDT 471) HEMATOLOGY CORRELATIONS (2) (F) Present diseases associated with abnormal findings in laboratory tests performed in hematology, coagulation, urinalysis, and clinical microscopy. Assist in correlating two or more laboratory procedures which might reinforce the likelihood of specific diseases being identified by laboratory methods.
MLS 4130 (MDT 472) BLOOD BANK AND SEROLOGY CORRELATIONS (2) (S) Laboratory identification of venereal diseases. Blood Bank regulations in protection of donor and recipient. Blood component therapy selection for specific conditions. Problems of the patient immunized through transfusion therapy.
MLS 4120 (MDT 473) MICROBIOLOGY CORRELATIONS (2) (W) Medical aspects of infections caused by bacterial, viral, rickettsial, and mycotic pathogens. In vivo and in vitro actions of antimicrobials. Hospital infection control.
MLS $4140 C$ (MDT 474) CLINICAL CHEMISTRY CORRELATIONS (2) (F) Biochemical tests used in diagnosis and treatment of metabolic disorders. Carbohydrate and protein metabolism, acid-base balance, enzymes, testing for organ function.
$\qquad$ (MDT 480C) ADVANCED HEMATOLOGY (4) (W) Study of abnormal blood cells present in peripheral smear and bone marrow. Special tests performed in hematology and coagulation. Hematology automation. Lectures and laboratory.
MLS 4630 C (MDT 481) ADVANCED CHEMISTRY (5) (S) Lecture and Laboratory. Topics to be covered include analysis of thyroid hormones, estrogens, adrenal hormones and metabolites, radiommunoassay and radioisotope measurement, amniocentesis, toxicology, multichannel analyzers, and gas chromatography. Seniors only.
MLS 4320C (MDT 482C) ADVANCED BLOOD BANKING (4) (W) In depth study of Transfusion Therapy, the use and preparation of blood components, and special problems in blood banking. Lectures and laboratory. Seniors only.
MLS 4460 (MDT 483) ADVANCED MICKOBIOLOGY (4) $(F, S)$ Lectures and laboratory. Identification of rare pathogens. Virology - tissue culture techniques. Mode of action and bacterial resistance to antibiotics. Fluorescent antibody techniques. Immunodiffussion. Immunoelectrophoresis. Seniors only.
MLS 4700C (MDT 484) LABORATORY MANAGEMENT (2) (S) Personnel handling, laboratory records, equipment and reagent purchasing; laboratory computerization, quality assurance programs, work-load recording programs, scheduling and methods of laboratory selfevaluation. Seniors only.
MLS 4755C (MDT 485) LABORATORY STATISTICS AND QUALITY CONTROL (2) (W) Lecture. Topics to be covered include basic laboratory statistics, linear regression and correlation analysis, quality control charting techniques, new method evaluation, problem solving using computer programs.
MLS 4327L (MDT 491) INDIVIDUALIZED STUDY IN HEMATOLOGY (2-5) (W,S,SS) Introduction to problems in Hematology requiring research or independent study. Special work, lecture and/ or laboratory as determined by advisor in accord with student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.
MLS 4551L (MDT 492) INDIVIDUALIZED STUDY IN BLOOD BANKING (2-5) (F, W, SS) Introduction to problems in Blood Banking requiring research or independent study. Special work, lecture and/or laboratory as determined by advisor in accord with student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.
MLS 4467 (MDT 493) INDIVIDUALIZED STUDY IN CLINICAL MICROBIOLOGY ( $2-5$ ) ( $F$,S,SS) Introduction to problem in Clinical Microbiology requiring research or independent study. Special work, lecture and/or laboratory as determined by advisor in accord with student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.
MLS 4637 (MDT 494) INDIVIDUALIZED STUDY IN CLINICAL CHEMISTRY (2-5) ( $\mathrm{W}, \mathrm{S}, \mathrm{SS}$ ) Introduction to problems in Clinical Chemistry requiring research or independent study. Special work, laboratory and/or lecture as determined by advisor in accord with the student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.
MLS 4160 L (MDT 495) INDIVIDUALIZED STUDY IN CLINICAL CORRELATIONS (2-5) (F,W,S,SS) Introduction to problems in Clinical Correlations requiring research or independent study. Special work, lecture and/or laboratory as determined by advisor in accord with student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.
MLS 5934C, 5935C, 5936C (MDT 551, 552, 553) SEMINAR I, II, AND III (1) (F,W,S) Three quarters are required. Preparation and presentation of literature review and individualized projects. Instructional methods. Supervisory techniques. Seniors only.

## NURSING

The Nursing Program is designed as a non-traditional, upper-division undergraduate program leading to the Bachelor of Science Degree in Nursing.

The curriculum is organized around the use of the nursing process within a transcultural framework to assist man to increase the effectiveness of his adaptive responses and promote positive movement along the health-illness continuum.

NOTE: Students must confer with the student advisor to plan a Program of Studies.
Campus Location: Tamiami and North Miami Campuses.
DEGREE: Bachelor of Science in Nursing
Admission Requirements: (1) 45 quarter hours lower division academic credit in general education and 45 quarter hours lower division academic credit in nursing; (2) current license as a registered nurse; (3) specific courses in general microbiology, general chemistry, human growth and development or equivalents, general psychology and general sociology (effective September 1978).
Remarks: (1) detailed admission requirements may be obtained from Admissions Office (2) all students must carry individual professional liability insurance.

UPPER DIVISION PROGRAM

| Required nursing courses: | Quarter Hours |
| :---: | :---: |
|  | 45 |
| NUU 3431 (NUR 350) Nursing in an Evolving Health Care |  |
| System | 3 |
| NUU 3210C (NUR 365) Nursing Process I | 4 |
| NUU 3211L (NUR 365L) Nursing Process I Lab | 1 |
| NUR 3375C (NUR 375) Nursing Process II | 3 |
| NUU 3221 (NUR 375L) Nursing Process II Lab | 2 |
| (NUR 425) Decision Making in Nursing |  |
| Practice | 2 |
| NUU 4630 (NUR 430) Introduction to Nursing Research | 3 |
| NUR 4910C (NUR 435) Project in Nursing Research | 3 |
| NUU 4230C (NUR 445) Nursing Process Applied to Individuals | 5 |
| NUU 4230L (NUR 445L) Nursing Process Applied to |  |
| Individuals Lab | 4 |
| NUU 4231C (NUR 455) Nursing Process Applied to Families | 4 |
| NUU 4231L (NUR 455L) Nursing Process Applied to |  |
| Families Lab | 4 |
| NUU 4232C (NUR 465) Nursing Process Applied to |  |
| Communities | 3 |

- (NUR 465L) Nursing Process Applied to Communities Lab2
NUR 4625C (NUR 475) Dimensions of Professional Nursing ..... 2NOTE: 1 credit equals 3 clock hours per week for laboratory courses

Support courses:
ANT 4451 (ANT 403) Racial and Cultural Minorities 5 or
SOC 4745 (SOC 471) Minorities
SOW 3703 (SOW 306) Self-awareness, Self-modification 5
PCB 4701 (BSC 451) Human Systemic Physiology 5
STA 3013 (MAS 306) Statistics for Health \& Social Services 5

## or

STA 3122 (MAS 307) Introduction to Statistics I
SOC 3300 (SOC 341) The Community
5
*Epidemiology 5
Free Electives
*Under development

## COURSE DESCRIPTIONS

NUU 3431 (NUR 350) NURSING IN AN EVOLVING HEALTH CARE SYSTEM (3) Analysis of current trends and issues related to the evolution of nursing and nursing roles in the health care delivery system. Open to non-majors.

NUU 3210C (NUR 365) NURSING PROCESS I (4) An overview of the nursing process; communication/interaction process in nursing; teaching/learning process, and theories of adaptation applicable to nursing practice. For Nursing Majors only. Prerequisites: ANT 403 or SOC 471; SOW 306; course in human growth and development; NUR 350 (or concurrently).
NUU 3211L (NUR 365L) NURSING PROCESS I - LAB, Concurrent with NUR 365 (1) Identification and application of theories, concepts and principles introduced in class provided in simulated and clinical situations. For Nursing Majors only.
NUR 3375C (NUR 375) NURSING PROCESS II (3) Focus is on assessment of physical, psychological and social variables of health and illness, and the nursing history inherent in the nursing process. For Nursing Majors only. Prerequisite: BSC 451, NUR 365, NUR 365L.
NUU 3221 (NUR 375L) NURSING PROCESS II - LAB, Concurrent with NUR 375 (2) Practice of physical assessment and data collection for nursing history in simulated and ambulatory care settings.

- (NUR 402) INTERNATIONAL DIMENSIONS OF NURSING AND HEALTH CARE (4) Analysis of forces that affect health care in any country with emphasis on nursing practice and education. Nursing Elective. Open to non-majors.
-- (NUR 403) FIELD STUDY: INTERNATIONAL NURSING (4-8) On-site study of health care, nursing practice and education in another country. Registration by permission of instructor. Nursing Majors only. Recommended preparation - NUR 402. Nursing Elective.

NUU 5410 (NUR 404) ISSUES AND PROBLEMS IN NURSING ADMINISTRATION (4) Application of principles to current issues and problems in nursing administration occurring with frequency in health care settings. Nursing elective. Open to nurses with administrative experience.
NUU 4330C (NUR 406) EVALUATION OF NURSING PRACTICE (4) A broad overview of the evaluation process in nursing practice for improving the quality of patient care. Nursing elective. Open to non-nursing majors.
NUR 4335C (NUR 410) CRISIS INTERVENTION (3) Exploration of the current theories of crisis, the process of resolution, and the methodology of intervention. Open to non-majors. Nursing elective.
(NUR 425) DECISION MAKING IN NURSING PRACTICE (2) Theoretical base of decision making process to effect nursing intervention for achievement of comprehensive nursing goals. Emphasis on problem solving approach to professional and social issues. For Nursing Majors only. Prerequisites: NUR 350, NUR 365, NUR 365L. May be taken concurrently with NUR 375 and NUR 375L. Open to non-majors with consent of instructor.
NUU 4630 (NUR 430) INTRODUCTION TO NURSING RESEARCH (3) Introduction to and application of research principles in a design of study related to contemporary nursing problems. Prerequisite: MAS 306 or equivalent. May be taken concurrently with NUR 455 and 455L.
NUR 4910C (NUR 435) PROJECT IN NURSING RESEARCH (3) Implementation of project designed in NUR 430. Data collected is collated, analyzed, and interpreted. Written and verbal reports given. Prerequisite: NUR 430
NUR 4910C (NUR 440) INDIVIDUAL STWDY (variable 1-5) Students are provided with an opportunity to investigate nursing areas of special interest consistent with their career goals. May be repeated once. Permission of instructor.
NUU 4230C (NUR 445) NURSING PROCESS APPLIED TO INDIVIOUALS (5) Focus is on the use of the nursing process within a transcultural orientation to assist individuals to achieve a state of biopsychosocial equilibrium. Emphases are placed on stresses disruptive to high level wellness and evaluation of individuals' response and adaptation to illness. For Nursing Majors only. Prerequisites: Course in Epidemiology (prerequisite for this course in general microbiology); and General Chemistry or Equivalent; NUR 375, 375 L.
NUU '4230L (NUR 445L) NURSING PROCESS APPLIED TO INDIVIDUALS LAB (4) Concurrent with NUR 445. Focus is on the use of the nursing process within a transcultural orientation to assist individuals to achieve a state of biopsychosocial equilibrium. Emphasis is on application of theory to nursing practice. For Nursing Majors only. Senior Standing
NUU 4231C (NUR 455) NURSING PROCESS APPLIED TO FAMILIES (4) Nursing Process in a family-centered approach focusing on acquisition of knowledge, attitudes, and skills to promote high level wellness. For Nursing Majors only. Prerequisites: NUR 350, 365, 375, 445.
NUU $4231 L$ (NUR 455L) NURSING PROCESS APPLIED TO FAMILIES LAB (4) FOCus is on the use of the nursing process within a transcultural orientation to assist individuals to achieve a state of biopsychosocial equilibrium. Emphasis is on application of theory to nursing practice. For Nursing Majors only. Concurrent with NUR 455.
NUU 4232C (NUR 465) NURSING PROCESS APPLIEO TO COMMUNITIES (3) Focus on community health provides opportunity to consult and collaborate with consumers and providers in selecting and coordinating health care activities. For Nursing Majors only. Prerequisite: SOC 341, NUR 350, 365, 375, 425, 430, 435, 445, 455.

- (NUR 465L) NURSING PROCESS APPLIED TO COMMUNITIES, LAB (2) Concurrent with NUR 465. Clinical application of the nursing process applied to communities. For Nursing Majors only.
NUR 4625C (NUR 475) DIMENSIONS OF PROFESSIONAL NURSING (2) A dynamic approach to the nature, scope, and influence of new developments in nursing. Their impact on practice and application to the health field, focus is on the development of professional awareness, ethics and accountability emphasizing effective involvement in all facets of practice. Prerequisite: Senior Standing


## PHYSICAL THERAPY

Accredited by the American Physical Therapy Association, the education program emphasizes a progressive, student centered approach to educating physical therapists. Students progress through a variety of learning experiences designed to develop their evaluation and applied therapeutic skills in treating musculoskeletal, neurological, cardiovascular and pulmonary disorders.

The education program is community-centered utilizing clinical physical therapists, medical physicians and other allied medical professionals to complement the teaching efforts of its faculty.

Graduates of the program are prepared to assume positions in a variety of settings, such as general hospitals, rehabilitation centers, private clinics, home health care facilities, school systems, student health and sports medicine centers; many physical therapists are self employed.

Students applying to the program must meet the general education requirements, apply both to the University and the Physical Therapy Program. Enrollment is limited, admission is selective and acceptance to the university does not assure entrance to the education program.
Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science in Physical Therapy
LOWER DIVISION PREPARATION:
Required Courses: at least 90 quarter hours ( 60 semester hours) of acceptable college credit; at least one academic year of science coursework (with laboratory) in the area of biology or zoology, chemistry and physics; one year of psychology; a minimum grade average of 2.85 in the above required coursework, 2.75 overall GPA. (Effective 1977-78 academic year).
UPPER DIVISION PROGRAM:
Requir Quarter Hours
Required Courses:
118-123
Junior Year
$\begin{array}{lll}\text { Fall Quarter } & & \\ \text { PHT } 3001 & \text { (PHT 301) Introduction to Physical Therapy }\end{array}$
2003733 (BSC 355) Human Gross Anatomy 4
ZOO 3733L (BSC 355L) Human Gross Anatomy Lab 2
PCB 3703 (BSC 350) Human Physiology I 4
PCB 3703L (BSC 350L) Human Physiology Lab I 1
PHT 3122 (PHT 311) Kinesiology I 3
Winter Quarter
200 3734 (BSC 356) Human Gross Anatomy
ZOO 3734L (BSC 356L) Human Gross Anatomy Lab 2
PCB 3704 (BSC 351) Human Physiology II 4
PCB 3704L (BSC 351L) Human Physiology Lab II 1
PHT 3123 (PHT 312) Kinesiology II 3
PHT 3202 (PHT 352) Basic Therapeutic Skills 4
Spring Quarter (BSC 357) Neuroscience 5
ZOO 3743 (BSC 357) Neuroscience 5
PHT $3300 \quad$ (PHT 320) Physical Therapy and Human
Disorders
PHT 3133C (PHT 323) Musculoskeletal Evaluation and Lab 6
(PHT 333) Clinical Clerkship I 3
ZOO 3743L (BSC 357L) Neuroscience Lab 2
Summer Quarter
PHT 3310 (PHT 314) Orthopedic Surgery 5
PHT 3311 (PHT 317) Clinical Orthopedics 3
PHT 3232C (PHT 324) Prosthetics and Orthotics 3
PHT 3231 (PHT 354) Rehabilitation 2
PHT 3812 (PHT 334) Clinical Clerkship II 4
Senior Year
$\begin{array}{cc}\text { Fall Quarter } \\ \text { PHT } 3400 & \text { (PHT 344) Emotional Aspects of Physical } \\ & \text { Disability }\end{array}$
PHT 4312 (PHT 415) Neurology 3
PHT 4235C (PHT 416) Electrodiagnosis 4
PHT 4313 (PHT 417) Clinical Neurology 2
PHT 4141 (PHT 425) Evaluation of the Developing Child 2
PHT 4822 (PHT 435) Clinical Clerkship III 3
Winter Quarter
PHT 4932
(PHT 426) Research Methods and Design
PHT 4234C (PHT 456) Neurophysiologic Techniques 6

## Summer Quarter

PHT 4825 (PHT 438) Internship

## COURSE DESCRIPTIONS

PHT 3001 (PHT 301) INTRODUCTION TO PHYSICAL THERAPY (2) (F) A survey course of the present status of physical therapy as a health care profession.
PHT 3121 (PHT 310) APPLIED KINESIOLOGY (5) (W) A course in kinesiology that provides learning experiences to develop skills in palpation, goniometry, manual muscle testing and motion analysis of normal subjects. For Occupational Therapy students.
PHT 3122 (PHT 311) KINESIOLOGY (3) (F) A study of the anatomoical, physiological and biomechanical principles as they relate to body movement, coverage of upper extremity.
PHT 3123 (PHT 312) KINESIOLOGY II (3) (W) A study of the biomechanical principles related to the analysis of motion of the trunk, lower extremity, and normal gait.
PHT 3310 (PHT 314) ORTHOPEDIC SURGERY (5) (SS) Multimedia lectures and patient case studies presented by physicians covering the orthopedic evaluation, surgical and non-surgical management of orthopedic patients.
PHT 3311 (PHT 317) CLINICAL ORTHOPEDICS (3) (SS) Correlated with Orthopedic Surgery (PHT 314), application of physical therapy evaluation, treatment and management procedures are made to patients referred to physical therapists by physicians.
PHT 3300 (PHT 320) PHYSICAL THERAPY AND HUMAN DISORDERS (4) (S) Lectures and media presentations related to human disorders typically seen within the practice of physical therapy.
PHT 3133C (PHT 323) MUSCULOSKELETAL EVALUATION (6) (S) Laboratory experiences in measuring and recordng the physical status of the musculoskeletal system using the manual means of palpation, movement, muscle strength testing goniometry and $x$-ray. Abnormal gait patterns and posture evaluation will be presented.
PHT 3232C (PHT 324) PROSTHETICS AND ORTHOTICS (3) (SS) A presentation of the biomechanics, anatomy, and appliances necessary to the evaluation, prescription, fabrication and use of prosthetic and orthotic devices.

- (PHT 333) CLINICAL CLERKSHIP (3) (S) Supervised clinical experience within the local community designed to afford the student an ever enlarging view of physical therapy departments and their services with ever increasing responsibility of the student for the care of patients.
PHT 3812 (PHT 334) CLINICAL CLERKSHIP II (3) (SS) Extension of PHT 333
PHT 3400 (PHT 344) EMOTIONAL ASPECTS OF PHYSICAL DISABILITY (2) Examines attitudes of physical therapists toward disability, emotional reactions of patients to their own disability, and emotional disorders common to patients treated by physical therapists.
PHT 3202C (PHT 352) BASIC THERAPEUTIC SKILLS (4) (W) A study of the physiological rationale for the use of the electrophysiological modalities, therapeutic exercise, massage transfers, and basic gait training in a lecture and laboratory setting. PHT 3231 (PHT 354) REHABILITATION (3) (SS) A study of functional evaluation and interpretation, treatment program planning, and total treatment of the severely physically disabled, including cardiac and pulmonary rehabilitation programs. PHT 4905 (PHT 407) INDEPENDENT STUDY (1-6) (S,SS,F) (By permission of Physical Therapy Faculty). The student will select a particular aspect of physical therapy or a related field for in-depth independent study.
PHT 4312 (PHT 415) NEUROLOGY (3) (F) Taught by community neurologists, the course covers the neurologic evaluation and investigation of neurological disorders typically seen by a physical therapist.
PHT 4235C (PHT 416) ELECTRODIAGNOSIS (4) (F) A study of electromyography and other electrical testing procedures for neuromuscular disorders; also, a study of basic acupuncture, transcutaneous stimulation and biofeedback.
PHT 4313 (PHT 417) CLINICAL NEUROLOGY (2) (F) Correlated with Neurology (PHT 415), application of physical therapy evaluation, treatment and management procedures for patients referred to physical therapists by physicians.
PHT 4141 (PHT 425) EVALUATION OF THE DEVELOPING CHILD (2) (F) A study of the neuromuscular development characteristics of the child; information necessary as prerequisite to Neurophysiologic Techniques (PHT 456)
PHT 4932 (PHT 426) RESEARCH METHODS AND DESIGN (2) (W) An introduction to research theory and methods; collection and analysis of data and methods of presentation and interpretation as they apply to physical therapy.
PHT 4822 (PHT 435) CLINICAL CLERKSHIPS III (3) (F) Extension of PHT 333
PHT 4823 (PHT 436) CLINICAL CLERKSHIPS IV (3) (W) Extension of PHT 435
- (PHT 437) CLINICAL INTERNSHIP II (12) (S) Supervised full-time clinical experience designed to afford the student the opportunity to gain experience in the total care of patients, the administration and supervision inherent to the Physical Therapy Department, and experience in his chosen area of specialization.
PHT 4825 (PHT 438) CLINICAL INTERNSHIP (4) (SS) Extension of PHT 437
PHT 4510 (PHT 447) ORGANIZATION AND ADMINISTRATION (5) (S) A study in management of physical therapy delivery systems and current health trends affecting the profession of physical therapy.
PHT 4234C (PHT 456) NEUROPHYSIOLOGIC TECHNIQUES (6) (W) A study and application of the exercise techniques of Bobath, Rood, Brunnstrom, Knott and Voss to the treatment of children an adults with neurophysiologic deficit.


## OCCUPATIONAL THERAPY

The department offers a program of study designed to develop the student's professional understandings and skills that will be needed to assist others gain or restore their adaptive skills and performance capacity. Special attention is given to those factors which serve as impediments to the individual's ability to function effectively as well as to those factors which promote, influence, or enhance performance.

Program graduates are prepared to function professionally in hospitals and clinics, rehabilitation facilities, long-term care facilities, extended care facilities, sheltered workshops, and community agencies.

Besides meeting the requirements for admission to the university, an applicant must give evidence of general physical fitness and emotional stability. A personal interview is required.
Campus Location: Tamiami Campus only.
DEGREE: Bachelor of Science in Occupational Therapy
LOWER DIVISION PREPARATION:
Required courses:
Biology and lab
Chemistry and lab
Zoology and lab
Introduction to Sociology
UPPER DIVISION PROGRAM:

General mathematics Introduction to Psychology<br>Personality Theory<br>Basic Design

Junior Year

OTH 4321 (OCT 421) Psychiatric Occupational Therapy 5
OTH 4190 (OCT 432) Disability Evaluation I 5
OTH 4210 (OCT 450) Developmental Theory 5
(OCT 433) Disability Evaluation II 5

Fall Quarter
$\begin{array}{ll}\text { OTH } 3000 & \text { (OCT 300) Introduction to Occupational } \\ \text { Therapy }\end{array}$
ZOO 3733 (BSC 355) Human Gross Anatomy 4
ZOO 3733L (BSC 355D) Human Gross Anatomy Lab 1
PCB 3702 (BSC 372) Intermediate Human Physiology 5
PCB 3702L (BSC 372L) Intermediate Human Physiology
OTH 3120 (OCT 315) Therapeutic Media I 5
Winter Quarter
ZOO 3734 (BSC 356) Human Gross Anatomy
ZOO 3734L (BSC 356D) Human Gross Anatomy Lab 1
PHT 3001 (PHT 310) Applied Kinesiology 5
OTH 3121 (OCT 316) Therapeutic Media II 5
Psychology Elective 5
Spring Quarter
ZOO 3743 (BSC 357) Neuroscience 5
ZOO 3743L (BSC 357L) Neuroscience Lab 1
CLP 4144 (PSY 461) Abnormal Psychology 5
OTH 3411 (OCT 320) Pathology 2
OTH 3421 (OCT 330) Physical Disability Theory 5
OTH 3011 (OCT 335) Principles of Practice 2

## Summer Quarter

OTH 3813 (OCT 360) Field Work Experience 4
Fall Quarter
(TEY 320) Technology for Occupational Therapy
OTH 4320 (OCT 420) Psychiatric Occupational Therapy 5
OTH 4422 (OCT 430) Physical Disability Theory 5
Winter Quarter
20



2
20

20
55Fall Quarter

55

4

## 10

Electives: 5 quarter hours of electives are taken during the second Fall Quarter of the Senior Year

## COURSE OFFERINGS

OTH 3000 (OCT 300) INTRODUCTION TO OCCUPATIONAL THERAPY (3) (F) History and development of the profession. Philosophy of treatment.
OTH 3120 (OCT 315) Therapeutic Media I (5) (F) The study of loom and non-loom weaving techniques.
OTH 3121 (OCT 316) Therapeutic Media II (5) (W) Study of man's creative expression through crafts.
OTH 3411 (OCT 320) PATHOLOGY (2) (S) Brief review of organ systems, primary diseases that affect each organ with specific emphasis on the disabilities that would result from disease. Prerequisites: Anatomy, physiology.
OTH 3421 (OCT 330) PHYSICAL DISABILITY THEORY (5) (S) The study of occupational therapy as related to physical disabilities. Development and status of current treatment techniques. Lecture and Lab. Prerequisites: Anatomy, physiology, kinesiology.
OTH 3011 (OCT 335) PRINCIPLES OF PRACTICE (2) (S) Introduction to processes of professional practice in treating functional limitations. Lecture and Lab.
OTH 3813 (OCT 360) FIELD SERVICE 4 (SS) Pre-clinical experience in an approved training center.
OTH 4700 (OCT 410) ORGANIZATION AND ADMINISTRATION (5) (F) Administrative procedures in planning and operating an occupational therapy treatment program.
OTH 4320 (OCT 420) PSYCHIATRIC OCCUPATIONAL THERAPY THEORY (5) (F) Theories and approaches to psychological aspects of illness in the rehabilitative process. Lecture and Lab.
OTH 4321 (OCT 421) PSYCHIATRIC OCCUPATIONAL THERAPY THEORY (5) (W) Continuation of OCT 420. Prerequisite: OCT 420. Lecture and Lab.
_. (OCT 430) FIELD WORK EXPERIENCE (2) (FWS) Pre-clinical experience in an approved training center to meet individual interests and needs. 8 hours field work.
OTH 4422 (OCT 431) PHYSICAL DISABILITY THEORY (5) (F) Continuation of OCT 330. Prerequisite: OCT 330.
OTH 4190 (OCT 432) DISABILITY EVALUATION (5) (W) Evaluation of work potential in the cultural millieu. Lecture and Lab. OTH 4260 (OCT 433) DISABILITY EVALUATION II (5) (W) Evaluation procedures in the testing of perceptual-motor dysfunction. Prerequisites: Anatomy, physiology, neuroscience. Lecture and Lab.
OTH 4750 (OCT 440) REHABILITATION SEMINAR (5) (F) Research in occupational therapy and related medical fields.
OTH 4210 (OCT 450) DEVELOPMENTAL THEORY (5) (W) The use of developmental theory in occupational therapy practice.
OTH 4850 (OCT 460) FIELD WORK EXPERIENCE (12) Three month internship in a physical disabilities treatment center.
OTH 4851 (OCT 461) FIELD WORK EXPERIENCE (12) Three month internship in a mental health treatment center.
OTH 4852 (OCT 462) FIELD WORK EXPERIENCE (variable) Internship in a specialized treatment area.
OTH 5905 (OCT 500) INDEPENDENT STUDY (variable)
OTH 5760 (OCT 501) CURRENT RESEARCH IN OCCUPATIONAL THERAPY (1-5) Review of statistical concepts and research procedures in the clinical setting with in-depth study of current status of research in occupational therapy.
OTH 5329 (OCT 502) CURRENT TRENDS IN MENTAL HEALTH AS RELATED TO OCCUPATIONAL THERAPY PRACTICE (1-5) Specialized study of specific treatment theories and the application of these theories to clinical practice.
OTH 5600 (OCT 503) THE STUDY OF GERONTOLOGY AS RELATED TO OCCUPATIONAL THERAPY PRACTICE (1-5) A study of the impact of advances in the field of gerontology and current legislation on the profession.
OTH 5262 (OCT 504) EVALUATION AND TREATMENT OF PERCEPTUAL-MOTOR DYSFUNCTION (1-5) The study of specific evaluation tools and the developing treatment procedures as directly related to these tests.

## SOCIAL WORK

The program offers an integrated educational experience, that combines the theoretical and the practical. It is designed to prepare the student for beginning professional practice in social work, for entrance into a graduate school of social work, and for participation in society as an informed citizen.

The six-quarter program includes a sequence of academic courses and field instruction under qualified supervision in social agencies in South Florida.

The program is accredited by the Council on Social Work Education.
Campus Location: Tamiami and North Campus.

## DEGREE: Bachelor of Science in Social Work

LOWER DIVISION PREPARATION:
The student desiring to major in Social Work must have completed the Associate of Arts degree from a Florida public community college or equivalent collegiate work from an accredited institution.

REQUIRED COURSES: Before admission to the Social Work Program, the student must complete courses in introductory psychology, statistics, American government, and principles of economics and two courses in sociology.

## UPPER DIVISION PROGRAM:



Remarks: Students should be aware that courses in this program are sequenced. Students must check with their advisor for pre- and co-requisite courses.

## COURSE OFFERINGS

SOW 3203 (SOW 301) HISTORICAL AND PHILOSOPHICAL PERSPECTIVES OF SOCIAL WELFARE SERVICES (5) This course is a sequential and cumulative examination of Social Welfare and the changing role of Social Work. The focus will be creating awareness in the individual in relation to the question: How Do We Want to Live?
SOW 3232 (SOW 302) SOCIAL WELFARE POLICY AND SERVICES I (5) (F,W,S) 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. SOW 3113 (SOW 305) DYNAMICS OF HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT I (5) (F,W,S) An examination of the psychosocial foundations of Social Work practice focusing on the analysis of factors affecting human development and functioning in relation to social systems. Prerequisite: PSY 300 or its equivalent.
SOW 3703 (SOW 306) SELF-AWARENESS, SELF-MODIFICATION AND SERVICE (5) (F,W,S) An experientially oriented course directed toward helping students become aware of their own intrapersonal and interpersonal processes and how these may influence their skill and effectiveness as professional helping persons. Emphasis is on personal learning.
SOW 3313 (SOW 307) SOCIAL WORK PRACTICE SKILLS I (5) (F,W,S,SS) An overview of social work intervention for the beginning practitioner. Generic values, attitudes and process in client-worker relationship building will be discussed and analyzed. Authentic case material is utilized to acquaint students with assessment, modes of intervention, goal setting, and implementation. Prerequisites: SOW 302, SOW 305, SOW 306 or their equivalents.

SOW 3511 (SOW 308) FIELD EXPERIENCE I (9) (F,W,S,SS) This is the first 210 -clock hour social work practice experience in service to individuals, groups, and/or communities. Placement in an agency or institution is for the purpose of gaining a first-hand awareness of needs and behavioral responses as well as a knowledge base of expectations, responsibilities, and activities involved in the delivery of social services. This experience facilitates the development of beginning social work skills, and a continually growing awareness of self as a helping person. Majors only. Prerequisites: SOW 302, SOW 305, SOW 306, SOW 307, and SOW 405 or their equivalents. Corequisites: SOW 309 and SOW 407.
SOW 3522 (SOW 309) INTEGRATIVE FIELD SEMINAR I (1) (F,W,S,SS) This course is a one-hour seminar to be taken concurrently with SOW 308, 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 302, SOW 305, SOW 306, SOW 307, and SOW 405 or their equivalents. Corequisites: SOW 308 and SOW 407.
SOW 3350 (SOW 317) TECHNIQUES OF INTERVIEWING (5) 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, roleplaying, simulations, and micro-counseling training methods will be utilized.
SOW 4403 (SOW 401) METHODS OF COMMUNITY RESEARCH (5) (F,W,S) Introduction to basic skills of research for beginning social work practitioners: background searching, definition of variables, sampling analysis of data, data depiction and report writing. This course is also designed to enable social work students to read research articles more critically, understand report of results, and evaluate evidence for hypotheses. Prerequisites: MAS 306, SOW 308, SOW 309, and SOW 407 or their equivalents.
SOW 4233 (SOW 402) SOCIAL WORK POLICY AND SERVICES II (5) (F,W,S) This course considers characteristics and processes common to organizations within the social service system and the impact of policy decisions on individuals and groups. A systems approach will be used as a basis for understanding strategies for innovation and change. Prerequisites: SOW 302, SOW 305, SOW 308, and SOW 309, or their equivalents.
SOW 4125 (SOW 405) DYNAMICS OF HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT 2 (5) ( $F, W, S$ ) Within the framework of the life cycle, the content of this course focuses on the study of selected client systems frequently encountered by Social Work practitioners. Emphasis is placed on UNDERSTANDING bio-psycho-socio-cultural factors contributing to their problems. Prerequisite: SOW 305 or its equivalent.
SOW 4343 (SOW 407) SOCIAL WORK PRACTICE SKILLS II (5) (F,W,S,SS) This generic skills course is designed to provide students with the theories and techniques of social work practice as applied to small groups. Prerequisite: SOW 307, SOW 405, or their equivalents. Corequisites: SOW 308 and SOW 309.
SOW 4512 (SOW 408) FIELD EXPERIENCE II (9) (F,W,S,SS) This second 210 -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 308, SOW 309, SOW 407, or their equivalents. Corequisites: SOW 409 and SOW 417.
SOW 4523 (SOW 409) INTEGRATIVE FIELD SEMINAR II (1) (F,W,S,SS) This course is a one-hour seminar to be taken concurrently with SOW 408, 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 308, SOW 309, and SOW 407, or their equivalents. Corequisites: SOW 408 and SOW 417.
SOW 4332 (SOW 417) COMMUNITY ORGANIZATION (5) (F,W,S,SS) 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 community organization in social work practice. Prerequisites: SOW 308, SOW 309, SOW 407 or their equivalents. Corequisites: SOW 408 and SOW 409.
SOW 4514 (SOW 420) FIELD EXPERIENCE III ( 5 or 10) (F,W,S,SS) 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 408, SOW 409, and SOW 417, or their equivalents.
SOW 4193 (SOW 480) THE SYSTEMS APPROACH IN THE SOCIAL SERVICES (5) This course will focus on general systems theory and its consequences for a revision of the world picture. Emphasis will be on the significance of the systems approach in models elaborated for social service systems. Prerequisite: Permission of instructor.
SOW 4621 (SOW 485) CRISES IN THE LIVES OF WOMEN (5) Introduction to special experiences in the lives of women which might lead women to seek supportive counseling or other professional assistance. Topics include rape, abortion, sex discrimination, menopause, childbirth.
SOW 4905 (SOW 495) INDIVIDUAL STUDY ( $1-10$ ) (F,W,S,SS) Individually selected program of supervised personal study related to specific social issues. Prerequisite: Permission of instructor.
SOW 4905 (SOW 496) DIRECTED READINGS (1-10) (F,W,S,SS) Extensive reading and analysis of appropriate literature under faculty supervision. Prerequisite: Permission of instructor.
SOW 4675 (SOW 499) SOCIAL WORK PHILOSOPHY AND VALUES (5) (F,W,S) This course is designed to investigate philosophical and social thought in order to explore concepts of social welfare and to assist students in the identification and clarification of values inherent in the Social Work profession. Majors only. Prerequisites: SOW 408, SOW 409, and SOW 417, or their equivalents.
SOW 5914 (SOW 500) INDEPENDENT RESEARCH (1-10) Individually selected program of supervised data collection and analysis. Prerequisite: SOW 401 or permission of instructor.
SOW 5435 (SOW 501) EVALUATING SOCIAL SERVICE PROGRAMS I (5) Introduction to experimental and quasi-experimental designs and measurement techniques suitable for evaluation of social service programs. Field experience in defining agency or program goals objectively and designing an actual program evaluation will be provided. This course is designed for seniors and graduate students. Prerequisites: MAS 306, SOW 401, or their equivalents.
SOW 5272 (SOW 502) SOCIAL WELFARE: CROSS-CULTURE COMPARISONS (5) A seminar in which students will analyze and compare social welfare policy, problems, and programs in various countries. This course is designed for seniors and graduate students. Prerequisites: SOW 302 and SOW 402, or permission of insturctor.
SOW 5436 (SOW 511) EVALUATING SOCIAL SERVICE PROGRAMS II (5) Implementation of program evaluation proposal
generated in SOW 501. This seminar will provide actual field experience in data collection, analysis, and program evaluation report writing. Prerequisite: SOW 501.
SOW 5354 (SOW 515) TECHNIQUES OR PREVENTION AND EARLY INTERVENTION (5) (F,S) This course has been designed to enable the student to learn about crisis intervention etiology, structure and theory so he/she may acquire some beginning practical knowledge in a sub-specialty. This course is designed for seniors and graduate students. Prerequisites: SOW 307 and SOW 417, or permission of instructor.
SOW 5684 (SOW 530) PROFESSIONAL VALUES IN THE HUMAN SERVICES (5) (S) This course is designed to assist students in the identification, exploration, and experiencing the values inherent in professionalism as they are manifested in the various human service professions. Material will be presented in a didactic and experiential manner with a heavy emphasis upon student involvement in the value clarification process. Prerequisite: Senior or graduate standing.
SOW 5643 (SOW 533) UNDERSTANDING THE PROCESS OF AGING (5) This course is designed to develop an understanding of the multiple psychosocial problems experienced by the aging person and the impact of such on the older person's physical and emotional well-being. Such an understanding will facilitate the helping person's ability to evaluate and intervene with the behavior responses as exhibited by the elderly. Prerequisite: Senior or graduate standing.
SOW 5217 (SOW 596) SEMINAR IN SOCIAL WORK (5) An exploration of various critical issues of concern to the Social Work Profession. Prerequisite: Permission of instructor.

## SCHOOL OF HOTEL, FOOD \& TRAVEL SERVICES

The School of Hotel, Food and Travel Services offers bachelors and masters programs that combine practical experience with classroom theory to assist the student gain the understandings, skills, and techniques needed to qualify for job opportunities, or to achieve his or her career goals, in the growing hospitality industry.

With the cooperation of industry executives, the School has created an internship program which literally utilizes the hotels, motels, restaurants, clubs, airlines, travel agencies and cruise lines as practice labs for students. The advanced phase of the internship program provides each student a structured and closely supervised management experience normally not available to a student until he or she has entered the industry after graduation.

An active Industry Advisory Board - which includes outstanding executives in the hotel, food and travel industries - works regularly with the faculty, staff and students of the School to formulate and update a curriculum that is current, flexible, and related to the needs of the hospitality industry.

The School has been designated a Program of Distinction by the Board of Regents. Only five programs in the entire state university system have been so honored.

## ADMISSION

## UNDERGRADUATE

Any student who has completed two years of college ( 60 semester hours, 90 quarter hours) may apply for admission. Full credit will be granted for both Associate of Arts and Associate of Science degrees. One may enroll on either a full-time or part-time basis.

It is not necessary to have been previously enrolled in a hotel or restaurant program. The curriculum will provide the specialized professional education to equip the student for a career in hospitality management. Students with training in Liberal Arts, Business, Education, Technology, for example, are qualified to enroll in the program.

## GRADUATE

Any student is eligible for admission to graduate study who holds a bachelors degree from an accredited institution, has attained a combined score of 1000 on the Graduate Record Examination (verbal and quantitative aptitude sections), or a " $B$ " average in all upper division work.

A candidate for the masters degree whose undergraduate program was in Hotel and Restaurant Management must complete 45 quarter hours of graduate study plus the research project. The candidate with a bachelors degree in any other academic area must complete an additional core of professional hotel and food service courses.

The exact amount of additional work will vary with the undergraduate background of the candidate, but will not exceed 40 quarter hours including the required managerial internship program. A maximum of 15 quarter hours of graduate credit may be transferred from any other university or from the graduate programs of this University.

Additional information on admission procedures may be found in the admission section of the Catalog.

## SPECIAL STUDENTS

A number of persons currently employed in the hospitality field may not have the educational requirements to meet degree admission standards, but may be interested in enrolling in certain specific courses to improve their skills and to enhance their chances for promotion. Any person currently employed in the field may register as a Special Student for a maximum of 10 credit hours per quarter.

## UNDERGRADUATE STUDY

Bachelor degree programs are offered in general hospitality management; hotel and motel management; international hotel management; restaurant and food service management; tourism and travel management; condominium, cooperative, and apartment management.

## Campus Location: Tamiami Campus only.

DEGREE: Bachelor of Science
LOWER DIVISION PREPARATION:
Required Courses: Principles of Accounting is a prerequisite for taking course work in the accounting and finance areas. The student who has not taken this prerequisite will be required to take this course during his or her first year at the University.
Recommended Courses: Courses in accounting, economics, psychology and public speaking.
UPPER DIVISION PROGRAMS:

## *GENERAL HOSPITALITY MANAGEMENT

| Required Courses: Management Accounting |  |  |
| :---: | :---: | :---: |
| Finance \& Information Systems |  |  |
| HFT 3453 | (HRM 320) Operations Control for Hospitality Industry Management | 5 |
| HFT 3423 | (HRM 360) Hospitality Accounting Information Systems | 5 |
| or |  |  |
| HFT 4464 | (HRM 361) Lodging Systems \& Procedures | 5 |
| HFT 4654 | (HRM 404) Interpretation of Hospitality Financial Statements | 5 |
| HFT 4474 | (HRM 408) Financial and Legal Aspects of Real Estate Development | 5 |
|  | (HRM 485) Profit Planning and DecisionMaking in the Hospitality Industry | 5 |
| Food and Beverage Management |  |  |
|  | (HRM 308) introductory Commercial Service Production | 5 |
| FSS 3234 | (HRM 311 ) Volume Feeding Management | 5 |
| HFT 3263 | (HRM 316) Restaurant Management | 5 |
| FSS 3243 | (HRM 318) Basic Meat Science | 5 |
| Administration |  |  |
| HFT 3603 | (HRM 325) Law as Related to the Hospitality Industry | 5 |
| HFT 3945 | (HRM 329) Advanced Internship in Hospitality Management | 5 |
| HFT 3503 | (HRM 331) Marketing of Hospitality Services | 5 |
| HFT 3323 | (HRM 340) Physical Plant Management | 5 |
| MAR 3023 | (BUA 303) Principles of Marketing | 5 |

Quarter Hours
Required Courses: Management Accounting Finance \& Information Systems
or
HFT 4654 (HRM 404) Interpretation of Hospitality Financial Statements 5
(HRM 408) Financial and Legal Aspects of Real Estate Development 5
(HRM 485) Profit Planning and DecisionMaking in the Hospitality Industry 5
Food and Beverage Management
(HRM 311 ) Volume Feeding Management 5
HFT 3263 (HRM 316) Restaurant Management 5
FSS 3243 (HRM 318) Basic Meat Science 5
HFT 3603 (HRM 325) Law as Related to the Hospitality Industry

5

Management 5
HFT 3323 (HRM 340) Physical Plar 5
MAR 3023 (BUA 303) Principles of Marketing 5
Electives:

[^5]
## HOTEL AND MOTEL MANAGEMENT

Quarter Hours
HFT 3453 (HRM 320) Operations Control for Hospitality Industry Management ..... 5
HFT 3423 (HRM 360) Hospitality Accounting Information Systems ..... 5
or
HFT 3413 (HRM 361) Lodging Systems \& Procedures ..... 5
HFT 4464 (HRM 404) Interpretation of Hospitality Financial Statements ..... 5
HFT 4654 (HRM 408) Financial and Legal Aspects of Real Estate Development ..... 5
HFT 4474 (HRM 485) Profit Planning and Decision- Making in the Hospitality Industry ..... 5
Food and Beverage Management20
FSS 3221 (HRM 308) Introductory Commercial Food Service Production ..... 5
FSS 3234 (HRM 311) Volume Feeding Management ..... 5
HFT 3263 (HRM 316) Restaurant Management ..... 5
FOS 3243 (HRM 318) Basic Meat Science ..... 5
AdministrationHFT 3603 (HRM 325) Law as Related to the Hospitality30
Industry ..... 5
HFT 3941 (HRM 328) Internship in Hospitality

Management

Management

Management

Management

Management .....  .....  .....  ..... 5 .....  .....  .....  ..... 5 .....  .....  .....  ..... 5 .....  .....  .....  ..... 5 .....  .....  .....  ..... 5

HFT 3945 (HRM 329),Advanced Internship in Hospitality

HFT 3945 (HRM 329),Advanced Internship in Hospitality

HFT 3945 (HRM 329),Advanced Internship in Hospitality

HFT 3945 (HRM 329),Advanced Internship in Hospitality    Management    Management    Management    Management .....  .....  .....  ..... 5 .....  .....  .....  ..... 5 .....  .....  .....  ..... 5 .....  .....  .....  ..... 5

HFT 3503 (HRM 331) Marketing of Hospitality Services

HFT 3503 (HRM 331) Marketing of Hospitality Services

HFT 3503 (HRM 331) Marketing of Hospitality Services

HFT 3503 (HRM 331) Marketing of Hospitality Services .....  ..... 5 .....  ..... 5 .....  ..... 5 .....  ..... 5

HFT 4234 (HRM 425) Union Management Relations in

HFT 4234 (HRM 425) Union Management Relations in

HFT 4234 (HRM 425) Union Management Relations in

HFT 4234 (HRM 425) Union Management Relations in  the Hospitality Industry  the Hospitality Industry  the Hospitality Industry  the Hospitality Industry .....  ..... 5 .....  ..... 5 .....  ..... 5 .....  ..... 5
MAR 3023 (BUA 303) Principles of Marketing
MAR 3023 (BUA 303) Principles of Marketing
MAR 3023 (BUA 303) Principles of Marketing
MAR 3023 (BUA 303) Principles of Marketing ..... 5 ..... 5 ..... 5 ..... 525
Electives:
Required Courses: Management Accounting, Finance \& Information System ..... 25-
$\qquad$$\begin{array}{ll}\text { HRM 316) Restaurant Management } & 5 \\ \text { HRM 318) Basic Meat Science } & 5\end{array}$
$\square$
RESTAURANT AND FOOD SERVICE MANAGEMENT
Quarter Hours
Required Courses: Management Accounting, Finance \& Information Systems ..... 15
HFT 3423 (HRM 360) Hospitality Accounting Information Systems ..... 5
HFT 4464 (HRM 404) Interpretation of Hospitality Financial Statements ..... 5
HFT 4474 (HRM 485) Profit Planning and Decision- Making in the Hospitality Industry ..... 5
Food and Beverage Management25FSS 3221 (HRM 308) Introductory Commercial FoodService Production5
FSS 3234 (HRM 311 ) Volume Feeding Management ..... 5
HFT 3263 (HRM 316) Restaurant Management ..... 5
FOS 3243 (HRM 318) Basic Meat Science ..... 5
FSS 4105 (HRM 415) Purchasing and Menu Planning ..... 5
Administration
HFT 3603 (HRM 325) Law as Related to the Hospitality35Industry5

HFT $\left.3941 \begin{array}{c}\text { (HRM 328) Internship in Hospitality } \\ \text { Management }\end{array}\right) 5$
HFT $\left.3945 \begin{array}{c}\text { (HRM 329) Advanced Internship in Hospitality } \\ \text { Management }\end{array}\right) 5$
HFT 3503 (HRM 331) Marketing of Hospitality Services 5
HFT 3323 (HRM 340) Physical Plant Management 5
HFT 4234 (HRM 425) Union Management Relations in the Hospitality Industry

5
MAR 3023 (BUA 303) Principles of Marketing 5
Electives: (Five hours must be taken in either HRM 309 or HRM 446)

25
100

## INTERNATIONAL HOTEL MANAGEMENT

Required Courses: Management Accounting, Finance \& Information Systems
HFT 3453 (HRM 320) Operations Control for Hospitality Industry Management 5
HFT $3423 \begin{gathered}\text { (HRM 360) Hospitality Accounting Information } \\ \text { Systems }\end{gathered}$
or
HFT 3413 (HRM 361) Lodging Systems \& Procedures 5
HFT 4464 (HRM 404) Interpretation of Hospitality Industry Financial Statements
HFT 4474 (HRM 485) Profit Planning and DecisionMaking in the Hospitality Industry
Food and Beverage Management
FSS 3221 (HRM 308) Introductory Commercial Food Service Production
FSS 3234 (HRM 311) Volume Feeding Management
HFT 3263 (HRM 316) Restaurant Management
Administration
HFT 3603 (HRM 325) Law as Related to the Hospitality Industry

5
HFT $3941 \begin{gathered}\text { (HRM 328) Internship in Hospitality } \\ \text { Management }\end{gathered}$
HFT $3945 \begin{gathered}\text { (HRM 329) Advanced Internship in Hospitality } \\ \text { Management }\end{gathered}$
HFT 3503 (HRM 331) Marketing of Hospitality Services 5
HFT 3323 (HRM 340) Physical Plant Management 5
HFT 3713 (TTM 308) International Travel and Tourism 5
MAR 3023 (BUA 303) Principles of Marketing 5
Electives:

TRAVEL AND TOURISM MANAGEMENT
Required Courses: Management Accounting, Finance \& Information Systems
HFT 3423 (HRM 360) Hospitality Accounting Information Systems

5
or
HFT 3413 (HRM 361) Lodging Systems \& Procedures 5
HFT 4465 (TTM 404) Interpretation of Travel and Tourism Management Financial Statements
HFT 4474 (HRM 485) Profit Planning and Decision- Making in the Hospitality Industry ..... 5
Administration ..... 25
HFT 3603 (HRM 325) Law as Related to the Hospitality Industry ..... 5
HFT 3000 (HRM 326) Introduction to Hospitality Management ..... 5
HFT 3503 (HRM 331) Marketing of Hospitality Services ..... 5
HFT 4234 (HRM 425) Union Management Relations in the Hospitality Industry ..... 5
MAR 3023 (BUA 303) Principles of Marketing ..... 5
Travel and Tourism Management
HFT 3700 (TTM 301) Fundamentals of Tourism ..... 535
HFT 3722 (TTM 303) Retail Travel Agency Management ..... 5
HFT 3753 (TTM 307) Convention and Trade Show Management ..... 5
HFT 3713 (TTM 308) International Travel and Tourism ..... 5
HFT 3941 (TTM 309) Internship in Travel and Tourism Management ..... 5
HFT 3945 (TTM 310) Advanced Internship in Travel and Tourism Management ..... 5
GEA 3000 (INR 334) World Regional Geography ..... 5
Electives: (Five hours must be taken in Transportation) ..... 25
100
CONDOMINIUM, COOPERATIVE, AND APARTMENT MANAGEMENT
Quarter Hours
Required Courses: Management Accounting, Finance \& Information Systems ..... 20
HFT 3423 (HRM 360) Hospitality Accounting Information Systems ..... 5
or
HFT 3413 (HRM 361) Lodging Systems \& Procedures ..... 5
HFT 4464 (HRM 404) Interpretation of Hospitality Industry Financial Statements ..... 5
HFT 4654 (HRM 408) Financial and Legal Aspects of Real Estate Development ..... 5
HFT 4474 (HRM 485) Profit Planning and Decision- Making in the Hospitality Industry ..... 5
Administration
HFT 3263 (HRM 316) Restaurant Management ..... 530
HFT 3603 (HRM 325) Law as Related to the Hospitality
HFT 3603 (HRM 325) Law as Related to the Hospitality Industry ..... 5
HFT 3941 (HRM 328) Internship in Hospitality Management ..... 5
HFT 3945 (HRM 329) Advanced Internship in Hospitality Management ..... 5
HFT 3503 (HRM 331) Marketing of Hospitality Services ..... 5
MAR 3023 (BUA 303) Principles of Marketing ..... 5
Property Management
HFT 3323 (HRM 340) Physical Plant Management ..... 515HFT 4274 (HRM 480) Condominium, Cooperative andApartment Management5
HFT 4574 (HRM 481) Marketing and Servicing the Resort Condominium, Cooperative and Apartment Concepts ..... 5
Electives:35

# HOTEL AND FOOD SERVICE MANAGEMENT 

Campus Location: Tamiami Campus only
DEGREE: Master of Science in Hotel and Food Service Management

Quarter Hours

Required Core Courses: 30
HFT 6246 (HRM 610) Organizational Behavior in the Hospitality Industry
5
HFT 6586 (HRM 615) Research and Statistical Methods 5
HFT 6477 (HRM 620) Financial Management for the
Hospitality Industry 5
HFT 6296 (HRM 625) Seminar in Hospitality
Management
5
HFT 6697 (HRM 629) Hospitality Law Seminar 5
HFT 6916 (HRM 630) Hospitality Industry Project 5
Electives: (500 and 600 level)

COURSE OFFERINGS

HFT 3403 (HRM 301) INTRODUCTION TO MANAGEMENT ACCOUNTING FOR THE HOSPITALITY INDUSTRY (5) 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.
FSS 3221 (HRM 308) INTRODUCTORY COMMERCIAL FOOD SERVICE PRODUCTION (5) Provides an introduction to commercial food preparation, nutrition, standard product identification, storage and supervisory techniques in the area of food preparation. Course includes classroom instruction, demonstrations and actual cooking experience.
FSS 3232 (HRM 309) INTERMEDIATE QUANTITY FOOD PRODUCTION TECHNIQUES (5) An advanced commercial food production course which provides the student with the opportunity to achieve competence and to develop techniques in the garnishing, pastry, serving and convenience food areas. Prerequisite: HRM 308 or equivalent.
FSS 3234 (HRM 311) VOLUME FEEDING MANAGEMENT (5) The facilities of various types of large quantity food operations are utilized to provide the student with both production and managerial experience. Students will be rotated through production stations and, as managers, will be required to plan menus, supervise preparation and service, handle customer telations and keep accurate accounting records on the profit and loss phases of the operation. Staffing, merchandising and cost control procedures are integral parts of the course. Prerequisite: HRM 308 or equivalent.
COA 3411 (HRM 312) IMPROVING YOUR EFFECTIVENESS AS A CONSUMER (3-5) What information does the individual consumer need to deal more effectively for goods and services? Where and how is this information obtained? These questions will be dealt with in detail. Materials intended for the student's future reference will be used. The purpose of the course is to apply modern management methods to improve individual spending decisions.
FSS 3252 (HRM 313) FOOD AND BEVERAGE TECHNOLOGY (5) A course designed to explore principles, and permit students the opportunity to master procedures, in the area of food and beverage technology.
FSS 3241 (HRM 314) CLASSICAL CUISINE (5) Provides an opportunity for students skilled in cookery to expand their knowledge of food preparation into the area of world respected, traditional dishes. The course includes lecture demonstration and actual preparation of classical dishes. The students will utilize conventional methods of preparation as well as convenience foods. Prerequisite: HRM 308.
HFT 3263 (HRM 316) RESTAURANT MANAGEMENT (5) An analysis of the principal operating problems in the restaurant field. Procedures, approaches and techniques of management are explored and developed as they relate to the various categories of restaurants ranging from fast food to gourmet. Industry leaders will present successful concepts of restaurant operation. FSS 3272 (HRM 317) BEVERAGE MANAGEMENT (5) An introduction to the identification, use and service of wines and other alcholic beverages with an in-depth analysis of the various elements of beverage operations including purchasing, control, merchandising and bar management. Field trips are made to hotels and restaurants to demonstrate salient operating principles.
FOS 3243 (HRM 318) BASIC MEAT SCIENCE (5) Fundamentals of meat quality, yield, utilization of cuts, availability, costing, buying, inventorying, packaging, labor and trends.
HFT 3453 (HRM 320) OPERATIONS CONTROL FOR HOSPITALITY INDUSTRY MANAGEMENT (5) Study of the management tools available to control sales and expenses within hospitality operations. Detailed analysis of the responsibility centers using a cost managing approach. Case problems provide the students the opportunity to develop control systems for food and lodging organizations.

HFT 3434 (HRM 321) CLUB OPERATIONS MANAGEMENT (5) Lecture discussion, case studies and field trips specifically designed to expose the future club manager, golf professional and turf manager to Club operations. Introduction to the Uniform System of Accounts for Clubs. Annual Club Studies for Operating Results, Control Systems, Taxation, Budgeting and Management Reports.
HFT 3603 (HRM 325) LAW AS RELATED TO THE HOSPITALITY INDUSTRY (5) A basic course in hotel, motel and restaurant law. The student is introduced to the fundamental laws, rules and regulations applicable to the hospitality industry. The case study approach is used to develop an awareness and understanding of the legal problems confronting the executive in his policy and decision making role.
HFT 3000 (HRM 326) INTRODUCTION TO HOSPITALITY MANAGEMENT (5) A survey course providing an overview of the industry, its history, problems and general operating procedures. Operating executives from the fields of hotel, restaurant, food service, travel and tourism will be teatured periodically.
HFT 3941 (HRM 328) INTERNSHIP IN HOSPITALITY MANAGEMENT (5) Experience in all the major departments of an operating hotel, motel, restaurant or food service operation. Reports are required of all students.
HFT 3945 (HRM 329) ADVANCED INTERNSHIP IN HOSPITALITY MANAGEMENT (5) Structured management experience in a specialized career of the hospitality industry. Programs include: food and beverage management, rooms division management, sales management, in-flight catering management, fast food service management, and restaurant management.
HFT 3203 (HRM 330) FUNDAMENTALS OF MANAGEMENT IN THE HOSPITALITY INDUSTRY (5) 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 3503 (HRM 331) MARKETING OF HOSPITALITY SERVICES (5) Application of marketing principles to business operations within the hospitality industry with particular emphasis on viewing marketing as a competitive strategy in domestic and international markets. Prerequisite: BUA 303 or equivalent.
HFT 3514 (HRM 332) ADVERTISING FOR THE HOSPITALITY INDUSTRY (5) Consideration of all aspects of the advertising element of the promotion mix to execute the corporation's or tourist destination's marketing strategy. Prerequisite: HRM 331. HFT 3524 (HRM 333) SALES MANAGEMENT FOR THE HOSPITALITY INDUSTRY (5) The course focuses on organizing the sales and servicing effort and executing the marketing strategy by developing sales strategies, plans and tactics for hospitality corporations and tourist destinations. Special emphasis is placed on group markets and gaining travel retailer support for destinations, hotel corporations and cruiselines. The course may be followed by a sales management internship. Prerequisite: HRM 331.
HFT 3313 (HRM 339) HOSPITALITY PROPERTY MANAGEMENT (5) 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 cost of equipment and personnel with modern innovations that are available.
HFT 3323 (HRM 340) PHYSICAL PLANT MANAGEMENT (5) A comprehensive survey of the engineering, maintenance and efficiency control in hotels, restaurants and institutions.
HFT 3343 (HRM 341) HOTEL AND RESTAURANT PLANNING AND DESIGN (5) Considers analysis, evaluation and scheduling of the economic, technical, aesthetic and merchandising factors involved in the planning, programming and design stages of hotels and restaurants. Actual hotel and restaurant projects will serve as the basis for discussion and student project work.
HFT 3423 (HRM 360) HOSPITALITY ACCOUNTING INFORMATION SYSTEMS (5) The study of an accounting system for hospitality operations within the context of the firm's overall information system. The flow of data from souce inputs through financial statement preparation, with emphasis on computer assisted processing and reporting techniques. Students use the University computer for a case project. Prerequisite: HRM 301 or equivalent.
HFT 3413 (HRM 361) LODGING SYSTEMS AND PROCEDURES (5) Detailed examination of the functions and procedures utilized in servicing the guest of a lodging establishment, contrasting the traditional techniques and the modern systems that have been developed. Extensive use of the School's Mobydata minicomputer hospitality system to demonstrate "state-of-theart" concepts. Prerequisite: HRM 301 or equivalent.
HFT 3900-3905-4910 (HRM 398-399-400) INDEPENDENT STUDIES (VAR) With permission from the Chairmen of the Division of Hotel and Restaurant Services, or Division of Travel Services, students may engage in independent research projects and other approved phases of independent study.
HFT 4494 (HRM 401) SEMINAR IN HOSPITALITY INFORMATION SYSTEMS (5) A study of the information systems utilized in hospitality operations to provide better management information for analysis and decision-making. Industry participants afford students the opportunity to study and evaluate their information system. This forms the basis for their course project. Research, case problems, class analysis and discussion. Prerequisite: Permission of the instructor.
HFT 4464 (HRM 404) INTERPRETATION OF HOSPITALITY INDUSTRY FINANCIAL STATEMENTS (5) In-depth study of hospitality industry financial statements including consideration of the significant relationships between the various accounts found on financial reports. The statement of changes in financial position is studied emphasizing funds as a means of payment. Major emphasis is placed upon trend analysis, ratio analysis and comparison analysis using hospitality industry annual studies. Prerequisites: HRM 320 and HRM 360 or HRM 361.
HFT 4455 (HRM 405) FUNCTIONS OF THE HOSPITALITY INDUSTRY COMPTROLLER (5) A specialized course designed for students desiring strong emphasis and training in the complex accounting and finance functions of hospitality industry management. Prerequisites: HRM 360, HRM 320.
HFT 4444 (HRM 406) COMPUTER SYSTEMS FOR HOSPITALITY INDUSTRY MANAGEMENT (5) A seminar on computer systems and their applications within the hospitality industry. Consideration is given to an understanding of the basic computer hardware and software concepts needed for a manager to communicate with data processing personnel. Prerequisite: HRM 360.

HFT 4485 (HRM 407) SEMINAR IN TAXPLANNING FOR THE HOSPITALITY INDUSTRY (5) Develops tax awareness and the ability to recognize the possible tax implications of business decisions. Tax considerations are studied for existing, expanding and planned hospitality operations. Included are compensation plans, pension and profit sharing plans, depreciation methods, acquisitions, mergers, liquidations, organization structure, accounting methods and capital gains and losses. Prerequisite: Permission of the instructor.
HFT 4654 (HRM 408) FINANCIAL AND LEGAL ASPECTS OF REAL ESTATE DEVELOPMENT (5) An introductory course de-
signed to acquaint the student with the legal aspects of financing in the hospitality industry. The student is exposed to the sources and availability of hospitality financing. Financing from the viewpoint of a sole proprietorship, partnership and corporation is discussed. The course also covers the purchasing and leasing of hospitality properties, condominium and cooperative forms of ownership and franchising.
FSS 4315 (HRM 410) INSTITUTIONAL FOOD SERVICE MANAGEMENT (5) This course brings together basic management techniques and controls that are useful in the area of institutional feeding programs. Federal and State governments' regulations studied. Special emphasis is given to Hospital Food Service Direction and the National School Lunch Program.
FSS 4333 (HRM 411) IN-FLIGHT FOOD SERVICE MANAGEMENT (5) An introduction to the concepts and managerial techniques specifically related to the In-Flight Food Service segment of the hospitality industry. Students will be exposed to a comprehensive study of contract purchasing, contract negotiations, system menu planning, volume food production, staff scheduling, industry pricing methods, product specification factors, client and employee relations, security control systems, familiarization with specific and specialized food service equipment, equipment routing and balance, and transportation methods and procedures.
FSS 4105 (HRM 415) PURCHASING AND MENU PLANNING (5) 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.
FOS 4201 (HRM 416) SANITATION IN FOOD SERVICE OPERATION (5) The causes and prevention of food poisoning are stressed. Emphasis is placed on the current problems confronting the industry with recent food developments as they relate to sanitation. Curriculum developed by the National Sanitation Foundation is included.
FOS 4245 (HRM 418) ADVANCED MEAT SCIENCE (5) An advanced course which considers the variable factors of meat, poultry and fish utilization. Emphasis is placed upon newer techniques in purchasing, maximizing yields and providing products in unique form. The use of TVP and other analogs are 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: HRM 318.
HFT 4293 (HRM 419) RESTAURANT MANAGEMENT SEMINAR (5) By permission of instructor only. A senior course reviewing current problems and practices, developing policies and procedures and implementing same.
HFT 4484 (HRM 421) MONEY MANAGEMENT FOR THE HOSPITALITY INDUSTRY (5) Various methods of investment analysis, investment opportunities and pitfalls with special emphasis on securities of and investments in the Hospitality Industry.
HFT 4234 (HRM 425) UNION MANAGEMENT RELATION IN THE HOSPITALITY INDUSTRY (5) A comprehensive course covering labor legislation, union history and the day-to-day administration of the labor contract. Emphasis is placed on collective bargaining and the business relationships between union and management.
HFT 4276 (HRM 427) RESORT MANAGEMENT (5) A course designed to focus on the unique problems of resort hotel management and the application of special techniques to meet these problems.
HFT 4224 (HRM 428) HUMAN RELATIONS IN THE HOSPITALITY FIELD (5) The problems faced by the supervisor and the executive in managing the human element in the hospitality field. Designed to give the student insight into the varied social and psychological factors present in any employee-employer relationship.
FSS 4614 (HRM 435) FOOD AND BEVERAGE MERCHANDISING (5) This is an application of marketing and advertising principles to the specific area of food and beverage for hotels and restaurants.
FSS 4431 (HRM 446) FOOD FACILITY LAYOUT AND DESIGN (5) Defines and explains concepts, principles and procedures in evaluating and/or [developing varied commercial food service facilities that will increase profit by reducing investment and operating cost and/or] increasing capacity. Actual installations are intensively reviewed, current trends in food service methodology and technology are studied in detail and food service equipment manufacturing processes and distribution economics are observed and evaluated.
HFT 4674 (HRM 450) ORGANIZATION AND DEVELOPMENT OF RESORT, CONDOMINIUM, COOPERATIVE AND RESIDENTIAL COMPLEXES (5) This seminar deals with the legal and financial aspects of real estate. Various instruments of real estate financing are examined. Students are exposed to land contracts, long and short term leases, real estate bonds, and various facets of investment trusts. Permission of the instructor must be obtained to take the course. Prerequisite: past course work or experience in the real estate industry.
HFT 4274 (HRM 480) CONDOMINIUM, COOPERATIVE AND APARTMENT MANAGEMENT (5) A survey course delineating the management functions of the resort condominium complex with special emphasis on similarities and differences in comparison to hotel and resort management.
HFT 4574 (HRM 481) MARKETING AND SERVICING THE RESORT CONDOMINIUM, COOPERATIVE AND APARTMENT CONCEPTS (5) A simulated case project taking each of the three types of properties from selection of site completely through all phases of sales, marketing and servicing to complete occupancy and day-to-day operation.
HFT 4474 (HRM 485) PROFIT PLANNING AND DECISION MAKING IN THE HOSPITALITY INDUSTRY (5) 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, variance analysis, cost-volume profit analysis, capital budgeting and tax considerations. Prerequisite: HRM 404 or TTM 404.
HFT 5901-5906-5911 (HRM 500-504) INDEPENDENT STUDIES (VAR) With permission from the Chairmen of the Division of Hotel and Restaurant Services, or Division of Travel Services, students may engage in independent research projects and other approved phases of independent study.
HFT 5476 (HRM 509) FEASIBILITY STUDIES FOR THE HOSPITALITY INDUSTRY (5) A survey of various theories and techniques available by which management may determine the financial feasibility of investments in the hospitality field. Prerequisites: HRM 331 and HRM 485 or concurrently enrolled.
HFT 5495 (HRM 510) SEMINAR IN HOSPITALITY INDUSTRY FINANCIAL MANAGEMENT SYSTEMS (5) Visits to various hospitality businesses for seminars with management team members. Lectures, demonstrations and discussion of each operation's methods and procedures with emphasis on accounting and control systems. Prerequisite: Permission of the instructor.
HFT 5595 (HRM 533) PROBLEMS IN MARKETING (5) Team-work analysis and recommended solution of an actual marketing problem which has been posed by a local operator. Prerequisite: HRM 331.

FFS 5361 (HRM 536) ADVANCED FOOD SERVICE OPERATION (5) A senior course designed to coordinate the various management functions covered in previous courses into a comprehensive approach to profitable food service operations.
HFT 3700 (TTM 301) FUNDAMENTALS OF TOURISM (5) An introduction to the broad fields of travel and tourism. Among the topics covered are cultural tourism, sociology of tourism, tourism components and supply, tourism development, the economic role of tourism demand, and the marketing of tourism.
HFT 3722 (TTM 303) RETAIL TRAVEL AGENCY MANAGEMENT (5) An introduction to the basic operations aspect of travel agency management. The application of fundamental principles and successful practices in developing a satisfied clientele.
HFT 3727 (TTM 304) TECHNICAL AGENCY OPERATIONS (5) Comprehensive, detailed course covering the technical procedures, practices and systems of day-to-day travel management. The counseling, sales and personal relationships with clients, hotels, tour agencies and transportation systems. Prerequisite: TTM 303.
HFT 3763 (TTM 305) PASSENGER TRAFFIC MANAGEMENT (5) A survey of land, water and air transportation from an integrated, intermodal frame covering organization, operations, financing, research, regulation, economics and certain social and political factors, as well as contribution made by each mode to the development of tourism.
HFT 3733 (TTM 306) CREATIVE TOUR PACKAGING (5) A thorough study of the functions of the wholesale tour operation. Includes tour operations and development, sales methods used in selling group business, costing and contracting of group business and in-depth study of the promotional aspects of tour packaging.
HFT 3753 (TTM 307) CONVENTION AND TRADE SHOW MANAGEMENT (5) A course concentrating on organizing, arranging and operating conventions, trade shows, and concessions. Emphasis will be placed on the modes and methods of sales used in booking conventions and trade shows as well as the division of administrative responsibility in their operation.
HFT 3713 (TTM 308) INTERNATIONAL TRAVEL AND TOURISM (5) An introduction to the complete international scope of travel and tourism. A brief analysis of regional framework and specific regions of the world; the interrelationship between human society and the physical environment. Tourism as a factor in economic development and its cultural and sociological factors are explored. An analysis of the international organization of tourism and the facilitation procedures required for its successful implementation are highlighted.
HFT 3941 (TTM 309) INTERNSHIP IN TOURISM AND TRAVEL MANAGEMENT (5) Experience in all phases of travel agency management and in the travel and sales area of major airlines. Reports are required.
HFT 3945 (TTM 310) ADVANCED INTERNSHIP IN TOURISM AND TRAVEL MANAGEMENT (5) Structured management experience with an airline, a travel agency, tour operator or cruise line. Report required.
HFT 3793 (TTM 312) SOCIOLOGY OF LEISURE (5) An introduction to the fundamental, psychological and sociological concepts and theories as they relate to the motivation behind travel and tourism. Emphasis will be placed on the biological basis on behavior and the dynamics of personality.
HFT 4465 (TTM 404) INTERPRETATION OF TOURISM AND TRAVEL MANAGEMENT FINANCIAL STATEMENTS (5) Indepth study of financial statements including consideration of the significant relationships between the various accounts found on financial reports. Use of a uniform system, reports analyses and data interpretation as tools for the travel and tourism organization manager. Major emphasis is placed upon trend analysis, ratio analysis and comparison analysis using industry studies. Prerequisite: TM 360.

## GRADUATE

## Core Courses

HFT 6246 (HRM 610) ORGANIZATIONAL BEHAVIOR IN THE HOSPITALITY INDUSTRY (5) A survey of the concepts of organizational behavior and industrial psychology theory from both the research and practical points of view. The course is designed to assist students in making sound decisions in the hospitality area by making them sensitive to the organizational parameters which influence their decisions.
HFT 6586 (HRM 615) RESEARCH AND STATISTICAL METHODS (5) A study of basic research methodology as applied to a variety of hospitality industry research projects. Technique for data collection, interpretation and methods of reporting are considered.
HFT 6477 (HRM 620) FINANCIAL MANAGEMENT FOR THE HOSPITALITY INDUSTRY (5) A study of the principles of financial management and their application to the hospitality industry. Discussion and case studies are used to develop plans for meeting financial needs (short, intermediate and long term) from internal sources or capital markets. Attention is focused on capital budgeting, leasing, franchising, mergers, consolidations and current financial issues in the hospitality industry.
HFT 6296 (HRM 625) SEMINAR IN HOSPITALITY MANAGEMENT (5) Attention is focused on major problems facing management in today's economy. Special emphasis is placed on the food service industry. Research of the current literature, class analysis a.n discussion.
HFT 6697 (HRM 629) HOSPITALITY LAW SEMINAR (5) New laws and their impact on the hospitality industry are examined. Students research and publish "industry alert bulletins" explaining the impact of new legislation on the hospitality industry. Prerequisite: HRM 325 or equivalent.
HFT 6916 (HRM 630) HOSPITALITY INDUSTRY PROJECT (5) An individualized research project dealing with current problems in the hospitality industry. Topics and research methods must be approved by the graduate faculty before registration for the course.

## Electives

HFT 6903-6907-6912 (HRM 600-602) INDEPENDENT STUDIES (VAR) With permission from the Chairmen of the Division of Hotel and Restaurant Services, or Division of Travel Services, students may engage in independent research projects and other approved phases of independent study.
FSS 6452 (HRM 606) ADVANCED FOOD SERVICE DESIGN OPERATIONS (5) Advanced planning, programming and project documentation for commercial food service facilities. Spatial, environmental and electro-mechanical design factors are stressed with particular emphasis on efficiency modulation and investment aspects. Recommended: HRM 341 or HRM 446. HFT 6486 (HRM 621) INVESTMENT ANALYSIS FOR THE HOSPITALITY INDUSTRY (5) Advanced investment methods and opportunities with emphasis on securities of the hospitality industry, financing techniques, syndication, negotiations.
(HRM 626) SEMINAR IN MANAGEMENT METHODS (5) Class will be divided into small groups, each of which will meet regularly with the executive committee of an area hotel or restaurant. Each group will be, in reality, the junior executive committee for the property. The groups will come together periodically for analysis and discussion of their experiences, and to relate their experiences to principles of modern management.
HFT 6946 (HRM 628) GRADUATE INTERNSHIP (5) Structured graduate management experience in a specialized career of the hospitality industry. Programs include: food and beverage management, room division management, sales management, In-flite catering management, fast food service management and restaurant management. Prerequisite: Permission of the instructor.
HFT 6697 (HRM 629) HOSPITALITY LAW SEMINAR (5) New laws and their impact on the hospitality industry are examined. Students research and publish "industry alert bulletins" explaining the impact of new legislation on the hospitality industry. Prerequisite: HRM 325 or equivalent.
HFT 6256 (HRM 635) INTERNATIONAL HOTEL OPERATIONS (5) A consideration of the various environments within which the international hospitality firm operates. Organizational, financial and marketing factors are of major concern. Emphasis is placed on those problems and constraints which are uniquely different from problems of firms engaged in domestic operations of a similar nature.
HFT 6286 (HRM 640) THE ORGANIZATION AND ITS ENVIRONMENT (5) A study of the hospitality industry as it is affected by its environment and in turn attempts to influence the various elements in this environment.
HFT 6446 (HRM 645) HOSPITALITY INDUSTRY ORGANIZATIONAL INFORMATION SYSTEMS (5) Study of information systems in the hospitality industry. Consideration of the design and development of an information system based on user needs. Emphasis on identification and specification of user requirements and the selection of the appropriate design. Students work on a systems development project.
HFT 6487 (HRM 650) TAXATION FEDERAL AND STATE (5) A study of state and federal taxation concepts, including tax management for individuals, partnerships, and corporations engaged in the hospitality field.
HFT 6596 (HRM 660) MARKETING MANAGEMENT (5) Team-work analysis and recommended solution of an actual marketing problem which has been posed by a local operator.
HFT 6456 (HRM 665) OPERATIONS CONTROL (5) Focus is directed to the information used in the decision process and the information flow associated with each decision process throughout hotels or restaurant enterprises.
HFT 6226 (HRM 670) MOTIVATION AND LEADERSHIP (5) Motivation, perception, learning, attitude formation, incentive theory, job satisfaction with emphasis on leadership and group task performance.
FSS 6834 (HRM 675) FOOD SERVICE RESEARCH (5) The planning, executing, and reporting of an individual research project dealing with significant problems in food service. Students demonstrate an understanding of research techniques through data collection, evaluation and interpretation.
FSS 6365 (HRM 680) FOOD SERVICE SYSTEMS (5) Principles of system analysis applied to the food service industry. Attention is given to the organization of modern food production, preparation, and distribution systems. Case study problems require application of economic and management principles for solution.
(MAR 612) MARKETING RESEARCH (5) The role of research in providing information for marketing decision-making including an examination of the research process and the tools available to the researcher.
MAN 6721 (MBA 625) MANAGERIAL DECISION THEORY (5) This course will investigate and analyze the decision problems that managers face in business, volunteer organizations, government, and the public sector. Emphasis in the course will be placed on providing variety of decision-making experiences for the student, including the opportunity of participating in a management computer game.
MAN 6721 (MBA 699) POLICY ANALYSIS (5) The use of cases, guest lectures, and gaming to integrate the analysis and measurement tools, the functional areas and public policy issues. The objective is to develop skill in broad areas of rational decision-making in an administrative context of uncertainty. Prerequisite: should be taken in the last quarter of Master's Program.

## SCHOOL OF TECHNOLOGY

The School of Technology offers programs leading to the bachelors degree in four fundamental technical fields: engineering technology, industrial technology, construction, and environmental and urban systems. A masters degree is offered in environmental \& urban systems.

## PROGRAMS

The programs of the School are directed toward the practical use of scientific, engineering and technical principles to meet the objectives of industry, business and the public. Programs range from those oriented toward careers in industrial management and supervision to those more directly associated with the sciences, mathematics and engineering or architecture, and are characterized by their emphasis on real applications, industrial operations and service. The School attempts to provide 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 satisfying personal growth.

Underlying the programs of the School is a recognition of the growing impact of technology upon the quality of life and that the proper application of technology is critical to meeting current and emerging needs of man.

The academic programs of the School are provided by its four divisions and are described below. Each division has several specified majors as well as a non-structured divisional major to meet the needs of individuals.

## BACHELOR DEGREES

The School awards the Bachelor of Science degree (B.S.) to students who complete the prescribed requirements in Engineering Technology (Electrical, Mechanical, Civil, Construction, Environmental, Urban Systems), Construction Management, Architectural Technology or Interior Design. A student who elects a non-structured divisional major (Industrial, Construction, Engineering Technology, Environmental and Urban Systems) may qualify for the Bachelor of Science degree or the Bachelor of Technology (B.T.) degree depending on the nature of his or her individualized program of study.

## GENERAL BACHELOR DEGREE REQUIREMENTS

In order to obtain a bachelors degree from the School of Technology, each student must satisfy the following minimum requirements:

1. Obtain a minimum of 180 quarter credits including transfer credits. Some students require more than the minimum program in order to obtain the competencies and objectives of their selected major.
2. Take at least 45 credits in the School of Technology.
3. Attain a minimum grade-point average of 2.0 on all work completed at F.I.U. and a minimum grade-point average of 2.0 on all School of Technology courses. A grade of " $D$ " in any course taught by the School of Technology and listed as a major requirement may not be counted for graduation. Those receiving " $D$ " in such courses must repeat them or obtain a waiver from the advisor to substitute another course.
4. Satisfy the general education requirements for the bachelor degree by taking those courses at the community college or by a combination of transfer, CLEP and course credits awarded at the University.
5. Satisfy the particular requirements for his or her own major and all University requirements for graduation.
6. Complete an approved program of study which must be filed with the advisor by the time he or she attains senior status ( 135 cr .) or at least two quarters prior to application for graduation.
7. Have proficiency in the use of language and mathematics appropriate to his or her program and career objectives.

## COOPERATIVE EDUCATION

A Co-op Program is conducted by the School of Technology in conjunction with the Department of Cooperative Education in the Division of Student Services. In this program, a student spends alternate quarters in school full-time and fully employed in industry in a technical position directly related to his or her major. Academic credit (normally, 5 credits per quarter) is given for the work periods, which counts toward the degree. The student receives full pay for his or her work in industry. Placement in co-op positions is arranged by the Co-op Program and includes both local and national industrial, business and governmental agencies. A Co-op student normally must agree to spend at least three work periods in industry and can normally complete the upper-division program within two calendar years. An applicant for the Co-op Program is evaluated by the School of Technology. An interested student should contact the Assistant Dean. Because of the requirement for three work periods, a student should enter the program during the first quarter of the junior year. Inquiries from lower-division students prior to transfer to the University are particularly encouraged since work may be arranged immediately upon enroliment.

## EXTERNAL DEGREE

The School participates in the External Degree Program of the University and the External Degree student may enroll in a division major. Because of the technical and laboratory requirements of most programs, the School will consider admission of a student to its External Degree Program only under these conditions:

1. Completion of two years of college, preferably with a technical associate degree.
2. The inability to attend the regular program.
3. Substantial work experience, with increasing responsibility, in the technical discipline of the proposed major.
4. A favorable evaluation of the probability of completing the program and the availability of the necessary resources (at this University and at an external site) for the program.

## ADMISSIONS AND PROGRAM PLANNING - BACHELOR DEGREE

## ADMISSION REQUIREMENTS

All bachelors degree programs of the School are designed to integrate the community college graduate (or junior-level transfer student) into curricula which have established certain minimum competencies or skills as the requirements for the four-year degree. Consequently, requirements may be met in a variety of ways and through various sequences which are accommodated at the freshman and sophomore level by College Parallel (A.A.) and Technical (A.S.) programs of the community colleges and by four-year colleges. The School admits to full junior standing a student who meets one of the following requirements:

1. Associate of Arts degree from an accredited community college, or . . .
2. Associate of Science degree from an accredited community college in the technical discipline of their proposed upper level major, or equivalent (the student with a nontechnical A.S. degree should consult the Dean's Office for assistance and may be admitted to certain programs,) or . . .
3. Junior level ( 90 cr .) in good standing at a four-year college.

Others will be considered as exceptions on an individual basis. A student transferring with the Associate degree (A.A. or A.S.) is normally awarded 90 transfer credits toward the bachelors degree. A transfer student from a four-year college may not receive more than 135 credits of transfer toward the bachelors degree. The transferability of upper-level technical courses is determined by the advisor and is a part of the establishment of the student's program of study.

A student earning the Associate of Science degree should attempt to obtain as many of the general education requirements as possible at the community college, preferably to completion and certification, by selection of electives. The college parallel student planning to major in Technology should select a pre-professional or pre-science major or should take math, science and related electives in order to insure rapid progress after transfer.

## PROGRAM OF STUDIES

The requirements for the various majors in Technology are described in terms of fundamental competencies which may be met through specified courses at the University or demonstrated in other ways. These alternative demonstrations include completion of equivalent courses at other colleges, significant and varied work experience, and non-traditional learning experiences. Since each student will meet requirements in a unique way, based on his or her individual background and experience, each student is required to arrive at a program of study which establishes the specific requirements for his or her degree. The program of study must be approved by both the advisor and student and must be completed by the time the student reaches senior standing ( 135 hours) or at least two quarters prior to application for graduation. A student who does not comply with this requirement may delay his or her graduation.

## DIVISION MAJORS

Each division offers a non-structured division major in addition to its structured majors. The student selecting a division major develops an individualized program of study with an advisor which becomes the degree requirement after it has been approved by the School. A division major must satisy all the graduation requirements of the School and University in a planned program. The School assumes no responsibility to apply courses to a division major which are taken prior to formal approval of program of study. The division major is provided to meet special needs; consequently, most students will be enrolled in the structured majors and the School of Technology does not approve a division major unless special needs exist which it can meet. All students in Industrial Technology enroll in the division major and receive individualized programs of study. In order to obtain the Bachelor of Science degree in a division major, the student must normally complete a program including substantial coursework in mathematics, science and related technology. Others receive the Bachelor of Technology degree. Determination of the degree to be awarded is a part of the preparation of the program of study.

## ACADEMIC ADVISORS

A student who has been accepted to a degree program in the School of Technology must obtain and consult an advisor prior to the first class enrollment. The advisor assignment may be obtained by contacting the Office of the Dean or the Director of the Division in which an academic major is desired. Continued contact (at least once per quarter) with the advisor is urged in order to review progress and register. Such contact is required until an approved program of study is completed. Special advising problems of the student who is undecided about a technology major may be referred to the Assistant Dean.

## CREDIT FOR EXPERIENCE

The School will consider awarding credit for experience of three basic types:
A. Compressed courses or training programs such as college seminars, short courses, company seminars, company schools, union apprenticeship schools, and military technical schools.
B. Regular courses taken from technical institutes or other institutions where normal transfer credit is not applicable.
C. Work experience wherein the student gains applicable skills and knowledge.

Such credit may be awarded through examination or evaluation of work products. Evaluation of credit-for-life experience is, of necessity, a very rigorous process with awards given only for significant experiences that are fully documented and directly applicable to the student's program. Normally, evaluation is based on equivalency to courses required for graduation and credit is limited to a maximum of 25 quarter hours. A student must be fully accepted to a degree program and must have completed at least two quarters of upper-division work ( 25 hrs.) prior to evaluation of experience for credit. The student wishing consideration for such credit should discuss it with his or her advisor.

## ACADEMIC APPEAL

The School endeavors to provide an atmosphere in which the special needs of each stu-
dent are served. In the event that a student has difficulty in a class or curriculum matter, this should be immediately brought to the attention of the instructor or advisor involved. If resolution is not possible in this way, the student should call the matter to the attention of the director of the division responsible. If the problem still cannot be resolved, the student may appeal to the Dean of the School by stating the grievance in writing and requesting a review. The Dean may hear an appeal or refer the matter for consideration to an Appeals Committee appointed for that purpose.

## SPECIAL FEATURES

The School is actively engaged in a number of special programs as a service to the community and the University. Among these activities are the support of the Technical/Vocational Education and Home Economics programs in technology-related service coursework. The Division of Construction hosts the International Association for Housing Science, an organization with membership from more than twenty nations dedicated to improving housing technology and production, as well as studying the inter-disciplinary aspects of housing. The Division of Environmental and Urban Systems has developed and supports environmental research activities. The School provides numerous special courses and training institutes in cooperation with the Division of University Services and Continuing Education. Technology faculty are actively engaged with business, industry and government seeking the solution to technical and operational problems. They are participating in a variety of applied research projects in such areas as energy, low-cost housing, transportation, solid waste disposal and water resources.

## CONSTRUCTION DIVISION

The Construction Division of the School is dedicated to a multi-disciplinary approach to the construction industry. By selecting from the fields of engineering, architecture and management, its programs develop a system of skills applicable to the complex and interrelated problems of development, construction and structures. As one of the major factors in our economy, the construction industry also plays a direct role in our quality of life and occupies a position of major concern in the curriculum of the University.

The Construction Division has five specific majors and the divisional major: Civil Engineering Technology, Construction Engineering Technology, Construction Management, Architectural Technology and Interior Design.

## CIVIL ENGINEERING TECHNOLOGY

This program emphasizes a broad range of knowledge and skills necessary to participate in major projects such as construction, design and analysis of highways, waterways, buildings, transportation facilities, public works and development.
Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science: Civil Engineering Technology
LOWER DIVISION PREPARATION: academic credit or proven competency in the following areas: mathematics through calculus, physics, surveying, construction materials, engineering drawing, statics.

Remark: A student without this preparation may obtain it while completing the upper division program by taking additional electives.

## UPPER DIVISION PROGRAM:

| Major Requirements:* | Quarter Hours |  |
| :--- | :--- | :---: |
| ETC 3322C | (CSN 305) Advanced Surveying | 5 |
| BCN 3762 | (CSN 326) Codes and Specifications | 5 |
| ETG 3530 | (CSN 352) Strength of Materials | 3 |
| ETG 3520L | (CSN 352L) Materials Testing | 2 |
| ETC 3412 | (CSN 353) Determinate Structural Analysis | 3 |
| ETC 3220C | (CSN 354) Soil Mechanics and Foundations | 5 |
| ETC 3210L | (CSN 354L) Soil Mechanics Laboratory | 2 |

ETC 3420 (CSN 357) Indeterminate Structural Analysis ..... 5
ETC 4541 (CSN 411) Traffic and Transportation Engineering Technology ..... 5
ETC 4502 (CSN 413) Geometric Design of Highways ..... 5
BCN 4431 (CSN 451) Steel Design ..... 5
ETC 4450C (CSN 455) Reinforced Concrete Design ..... 5
ETC 4429 (CSN 465) Computer Applications in Structural Analysis and Design ..... 5
COP 3210 (MAS 311) Introduction to Computers ..... 5
EVS 3215C (EUS 350) Applied Hydraulics ..... 5
(EUS 300) Introduction to Environmental and Urban Systems ..... 5
ETI 4671 (ITE 485) Engineering Economy ..... 5
ETG 3510 (MET 351) Dynamics ..... 5
*or demonstrated competencyElectives: selected with an advisor to meet objectives.10
(Minimum) 90
Including both lower and upper division course work each student must complete a minimum of 34 quarter hours in communications, social sicence, and humanities, and a minimum of 34 quarter hours in basic science and mathematics (general requirements).

## CONSTRUCTION ENGINEERING TECHNOLOGY

This program offers a specialized treatment of the construction process. The emphasis is placed on technical courses in fundamentals of construction, management of personnel and equipment, inspections, mechanical and structural design, construction economy, construction materials, construction methods, system analysis, conceptual study and operations research skills.
Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science: Construction Engineering Technology
LOWER DIVISION PREPARATION: academic credit or proven competency in the following areas: mathematics through calculus, physics, surveying, construction materials, engineering drawing, statics.

Remark: A student without this preparation may obtain it while completing the upper division program by taking additional electives.

## UPPER DIVISION PROGRAM:

## Quarter Hours

Major Requirements: * ..... 71
ETC 3322C (CSN 305) Advanced Surveying ..... 5
BCN 3240 (CSN 306) Construction Methods and Equipment ..... 3
BCN 3611 (CSN 320) Construction Cost Estimating ..... 5
BCN 3720 (CSN 322) Construction Costs and Scheduling ..... 5
BCN 3762 (CSN 326) Codes and Specifications ..... 5
ARC 3586 (CSN 328) Building Systems ..... 5
BCN 3703 (CSN 330) Management of Construction Projects ..... 3
ETG 3530 (CSN 352) Strength of Materials ..... 3
ETG 3520L (CSN 352L) Materials Testing ..... 2
ETC 3412 (CSN 353) Determinate Structural Analysis ..... 3
ETC 3220C (CSN 354) Soil Mechanics and Foundations ..... 5
ETC 3210L (CSN 354L) Soil Mechanics Laboratory ..... 2
ARC 4330C (CSN 407) Site Development ..... 5
ARC 4590C (CSN 457) Structural Design ..... 5
ETI 4671 (ITE 485) Engineering Economy ..... 5
COP 3210 (MAS 311) Introduction to Computers ..... 5

## CONSTRUCTION MANAGEMENT

This program is designed to develop individuals for management, supervisory or technical positions in the construction industry and related business, or those who would engage in their own construction-related business activities. The emphasis is placed on technical management essentials such as cost estimating, project field management and operations, methods and equipment, codes and specifications, contract administration, job planning, scheduling, inspections, site development, construction materials, construction economics, cost control, labor relations and safety.
Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science: Construction Management
LOWER DIVISION PREPARATION: academic credit or proven competency in the following areas: algebra and trigonometry, surveying, construction materials, drawing or drafting.

Remark: A student without this preparation may obtain it while completing the upper division program by taking additional electives.

Quarter Hours
Major Requirements: * 79
BCN 3240 (CSN 306) Construction Methods and Equipment

3
BCN 3611 (CSN 320) Construction Cost Estimating 5
BCN 3720 (CSN 322) Construction Costs and Scheduling 5
BCN 3762 (CSN 326) Codes and Specifications 5
BCN 3703 (CSN 330) Management of Construction Projects

3
BCN 3640 (CSN 331) Economic Planning for Construction 5
BCN 3740 (CSN 332) Legal Aspects of Construction 3
BCN 3402C (CSN 350) Mechanics of Materials 5
ARC 4330C (CSN 407) Site Development 5
BCN 4741 (CSN 426) Industrial \& Labor Relation Laws 5
BCN 4260 (CSN 429) Quality Control in Construction 5
BCN 4452 (CSN 450) Structural Systems 5
ETI 3670 (ITE 300) Industrial Financial Decisions 5
ETI 4671 (ITE 485) Engineering Economy 5
BCN 3730 (ITE 351) Construction Safety 5
*or demonstrated competency
REE 3040 (RES 390) Introduction Real Estate 5
BUL 4111 (LAW 401) Business Law 1
Electives: selected with an advisor to meet degree requirements and program objectives (minimum required)
(Minimum) 90

## ARCHITECTURAL TECHNOLOGY

This program gives the student a multidisciplinary knowledge of the major areas related to the practice of Architecture. The emphasis is placed on the technical as well as the managerial aspects of the architectural project. These will include the areas of cost estimating and economic planning; the systematic approach to Building Design, Design Development, preparation of Working Drawings and specifications; the areas of field management and office admin-
istration. Strength of materials and theory and design of structures. Furthermore, the student is given the option of concentrating on one or more of the above areas by selecting related electives with consultation to his/her advisor.
Campus Location: Tamiami Campus only
Degree: Bachelor of Science: Architectural Technology
LOWER DIVISION PREPARATION: completion of an Associate degree program in architectural technology or pre-architecture or academic credit or proven competency in the following areas: algebra and trigonometry (or technical mathematics), construction materials, architectural drawing, technical writing, building codes, plus completion of general education requirements.
UPPER DIVISION PROGRAM:

|  |  | Quarter Hours |
| :---: | :---: | :---: |
| Major Requirements* |  | 76 |
| BCN 3611 | (CSN 320) Construction Cost Estimating | 5 |
| BCN 3720 | (CSN 322) Construction Costs \& Scheduling | 5 |
| BCN 3762 | (CSN 326) Codes \& Specs | 5 |
| ARC 3586 | (CSN 328) Building Systems | 5 |
| BCN 3703 | (CSN 330) Management of Construction Project | 3 |
| BCN 3740 | (CSN 332) Legal Aspects of Construction | 3 |
| BCN 3402C | (CSN 350) Mechanics of Materials | 5 |
| ARC 3450 | (CSN 375) Architecture Innov. for Construction | 5 |
| ARC 3484C | (CSN 376) Advanced Architectural Drawing and Design 1 | 5 |
| BCN 3761 | (CSN 377) Specification Writing | 5 |
| BCN 4741 | (CSN 426) Industrial \& Labor Relation Laws | 5 |
| BCN 4260 | (CSN 429) Quality Control in Construction | 5 |
| ARC 4590 C | (CSN 457) Structural Design | 5 |
| ARC 4485C | (CSN 480) Advanced Architectural Drawing and Design II | 5 |
| ARC 4270 C | (CSN 482) Professional Office Practice | 5 |
| BCN 3560 | (MET 360) Mechanical Systems in |  |
| *or demon | Construction strated competency | 5 |
| Electives: select and program | ed with an advisor to meet degree requirements objectives (minimum requirement) |  |

(Minimum) 90

## INTERIOR DESIGN

This is an inter-disciplinary program integrating areas pertinent to the field of interior environments. It includes considerations in business procedures, commercial, residential and institutional design associated with this profession; and development in the ability to integrate design including basic design elements, space relationships, material and interior requirements.
Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science: Interior Design
LOWER DIVISION PREPARATION: Completion of an Associate Degree in Interior Design or related area.
UPPER DIVISION PROGRAM:
Major Requirements: With the approval of the advisor, students must complete a minimum of 90 credits selected from the following list:

Quarter Hours
HHD 3151 (CSN 329) Housing: Shelter and the Consumer
5

| IND 3200 | (CSN 373) Interior Design | 3 |
| :--- | :--- | :--- |
| IND 3210 | (CSN 383) Residential Interiors | 5 |
| BCN 3257C | (CSN 380) Exterior Design | 5 |
| IND 4220 | (CSN 473) Commercial \& Office Interiors | 5 |
| IND 4221 | (CSN 474) Institution Interiors | 5 |
| IND 4224 | (CSN 475) Exhibit and Display Design | 5 |
| ART 3401C | (FIA 345) Print Making | 5 |
| ART 3111C | (FIA 361) Ceramics | 5 |
| ARH 4552 | (FIA 377) Fabrics and Fibers | 5 |
| (ARH 416) Art of China and Japan | 5 |  |
| ARH 4470 | (ARH 475) Contemporary Art | 5 |
| TPA 3220 | (THE 336) Stage Lighting | 5 |
| TPA 3060 | (THE 345) Theatre Design | 5 |
| COA 3410 | (HMF 306) Consumer Resources Management | 5 |
| MAR 4503 | (MAR 410) Intro. to Consumer Behavior | 5 |
| MAR 3023 | (BUA 303) Principles of Marketing | 5 |
| HFT 3343 | (HRM 341) Hotel and Restaurant |  |
|  | Planning/Design | 5 |

3
IND 3210 (CSN 383) Residential Interiors 5
BCN 3257C (CSN 380) Exterior Design 5
IND 4220 (CSN 473) Commercial \& Office Interiors 5
IND 4221 (CSN 474) Institution Interiors 5
IND 4224 (CSN 475) Exhibit and Display Design 5
ART 3401C (FIA 345) Print Making 5
ART 3111C (FIA 361) Ceramics 5
ARH 4552 (ARH 416) Art of China and Japan 5
ARH 4470 (ARH 475) Contemporary Art 5
TPA 3220 (THE 336) Stage Lighting 5
TPA 3060 (THE 345) Theatre Design 5
COA 3410 (HMF 306) Consumer Resources Management 5
MAR 4503 (MAR 410) Intro. to Consumer Behavior 5
MAR 3023 (BUA 303) Principles of Marketing 5
HFT $3343 \quad \begin{gathered}\text { (HRM 341) Hotel and Restaurant } \\ \text { Planning/Design }\end{gathered}$
(TEY 355) Technical Communication 3
(Minimum) 90
Technical Electives: Up to 20 credits to be selected from the Design, Construction or related area.
Non-Technical Electives: As required to meet program objectives and general education requirements.

## DIVISION OF ENVIRONMENTAL AND URBAN SYSTEMS

This Division is dedicated to improving the quality of life through technology. There is a great need for individuals qualified to plan, design, maintain, manage, and operate in technology without causing injury to man or damaging his environment.

## BACHELOR'S DEGREE PROGRAM

The division offers the Bachelor of Science Degree in Environmental and Urban Systems with the opportunity to emphasize either environmental or urban planning systems. The program of study provides the student with a comprehensive overview of environmental and urban systems and also prepares the individual for employment in any one of several careers.

In addition to the required basic core, the program provides for selection of specialized courses. Through choice of electives, a student may incorporate work from business and public administration, economics, sociology, natural, physical or social sciences. Courses offered by the Engineering Technology, Industrial Technology and Construction Divisions in the School of Technology provide a means of broadening the student's technical background.

## Campus Location: Tamiami Campus only

DEGREE: Bachelor of Science in Environmental and Urban Systems
LOWER DIVISION PREPARATION: Academic credit or proven competency in the following areas: mathematics through calculus, physics, chemistry, biology.

Remark: A student without this preparation may obtain it while completing the upperdivision program by taking additional electives.

Quarter Hours
Major Requirements: 45
Core Courses:
EVS 3360 (EUS 310) Air Resources 5
EVS 3601C (EUS 320) Environmental Health 5
EVS 3428 (EUS 327) Environmental Management 5
ETC 3570 (EUS 330) Introduction to Transportation 5
URP 3000 (EUS 340) Urban Planning Concepts 5
URP 4030 (EUS 348) Analysis of Technological Systems ..... 5
EVS 3215C (EUS 350) Applied Hydraulics ..... 5
EVS 3264C (EUS 352) Water Resources ..... 5
EVS 3219C (EUS 356) Aquatic Systems ..... 5
Specialty: Environmental Systems
EVS 4233C (EUS 450) Unit Operations I ..... 545
EVS 4234C (EUS 451) Unit Operations II ..... 5
EVS 3463C (EUS 455) Water Supply Systems ..... 5
COP 3210 (MAS 311) Introduction to Computers ..... 5
ETI 4671 (ITE 485) Engineering Economy ..... 5
Twenty (20) hours of electives selected with advisor Specialty: Urban Planning Systems ..... 45
ETC 4560 (EUS 430) Transportation Planning. ..... 5
URP 4021 (EUS 445) Urban Land Use Planning ..... 5
URP 4011 (EUS 449) Planning Implementation ..... 5
COP 3210 (MAS 311) Introduction to Computers ..... 5
ECP 3613 (ECO 320) Introduction to Urban Economics ..... 5
Twenty (20) hours of electives selected with advisor

## MASTER OF SCIENCE DEGREE PROGRAM

In September, 1976, the Florida Board of Regents approved implementation of a Master of Science Degree program specializing in Aquatic Resources to begin in January, 1977. Implementation of the broader graduate program in Environmental and Urban Systems is pending final authorization at the writing of this catalog. Prospective graduate students should contact the Division Director for further information.

This graduate program is a multidisciplinary one which utilizes the resources of both the School of Technology and the College of Arts and Sciences to provide students with advanced training in the analysis and solution of environmental and urban problems. A particular emphasis is placed on the treatment of the community as a complex series of interacting systems which influence health, safety and quality of life. Service to the community through relevant research and a particular interest in the educational needs of working professionals are characteristics of the program.

## Admission Requirements

To be eligible for admission to the Master of Science program in Environmental and Urban Systems, the applicant must:

1. Satisfactorily meet the general University requirements for admission to graduate programs.
2. Hold a baccalaureate degree from a regionally accredited college or university.
3. Achieve a " $B$ " average (or the equivalent) while registered as an upper-division student working for a baccalaureate degree or pass the Graduate Record Examination (GRE) Aptitude Test with a minimum score of 1000.
The applicant should have completed an undergraduate major in the areas of environmental or urban systems, engineering, the natural sciences or a related field. Others may be considered for admission on an individual basis if they have completed necessary prerequisites and have work experience or other qualifications in the field. The student should have completed, as an undergraduate, courses in chemistry or physics, biological science, and mathematics through calculus. Additional undergraduate courses may be required for some areas of specialization.

## Degree Requirements

To be eligible for a Master's Degree in Environmental and Urban Systems, a student must:

1. Satisfy all University requirements for a Master's Degree.
2. Meet any undergraduate deficiencies, the requirements of the core, and specific program of study.
3. Complete a minimum of 53 quarter hours of graduate level courses. (Not more than 10 graduate credit quarter hours can be transferred from other accredited institutions.)
4. Achieve a " $B$ " average or better in all graduate work.
5. Complete an acceptable graduate thesis.

The M.S. in the Environmental and Urban Systems consists of 53 quarter hours of graduate credit. All students will participate in the following core courses:

| URP 6821 | (EUS 602) Urban Systems Analysis | 5 |
| :--- | :--- | ---: |
| EVS 6422 | (EUS 604) Environmental Assessment | 5 |
| EVS 4939 | (EUS 690) Seminar (three quarters) | 3 |
| EVS 6970 | (EUS 699) Thesis | 10 |

In addition to these common courses ( 23 hours), a student must select, with an advisor, an approved program of at least 30 quarter hours of graduate work in an area of specialization. Initially, specialization will be limited to an aspect of Aquatic Resources such as, for example, Water Quality, Marine Systems, Marine Biology, Fresh-Water Systems, or Aquatic Cytotoxicology. Additional areas of specialization will become available as the program is fully implemented.

## ENGINEERING TECHNOLOGY DIVISION

The student who wishes to enter a position which emphasizes the practical application of engineering concepts in areas such as manufacturing, production, design, installation, operation, administration, service and sales will be served by the programs of the Engineering Technology Division. Its programs are designed to give each student technical and organizational know-how which satisfies the needs of industry, business and government in many rewarding technical careers. The graduate of an Engineering Technology bachelor's degree program is a technical problem solver with the skills and training necessary for independent action as a part of the engineering team.

The objectives of the programs include: proficiency in the use of the scientific method; the capability to analyze problems through calculus; the application of processes, equipment, procedures and methods to industrial problems; the knowledge of a field of specialization including the underlying sciences; individual judgment, initiative and resourcefulness; capability of establishing an effective rapport with workmen, scientist, managers and customers; and effective communication skills.

Two majors are offered in the Division of Engineering Technology: Electrical Engineering Technology and Mechanical Engineering Technology.

## ELECTRICAL ENGINEERING TECHNOLOGY

This program offers specialization in the application of electronic concepts including circuit analysis and design, communications, power, process control, digital systems and related topics.
Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science: Electrical Engineering Technology
LOWER DIVISION PREPARATION: Completion of a community college associate program in electronics technology, electrical technology, pre-engineering or the equivalent at a four-year institution. An entering student with an Associate of Science degree in Technology should have completed algebra and trigonometry, physics, DC and AC circuits, transistor theory and circuits, semi-conductor devices and digital circuits prior to transfer. Pre-Engineering (Associate of Arts) or other transfer students should have completed mathematics through calculus, physics (with electricity) and other sciences at the lower division. The student whose background does not include all of these skills (ineither Technology or pre-Engineering) may be admitted with deficiencies which must be made up while enrolled at Florida International.
Core Courses (AA in Pre-Engineering) ..... 22
ETE 3034C (EET 310) Introduction to Circuit Anal. ..... 5
ETE 3101 (EET 312) Introduction to Electronics ..... 5
ETE 3030L (EET 313) Electronics Lab ..... 2
ETE 3030 (EET 328) Solid State Devices ..... 5
Advised Elective ..... 5
Core Courses (AS in Electronic Technology)
MAC 3411 (MAS 301) Calculus I ..... 520
MAC 3412 (MAS 302) Calculus II ..... 5
PHY 3040C (PHY 301) Physics ..... 5
PHY 3041C (PHY 302) Physics ..... 5
Common Core Courses: ..... 70
ETE 3620C (COT 300) Logic Design ..... 5
COP 3210 (MAS 311) Introduction to Computers I ..... 5
ETE 3121C (EET 316) Advanced Circuit Analysis ..... 5
ETE 3565C (EET 317) Introduction to Electrical Power ..... 5
ETE 3323C (EET 320) Practical Linear Systems Analysis ..... 5
ETE 3421C (EET 340) Modern Communication Technology ..... 5
ETE 4123C (EET 428) Electronic Circuit Analysis ..... 5
ETE 4161C (EET 430) Integrated Circuits Analysis \& Application ..... 5
MAN 3504 (ITE 301) Industrial Operations ..... 5
ETI 4671 (ITE 485) Engineering Economy ..... 5
Advised Elective ..... 5
*Technical Specialization ..... 15
Minimum Upper Division Required Hours ..... 90
*Technical Specialization: One of the following areas:
DIGITAL SYSTEMS
ETE 3661C (COT 304) Advanced Computer Systems ..... 5
ETE 4621C (COT 404) Advanced Logic Design ..... 5
ETE 4669 (COT 406) Microprocessors ..... 5
ELECTRICAL POWER
ETE 3526C (EET 318) Electric Machinery ..... 5
ETE 4565C (EET 415) Electrical Power Systems I ..... 5
ETE 4567C (EET 425) Electrical Power Systems II ..... 5
ELECTRONIC COMMUNICATIONS
ETE 3422 (EET 342) Transmission Systems for
Communication ..... 5
ETE 4426C (EET 440) Advanced Communication Systems ..... 5
ETE 4170C (EET 466) Passive and Active Filters ..... 5
PROCESS CONTROL
ETE 4324C (EET 420) Process Control Instrumentation ..... 5
ETE 4325C (EET 422) Advanced Control Systems ..... 5
ETE 4665C (EET 468) Digital Process Control Systems ..... 5
MECHANICAL
EVS 3215C (EUS 350) Applied Hydraulics ..... 5
ETM 4205C (MET 459) Applied Thermodynamics ..... 5
BCN 3402C (CSN 350) Mechanics of Materials ..... 5

Including both lower and upper division course work each student must complete a minimum of 34 quarter hours in communications, social science, and humanities, and a minimum of 34 quarter hours in basic science and mathematics (general education requirements).

## MECHANICAL ENGINEERING TECHNOLOGY

This program offers specialization in the application of energy, materials, mechanics, and design to industrial problems.

Campus Location: Tamiami Campus only.
DEGREE: Bachelor of Science: Mechanical Engineering Technology
LOWER DIVISION PREPARATION: academic credit or proven competency in the following areas: mathematics through calculus, physics, engineering drawing, statics, manufacturing processes.

Remarks: a student without this preparation may obtain it while completing the upper division program by selection of additional electives.
UPPER DIVISION PROGRAM:


# PROFESSIONAL CERTIFICATE PROGRAM 

## HEATING, VENTILATING, AND AIR CONDITIONING DESIGN

The purpose of this professional certificate program is to produce a learning experience that will enhance the design capabilities of professionals in the field. Emphasis will include the engineering science background as well as the practical applications of systems design.

The certificate will be awarded to a student who successfully demonstrates competency in:

$$
\begin{aligned}
& \text { ETM 4205C (MET 459) Applied Thermodynamics } \\
& \text { BCN } 3560 \text { (MET 360) Mechanical Systems in }
\end{aligned}
$$

ETM 4640C (MET 463) Principles of Air Conditioning \& Refrigeration ..... 5
ETM 4225C (MET 460) Energy Systems ..... 5
ETM 4641 (MET 464) Air Conditioning Design I ..... 3
ETM 4406L (MET 470) Mechanical Lab I ..... 2
ETM 4642 (MET 465) Air Conditioning Design II ..... 3
ETM 4643L (MET 471) Mechanical Lab II ..... 2
ETI 4671 (ITE 485) Engineering Economy ..... 5

## INDUSTRIAL TECHNOLOGY DIVISION

The individual who wishes to acquire a technical supervision and management background which emphasizes industrial operations will be served by Industrial Technology. Each Industrial Technology major is enrolled as a divisional major and receives an individualized program of study. By careful planning, and the application of courses available in the School and elsewhere in the University, it is possible to provide for specialization which responds to the needs of a wide variety of industrial and commercial enterprizes.

Industrial Technology is defined as a profession in which an understanding of the technical terminology of industry provides a capability of performing technical liaison between management, engineer, scientist, technician, craftsman and customer. The work of the industrial technologist has some characteristics of Engineering Technology and many of the qualities associated with management.

The objectives of the division are: to develop an understanding of the technical aspects of industry; to become familiar with terminology used in industry and business, to develop supervisory skills involving specialized knowledge, analytical ability and management tools; to develop leadership skills; to effect indivídual judgment and initiative; to establish effective communications with scientists, managers, engineers, customers and workers.

## Campus Location: Tamiami Campus only

DEGREE: Bachelor of Science or Bachelor of Technology: Industrial Technology.
LOWER DIVISION PREPARATION: Students must have completed a community college Associate program or attained junior standing at a four-year college. Lower-division courses should be selected in the field for which upper-division specialization is desired. In general, the individual's upper-division program is structured to complement lower-division preparation rather than supplement it. For example, the preparation listed below, or equivalent, is expected for typical upper-division Industrial Technology programs of study:

| Typical Upper-Level Specialization | Typical Lower-Division Preparation <br> Apparel Management |
| :--- | :--- |
| Fashion Merchandising Economics, Fashion Design, |  |
| Communications Technology | Fashion Merchandising |
|  | Communications Technology |
|  | Mass Communications |
| Industrial Operations | Engineering Technology |
|  | Industrial Technology |
| Aviation | Aviation (Pilot) |
|  | Air Traffic Control |
| Industrial Systems | Pre-Engineering |
| Industrial Safety | Engineering Technology |
|  | Pre-Engineering |
|  | Industrial Arts |
| A major characteristic of the Industrial Technology program is individual evaluation and |  |
| curriculum planning. Consequently, prospective students are urged to consult an advisor to |  |
| discuss their objectives and academic preparation. |  |

Major Requirements and Electives:
The student must complete a planned individual program of study, including a coherent specialization, which is approved by an advisor and the School of Technology. The program must satisfy the objectives of the Industrial Technology Division, career objectives of the student, and the general requirements for a Bachelor's Degree from the School of Technology.

## HOME ECONOMICS

The Department offers a major in home economics for the student who desires to work in home economics and related fields, but who does not plan to teach in the secondary school. The Program offers four areas of specialization: General Home Economics and Consumer Management; Food and Nutrition; Family and Child Development, and Clothing and Textiles. The courses in family and child development, food and nutrition, and home management and family economics are offered in the School of Health and Social Services for home economics majors, home economics education majors, and for students in other programs to take as electives.
Campus Location: Tamiami Campus only
DEGREE: Bachelor of Science in Home Economics
LOWER DIVISION PREPARATION:
Required: general education requirements for Associate of Arts degree
Recommended: courses in psychology, sociology, anthropology, chemistry, economics, art, and home economics.
UPPER DIVISION PROGRAM:

## GENERAL HOME ECONOMICS AND CONSUMER MANGEMENT

This specialization includes a core of home economics courses for personal and professional use and allows a wide choice of advised electives. It is intended to prepare the student to work in industry and business in such jobs as a professional home service representatives consumer consultant, or in product demonstration work.

Quarter Hours
Required Courses: 75
Clothing and Textile Courses
15
Family and Child Development Courses 15
Food and Nutrition Courses 15
Housing Courses 15
Management and Family Economics Courses 15
Advised Electives:

## FOOD AND NUTRITION

This program provides professional preparation for the person desiring career opportunities related to food and nutrition but who does not wish to become a dietitian. Possible careers include food services manager, and work in consumer and food and nutrition services.

Quarter Hours
Required Courses:
Core Home Economics Courses 20
Food and Nutrition Courses 40
Related Courses 20
Advised Electives:

## FAMILY AND CHILD DEVELOPMENT

The student in this program is prepared to enter professions which require a breadth of knowledge related to family and child development such as day care, parent education, nursery teacher, employee in federal and state agencies serving the family.

## Quarter Hours

Required Courses: ..... 80
Core Home Economics Courses ..... 20
Family and Child Development Courses ..... 40
Related Courses ..... 20
Advised Electives: ..... 10

## CLOTHING AND TEXTILES

Students interested in working as representatives of appliance, fabric, or pattern companies, or in specialized areas such as theatre costuming or testing laboratories, etc. would choose this area of specialization.

Quarter Hours
Required Courses: 75
Home Economics
20
Clothing and Textiles 40
Career Traineeship 15
Advised Electives:

## PROFESSIONAL CERTIFICATE PROGRAM

## INDUSTRIAL SAFETY

The objectives of the Professional Certificate Program in Industrial Safety is to present an integrated learning experience that will provide the student with a minimum level of expertise in the specialized area of Occupational Safety. Particular emphasis will be placed on application, interpretation and administration of the Federal Occupational Safety and Health Act and other regulations in an industrial setting. The program is intended to provide skills which will be directly applied in industry.

The Certificate will be awarded to any student who successfully completes the following 30 -credit program, or equivalent:

| ETI 3700 | (ITE 350) Industrial Safety | 5 |
| :--- | :--- | :--- |
| BCN 3730 | (ITE 351) Construction Safety | 5 |
| ETI 4708 | (ITE 450) Health Hazards in Industry | 5 |
| HES 4432 | (ITE 460) Safety Management | 5 |
| ETI 4632 | (ITE 471) Personnel Relations | 5 |
| ETI 4681 | (ITE 474) Industrial Supervision | 5 |

## INDUSTRIAL \& LABOR RELATIONS

The objectives of the Professional Certificate Program in Industrial \& Labor Relations is to provide students desiring to pursue professional work in the fields of industrial and labor relations and labor studies with a flexible course of study. The program has been designed to provide options to both baccalaureate degree seeking students and pre and post baccalaureate students in the fields of labor studies, industrial personnel operations, collective bargaining and labor-management relations.

The Certificate will be awarded to any student who successfully completes the following program of 20 required and 10 elective credits, or their equivalent:

|  |  | (ITE 302) Introduction to Labor Studies |
| :--- | :--- | :--- |
|  | (ITE 426) Industrial and Labor Relations Law | 5 |
| ETI 4632 | (ITE 471) Personnel Relations | 5 |
| ETI 4905 | (ITE 495) Independent Study (Field Project) | 5 |

Elective: (Any 2)
(ITE 429) Administration of Labor Organizations
(ITE 428) Labor and Industrial Dispute Resolution
ETI 4681 (ITE 474) Industrial Supervision
ETI 3700 (ITE 350) Safety in Industry

## COURSE OFFERINGS

## CLOTHING AND TEXTILE

CTE 3602 (CLT 325) FASHION AND CULTURE (5) Study of historical, socioeconomic and ethnic influences of fashion design. Includes analysis of current fashion influences.
CTE 3310 (CLT 335) BASIC CLOTHING CONSTRUCTION (5) Basic course developing skills in wardrobe planning, clothing pattern and fabric selection, machine usage, and construction techniques including their application in construction of apparel for personal use.
CTE 3401 (CLT 337) BASIC TEXTILES (5) Overview of the physical and chemical properties of textiles and their components as they relate to care, performance and consumer satisfaction.
CTE 4741 (CLT 425) PATTERN ALTERATIONS (3) Pattern alteration stresses importance of a pattern selector for individual figure types and pattern alteration for special fitting problems. Students will construct a dress, make sample pattern alterations for special fitting problems, and alter a ready-made garment. Prerequisite: CLT 335 or equivalent.
CTE 4340 (CLT 435) ADVANCED CLOTHING CONSTRUCTION (5) Additional experience in handling special fabrics, pattern and garment fitting, and application of principles and techniques of clothing construction. Prerequisite: CLT 335 or equivalent.
CTE 4761 (CLT 437) FASHION PRODUCTION AND DISTRIBUTION (5) Study of apparel industries with supervised observation of various aspects of production and distribution.
CTE 4352 (CLT 438) TAILORING (5) Application of custom tailoring techniques through the construction of a suit or coat with emphasis on fabric selection and pattern alteration. Prerequisite: CLT 435 or equivalent.
CTE 4880 (CLT 440) FASHION MERCHANDISING FIELD EXPERIENCE (5-10) Supervised "on-the-job" training and periodic seminars. Consent of faculty instructor required.
CTE 4421 (CLT 444) CREATIVE TEXTILES (5) Laboratory portion of Basic Textiles where students will explore techniques for designing and constructing textile fabrics. Experiences will include macrame, batik, tie-dying, weaving, knitting and crocheting. Course is designed for Home Economics and Art Education majors.
CTE 4905 (CLT 495) INDEPENDENT STUDY (1-5) Specialized intensive study in an area of special interest to the student. Consent of faculty instructor required.
CTE 4930 (CLT 497) SPECIAL TOPICS (1-5) for a group of students who wish an intensive study of a topic not offered in the University. Consent of faculty supervisor and division director is required.
CTE 5746 (CLT 534) PATTERN DESIGN (5) Principles of pattern fitting will be explored through the construction of a basic sloper. Samples of various pattern design techniques will be constructed. Students will design and construct at least one garment. Prerequisite: CLT 425 or CLT 435 or equivalent.
CTE 5345 (CLT 535) NEW TRENDS IN CLOTHING CONSTRUCTION (5) A study of the latest techniques for sewing today's fabrics including some factory methods. Prerequisite: CLT 435 or equivalent.
CTE 5422 (CLT 536) TODAY'S TEXTILES (5) A study of today's textiles fabrics, and the chemical and physical properties peculiar to all fibers.
CTE 5930 (CLT 537) TEXTILES AND CLOTHING SEMINAR (1-5) By permission of instructor only.
CTE 5355 (CLT 538) TAILORING MENSWEAR (5) Application of tailoring techniques commercially used in the production of menswear through the construction of a knit jacket and trousers. Prerequisite: CLT 435 or equivalent.

## COMMUNICATIONS TECHNOLOGY

JOU 3300 (COM 320) FEATURE WRITING (5) The fact story: researched and written in depth. Planning, constructing, writing and marketing non-fiction articles for general and special interest magazines and newspaper feature pages. Includes the query letter; preparing photos and illustrations to accompany the article.
JOU 3109 (COM 321) INTERVIEWING TECHNIQUES (5) The interview as a source of information and as a story. Preparing and conducting interviews, including planning of questions, note-taking and transcription, writing and editing. The Symposium interview; the press conference; the personality sketch.
JOU 3200 (COM 350) EDITING AND MAKE-UP (5) Practical skills involved in putting out a newspaper; editing copy for clarity, facts and brevity; headline writing; page make-up; copy reading and proofreading marks. Attention will be given to editing for T.V. and radio news and features.

JOU 3202 (COM 355) ADVANCED EDITING AND GRAPHICS USE (5) Study of makeup, layout and design techniques as they pertain to production of magazines, brochures, newsletters and newspapers. Provides an opportunity for individualized projects related to print communications. Prerequisites: COM 350 and COM 380 or equivalents.
JOU 3100 (COM 380) NEWS REPORTING (5) To teach the skills necessary to recognize and produce a good news or features story; experience with actual interviews, discussions with successful writers and journalists, and critique of student work. News judgment and identification of proper sources will be introduced.
RTV 3100 (COM 385) WRITING FOR ELECTRONIC MEDIA (5) Practical assignments in the writing of news for radio and television. Will include gathering, processing and final preparation of scripts. Emphasis will be on skills development. A brief study of libel, invasion of privacy, fairness doctrine and equal time will be included. Prerequisites: COM 380, COM 321 or equivalents.
MMC 4602 (COM 400) ROLE OF MASS MEDIA IN SOCIETY (5) To investigate the role played in the U.S. by the mass communications media as a cultural, social, informational, economic, political and educational force. The interrelationship of all media and their potential impact on the collective population will be studied.
PUR 4000 (COM 425) - see BEP 425
PUR 4800 (COM 426) - see BEP 426
PUR 4934 (COM 427) - see BEP 427
MMC 4200 (COM 410) MASS COMMUNICATIONS LAW (5) Study of laws that regulate U.S. mass media, their interpretations through recent court decisions and how communicators work within the statutes of their nation and state.
VIC 4300 (COM 470) COMMUNICATIONS TECHNOLOGY (5) This course will provide the study of modern communication equipment usage and impact, with special emphasis upon electronic and visual transmission, reception and projection capabilities and methods. Future development and instrumentation in technical communication systems will also be stressed.
JOU 4104 (COM 480) REPORTING OF PUBLIC AFFAIRS (5) To teach the student how to cover government activities for newspapers, television, and radio. Aspects of the budget office, county manager's office, and the commissioner's office, courts and planning and zoning will be outlined. Guest speakers from government offices will appear.
MMC 4945 (COM 499) COMMUNICATIONS INTERNSHIP (1-10) On the job learning activity at selected and approved commercial media. Will include newspaper, magazine, radio, television and agency placement. Prerequisite: Consent of advisor.

COMPUTER ENGINEERING TECHNOLOGY
ETE 3620 (COT 300) LOGIC DESIGN (5) Karnaugh maps and Quine McCluskey reduction techniques, study of analytical and empirical tools necessary to design with digital IC's; combinational logic, and sequential circuits are considered (includes lab). Prerequisite: Boolean Algebra.
ETE 3650 C (COT 302) COMPUTER HARDWARE FUNDAMENTALS (5) Analysis of computer elements and systems composed of flip-flops registers, counters, adders, etc.; study of a basic arithmetic unit, core memory system, control unit, and organization of these units into a system (includes lab). Prerequisite: Boolean Algebra.
ETE 3661C (COT 304) ADVANCED COMPUTER SYSTEMS (5) Study of hardware computer systems and components in a laboratory environment, arithmetic and memory system, complete minicomputer, digital communications system, digital modem input-output interface (includes lab). Prerequisite: COT 300.
ETE 4621C (COT 404) ADVANCED LOGIC DESIGN (5) Analysis, design and optimization of combinational systems, and interactive networks; study of digital systems such as multiplexers, D/A and A/D converters, digital multimeters, modems, arithmetic circuits, etc. Prerequisite: COT 300.
ETE 4669 (COT 406) MICRO PROCESSORS (5) Lecture/lab-including hardware, organization, interfacing, system components, application, design and selection. System development and usage through software. Prerequisites: MAS 311 and COT 304

## CONSTRUCTION

ETC 3321L (CSN 300) SURVEYING (5) Lecture/lab-Computations and field procedures associated with measuring of distances and angles, using tape, level and transit. Laboratory included with field measurements. Prerequisite: Trigonometry. 8CN 3210C (CSN 301) CONSTRUCTION MATERIALS (5) Lecture/Lab-A study of the origin, production and uses of construction materials such as concrete, steel, aluminum, wood, plastics, brick and stone. Includes testing lab, which consists of testing and evaluating properties of construction materials. Prerequisite: Physics.
ARC 3466 (CSN 304) MATERIALS AND METHODS OF CONSTRUCTION (5) A study of the types of construction and materials used in buildings. How materials are properly installed and inspected, including the use of special equipment in accordance to specifications, codes, standards, and agencies' recommendations.
ETC 3322C (CSN 305) ADVANCED SURVEYING (5) Lecture/lab-Computations and field procedures for earthworks and horizontal and vertical curves. Applications in establishing horizontal and vertical control in boundary determination, mapping, photogrammetry. Laboratory is included which consists of field measurements, layouts and computations. Prerequisite: CSN 300 or equivalent.
8CN 3240 (CSN 306) CONSTRUCTION METHODS AND EQUIPMENT (3) Methods, procedures, and equipment used in residential, commercial and heavy construction. Equipping the construction plant. Production value analysis. Work effectiveness studies. Prerequisite: Algebra.
ETC 3323C (CSN 307) LAND SURVEYING (5) The theory and practice of land surveying including computations, procedures, platting, records, land descriptions, legal aspects, controls requirements, urban surveys, coastal boundary surveys, astronomical observations, U.S. Government and State requirements. Cadastral surveying and professional registration. Prerequisite: CSN 300.
8CN 3611 (CSN 320) CONSTRUCTION COST ESTIMATING (5) Principles and theories of estimating, classification of work, and quantity survey techniques providing knowledge and skill as applied to various types of construction projects. Prerequisites: CSN 301 or CSN 304, or equivalent.

BCN 3720 (CSN 322) CONSTRUCTION COSTS AND SCHEDULING (5) 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: CSN 320 or equivalent.
BCN 3762 (CSN 326) COOES AND SPECIFICATIONS (5) A study of codes required by local, county, and state levels. The writing and reading of specifications. Bidding procedures. The relationships between the contractor, engineers-architects, owners, subcontractors, and material suppliers. Prerequisite: CSN 301 or CSN 304 or equivalent.
ARC 3586 (CSN 328) BUILDING SYSTEMS (5) Introduction to the problems related to the production of mass housing and applications of "industrialization" to the process of building. Systematic analysis and evaluation techniques of modular construction. Prerequisite: CSN 301 or CSN 304.
HHD 3151 (CSN 329) HOUSING: SHELTER AND THE CONSUMER (5) History and development of shelter and its effect on the family, community, towns, cities, etc. House planning and furnishings from the economic, social, scientific and aesthetic point of view.
BCN 3703 (CSN 330) MANAGEMENT OF CONSTRUCTION PROJECTS (3) Organization and management theory for construction. Elements of leadership and human supervision. Contractor organization, office operations, project management, labor relations, and safety requirements. Prerequisites: CSN 322 and CSN 326 or equivalent.
BCN 3640 (CSN 331) ECONOMIC PLANNING FOR CONSTRUCTION (5) Nature of construction costs, funding sources and arrangements, capital requirements, bonding, insurance, risk and contingency evaluation, general office operations, and bidding procedures. Prerequisites: CSN 330 and ITE 300 or equivalent.
BCN 3740 (CSN 332) 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, liquidated damages, and technical requirements. Prerequisite: CSN 326 or equivalent.
IND 3020 (CSN 340) SURVEY OF ARCHITECTURAL INTERIOR DESIGN (3) Application of the elements, principles and introduction to the basic facets of architectural interiors and its relationship to interior environment in general. Prerequisite: non majors only.
ARC 3127C (CSN 345) GRAPHIC COMMUNICATION (5) Principles of bi-dimensional design, drafting techniques. Perspective and isometric drawing and introduction to architectural drawings. Prerequisites: Consent of instructor.
BCN 3402C (CSN 350) MECHANICS OF MATERIALS (5) Applications of the principles of mechanics to engineering problems of equilibrium, strength, and stiffness. Topics include equilibrium of forces, stress, strain, torsion, beams, and columns. Prerequisite: Trigonometry or Technical Math.
ETG 3502 (CSN 351) STATICS (3) Study of forces acting on bodies, including coplanar and non-coplanar forces, concurrent and non-current forces, friction forces, and hydrostatic forces. Prerequisite: Physics, Calculus.
ETG 3530 (CSN 352) STRENGTH OF MATERIALS (3) Axial, torsional, shear, bending, and combined stress and strain analysis; mechanical properties and applications for static, dynamic, fatigue, and creep conditions. Prerequisite: CSN 351 or equivalent.
ETG 3520 (CSN 352L) MATERIALS TESTING LAB (2) A laboratory study of principle materials with particular attention to their mechanical properties and significance through evaluation for their engineering uses. Prerequisite or corequisite CSN 350 or CSN 352 or equivalent.
ETC 3412 (CSN 353) DETERMINATE STRUCTURAL ANALYSIS (3) Analysis of statically determinate structural systems by analytical methods. Reactions; shear, axial, and moment diagrams, truss analysis, influence lines; moving loads. Prerequisite: CSN 352 or equivalent.
ETC 3220C (CSN 354) SOIL MECHANICS AND FOUNDATIONS (5) Identification and properties of soils. Behavior of soils relating to design and construction of foundations for structures and pavements. Prerequisite: CSN 350 or CSN 352.
ETC 3210 (CSN 354L) SOIL MECHANICS LABORATORY (2) (S) Laboratory experiments in identification, properties and behavior of soils. Prerequisite or corequisite: CSN 354.
ETC 3420 (CSN 357) INDETERMINATE STRUCTURAL ANALYSIS (5) Analysis of indeterminate structural systems. Development and use of theorems of moment area, conjugate beam, elastic weights, virtual work, slope deflection and moment distribution methods. Moving loads and influence lines. Introduction to stiffness method and flexibility method. Application of matrix methods. Prerequisite: CSN 353.
ARC 3210 (CSN 370) ARCHITECTURAL CONCEPTS OF CONSTRUCTION (5) An examination of architectural design ideas and construction involving structural systems, materials, design standards and codes in a manner they can be utilized effectively. Original ideas encouraged.
BCN 3706 (CSN 372) INTERDISCIPLINARY ASPECTS OF HOUSINGS (3) Recognition and definition of all factors which affect the planning, financing and construction of housing projects. The operations and responsibilities of a multidisciplinary team dealing with the decision process. Prerequisite: Consent of instructor.
IND 3200 (CSN 373) INTERIOR DESIGN (3) Integrated study of materials used in interior design. Emphasis on blueprint reading, technical terms, color theory, business procedures, estimates and quotations.
ARC 3450 (CSN 375) ARCHITECTURAL INNOVATIONS FOR CONSTRUCTION (5) Specialized study in an area of interest to the student where architectural design is used with new methods of construction due to advancing technological developments. Drawings and field surveys. Prerequisite: Consent of instructor.
ARC 3484C (CSN 376) ADVANCED ARCHITECTURAL DRAWING AND DESIGN I (5) Methodology of planning and design of Architectural projects with special emphasis on Working Drawings and Detail Drawings. Prerequisite: CSN 345 or equivalent. BCN 3761 (CSN 377) SPECIFICATION WRITING (5) Study of information acquisition on legal and technical aspects of construction, preparation of outline specifications, building description and purchasing specifications. Problems of format, reviewing, and updating. Prerequisite: CSN 326.
BCN 3257C (CSN 380) EXTERIOR DESIGN (3) Exploration and analysis of the relationship of exterior and interior environment. Emphasis on three dimensional design projects. Using basic model making and presentations. Prerequisite: CSN 373 or its equivalent.

IND 3210 (CSN 383) RESIDENTIAL INTERIORS (5) Consideration and application of design criteria including floor, wall and ceiling materials and treatments, furniture selection and arrangement, illumination, ventilation and selected architectural details for residential spaces. Prerequisites: CSN 373 and CSN 430 or its equivalent.
ARC 3786 (CSN 385) SURVEY OF ARCHITECTURAL HISTORY (5) Comprehensive study of architectural forms, styles and construction techniques throughout history. Prerequisite: CSN 301 or CSN 304.
ETC 4530 (CSN 400) ROAD CONSTRUCTION (5) A study of highway planning, pre-construction investigations such as surveys, soil test data and drainage, types of construction procedures, materials and equipment. Familiarization with standard methods required for various governmental agencies. Prerequisites: CSN 301, CSN 305 and CSN 354 or equivalent. ।
ETC 4205 (CSN 402) HEAVY CONSTRUCTION (5) A study of construction procedures and equipment utilized in heavy engineering service systems. Planning, surveys, foundation investigation, materials for typical projects such as highrise buildings, tunnels, bridges, dams, rapid transit systems and other heavy public works. Prerequisites: CSN 300 and CSN 306.
ETC 4222C (CSN 405) FOUNDATIONS DESIGN AND CONSTRUCTION (5) Use of soil mechanics and subsurface construction theory and practice for design and construction of foundations for buildings and other engineering facilities. Topics include shallow and deep foundations, excavation, bracing and retaining structures. Prerequisite: CSN 354 or equivalent.
ARC 4330C (CSN 407) SITE DEVELOPMENT (5) Fundamentals of the art of site planning; physical, economic, social and governmental constraints affecting development; zoning; land use controls; subdivision layout; modular design; site characteristics (soil, geology, topography), drainage, access. Design and construction techniques. Prerequisite: Consent of instructor. ETC 4541 (CSN 411) TRAFFIC AND TRANSPORTATION ENGINEERING TECHNOLOGY (5) Characteristics of traffic, roadway, vehicular and human factors. Design, development regulations in modern transportation systems. Stream of flow, capacity, parking, accident analysis and intersection characteristics. Prerequisites: MAS 311 and Calculus.
ETC 4502 (CSN 413) GEOMETRIC DESIGN OF HIGHWAYS (5) Route surveys by ground and aerial methods-reconnaissance, preliminary and location surveys; geometric properties of highway surveys; spiral theory; design controls for both vertical and horizontal alignments. Applications of various available computer programs and equipment to the design of highways. CSN 305 and MAS 311 or equivalent.
BCN 4741 (CSN 426) INDUSTRIAL \& LABOR RELATIONS LAW (5) A study of the common law and statutory law affecting union-management relations with emphasis on current labor legislation including such areas as the National Labor Relations Act and amendments, the Railway Labor Act, wage and hour legislation, workmen's compensation, unemployment compensation and social security laws. Occupational safety and health hazards associated with construction labor. Same as ITE 426.
BCN 4473 (CSN 428) SYSTEMS APPROACH FOR HOUSING PLANNING (3) Discussions of basic concepts of systems analysis and systems approach to the field of housing planning. The advantages of systems approach. Case studies. Prerequisite: CSN 372 or equivalent.
BCN 4260 (CSN 429) QUALITY CONTROL IN CONSTRUCTION (5) Quality control as governed by the job inspector, contractor superintendent, architect-engineer, building commissioner, and governmental agencies and requirements. Prerequisite: CSN 326 or equivalent.
HHD 4420 (CSN 430) HOME FURNISHINGS AND EQUIPMENT (5) Principles involved in the construction, selection, operation and care of furnishings and equipment and their relationship to their environmental use. Prerequisite: CSN 340 or its equivalent.
BCN 4452 (CSN 450) STRUCTURAL SYSTEMS (5) A general study of the methods of structural systems; such as beams, columns, rigid frames, arches, trusses, floors, enclosure systems, and various foundation configurations. The limitations of using various structural materials for the systems will be discussed. Prerequisite: CSN 350 or CSN 352.
BCN 4431 (CSN 451) STEEL DESIGN (5) 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 or corequisite: CSN 353.
ETC 4460 (CSN 452) TIMBER DESIGN (5) The analysis and design of modern wood structures. Effect of plant origin and physical structure of wood on its mechanical strength; fasteners and their significance in design. Prerequisite: CSN 350 or CSN 352 or equivalent.
ETC 4450C (CSN 455) REINFORCED CONCRETE DESIGN (5) The analysis and design of reinforced concrete beams, columns, slabs, retaining walls, and footings. Both the working and ultimate strength design methods will be discussed with primary emphasis corresponding to recent ACI Building Code. Prerequisite or Corequisite: CSN 357.
ARC 4590C (CSN 457) STRUCTURAL DESIGN (5) Elements of structural design in steel, reinforced concrete, and timber with design specifications per AISC, ACI and NOS. Introduction to prestressed concrete design. Loadings and structural elements commonly encountered in construction will be used for analysis and design. Prerequisite: CSN 350 or CSN 352 or equivent.
ETC 4429 (CSN 465) COMPUTER APPLICATIONS IN STRUCTURAL ANALYSIS AND DESIGN (5) Discussion and application of various available computer programs and equipment for structural analysis and design. Application of the stiffness method and the flexural method of structural analysis. Prerequisites: CSN 451, CSN 455 and MAS 311.
BCN 4707 (CSN 470) HOUSING AND ENVIRONMENT (3) The impact of housing planning and construction on a community and environment. The necessity of total planning to protect the environment. Public participation in housing planning. Economics vs. ecology. Prerequisite: CSN 372.
ARC 4336 (CSN 471) BASIC UTILITIES AND HOUSING (3) The study of the importance of basic utilities such as roads, sewer and water supply systems in the housing planning and construction. A relative cost analysis; health problems; and sociological effects of lack of basic utlities. Innovative concepts to incorporate basic utilities to all housing projects in developing countries. Prerequisite: Consent of instructor.
IND 4220 (CSN 473) COMMERCIAL AND OFFICE INTERIORS (5) Analysis, synthesis, articulation and design execution of commercial spaces, integrating human factors, environmental-technological systems, activity structure and symbiotic relationships as space design determinates. Consideration of significant aspects of culture, design components, and merchandising procedures. Prerequisites: CSN 373 and CSN 430 or equivalent.
IND 4221 (CSN 474) INSTITUTION AND INDUSTRIAL INTERIORS (5) Analysis and synthesis of institutional functions, administrative controls, resources, constraints and policies in planning and design of institutional facilities. Consideration of esthetic, social, economic, behavioral and environmental parameters. Selections and design of selected furnishings and components. Prerequisites: CSN 373 and CSN 430 or equivalent.

IND 4224 (CSN 475) EXHIBIT AND DISPLAY DESIGN (5) Articulation and analysis of exhibit and display planning and design, integrating purpose, perceptual and effectiveness into the design process, emphasis on the coordination of materials, graphic design, color and illumination. Prerequisites: CSN 373, CSN 345 or equivalent.
ARC 4039 (CSN 479) ARCHITECTURAL DESIGN (5) Integrated study of design, basic design concepts and principles of design. Development of architectural design projects, presentation drawings, plans and quantity surveys. Prerequisite: CSN 345 or equivalent.
ARC 4485C (CSN 480) ADVANCED ARCHITECTURAL DRAWING AND DESIGN II (5) New techniques in the preparation of working drawings, detail drawings, inclusion of change orders. Preparation of finish schedules with correlation to specifications writing. Prerequisite: CSN 376.
ARC 4270C (CSN 482) PROFESSIONAL OFFICE PRACTICE (5) Assignments on office administration, negotiation of contracts, fee structure, client and public relations. Business organization and procedure scheduling and task allocation within an architectural office. Prerequisite: CSN 332 or equivalent.

- (CSN 488) CONSTRUCTION AND OESIGN OF NATURAL RECREATION AREAS (5) The course includes design factors, construction requirements, and techniques in developing outdoor recreation facilities. Soil structure, drainage, irrigation, grass choices and landscaping materials are covered. Construction of unique natural recreation areas are stressed and related to maintenance costs in the establishment of good facility management. Prerequisite: None.
ETG 4905 (CSN 495) INOEPENDENT STUOY (1-5) Specialized intensive study in an area of special interest to the student. Consent of instructor is required.
ETG 4930 (CSN 497) SPECIAL TOPICS (1-5) For a group of students who wish an intensive study of a topic not offered in the University. Consent of faculty supervisor is required.
ETC 5514 (CSN 512) PAVEMENT OESIGN (5) Analysis and design of sub-base, base and pavement of a roadway. Discussions of flexible pavement and rigid pavement as structural units. Boussinesq's approach, Westergaard's theory. Beams on Elastic Foundations. Prerequisite: CSN 354 and CSN 455.
ETC 5507C (CSN 513) ADVANCED GEOMETRIC DESIGN OF HIGHWAYS (5) Parameters governing the geometric design of highways; curve super-elevation; widening on highway curves; elements of intersection design; design of interchanges; use of AASHO design guidelines; a design project required. Prerequisite: CSN 413.
ETC 5470 (CSN 556) PRESTRESSED CONCRETE DESIGN (5) The behavior of steel and concrete under sustained load. Analysis and design of pre-tensioned and post-tensioned reinforced concrete members and using these members into the integral structure. Prerequisite: CSN 455 or equivalent.
ETC 5422C (CSN 557) ADVANCED STRUCTURAL DESIGN (5) The design of structural systems to formalize the student's knowledge of the behavior of individual components into a final integrated structure. Continuous span and simple span highway bridges, culverts, retaining walls, rigid frames, multi-storied buildings and similar type problems of interest to the student. Prerequisites: CSN 451 and CSN 455.
ARC 5916 (CSN 570) INNOVATIONS IN BUILDING TECHNOLOGY (3) Experimental approach to new materials and methods applicable to the field of construction. Prerequisite: Consent of instructor.
BCN 5022 (CSN 572) HOUSING FOR DEVELOPING COUNTRIES (3) Problems faced by the developing countries in housing their population. Political, economic, social and technical considerations in decision process. Prerequisite: CSN 372 or equivalent.
(CSN 595) INDEPENDENT STUDIES (1-5) Specialized intensive study in an area of special interest to the student. Prerequisite: Consent of instructor, advisor and director.
(CSN 597) SPECIAL TOPICS (1-5) For a group of students who wish an intensive study of a topic not offered in the University. Prerequisite: Consent of faculty supervisor is required.


## COOPERATIVE EDUCATION

ETG 3949 (COE 340) COOPERATIVE EDUCATION TECHNOLOGY (5) Supervised full-time work quarter for technology cooperative education students. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.
ETG 4949 (COE 440) COOPERATIVE EDUCATION TECHNOLOGY (5) Supervised full-time work quarter for technology cooperative education students. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.

## ELECTRICAL ENGINEERING TECHNOLOGY

ETE 3030 (EET 300) SURVEY OF ELECTRONICS (5) The basic principles of AC and DC circuits, solid state devices, and fundamental electronic circuits. This course is intended for students outside of the Electrical Engineering Technology major with no prior knowledge of electronics (includes lab).
ETE 3034C (EET 310) INTRODUCTION TO CIRCUIT ANALYSIS (5) Introduction to AC and DC circuit analysis. Use of complex algebra and phasors. Loop and node analysis. Resonance circuits. Introduction to three phase circuits. Transient analysis of first and second order circuits using calculus. Prerequisites: MAS 302 and Physics with electricity or equivalent.
ETE 3101 (EET 312) INTRODUCTION TO ELECTRONICS (5) Introduction to electronic circuit elements and analysis using calculus. Diode and transistor principles and circuits. Survey of pulse and digital circuits and various semiconductor devices. Prerequisite: EET 310 or equivalent. Corequisite: EET 313.
ETE 3030L (EET 313) ELECTRICAL AND ELECTRONIC LABORATORY (2) Introduction to laboratory equipment and techniques for pre-engineering students. Includes laboratory experiments on $A C$ and $D C$ circuits, electronic equipment and circuits, instrumentation such as meters, oscilloscopes, generators, etc. Corequisite: EET 312.
BCN 3521 (EET 314) ELECTRICAL SYSTEMS IN CONSTRUCTION (5) A survey of electrical and lighting requirements for residential and commercial buildings. Emphasis on estimating circuits, power requirements, layout constraints, etc.

ETE 3121C (EET 316) ADVANCED CIRCUIT ANALYSIS (5) This course provides the students with a basic knowledge of Laplace transforms for practical applications in networks and systems. Complex frequency poles and zeros concepts and applications, transformed networks, Fourier transform and signal spectra are also covered. Prerequisite: EET 310 or equivalent. Corequisite: MAS 302 and EET 312.
ETE 3565C (EET 317) INTRODUCTION TO ELECTRICAL POWER (5) Structure of electrical power systems. Major components and modern energy systems. Magnetism and magnetic circuits. Mutual induction and self induction. Three-phase circuit analysis and per unit calculations. Transformers and transformer connections. Energy conversion. Power system loads and statistical load-forecasting. Calculation of cost of electrical energy. Prerequisite: EET 310 or equivalent.
ETE 3526C (EET 318) ELECTRIC MACHINERY (5) Analysis of rotating electric machinery with emphasis on industrial applications (includes lab). Prerequisite: EET 317.
ETE 3323C (EET 320) PRACTICAL LINEAR SYSTEMS (5) Basic concepts and application of linear systems, feedback systems, stability analysis, bode plots and root-locus techniques. Prerequisite: EET 316
ETE 3142 (EET 328) SOLID STATE DEVICES (5) Study of vitually all modern semiconductor devices with applications. MOSFET, photodetectors, thyristors, unijunction transistors, special diodes, etc. (includes lab). Prerequisite: EET 300 or equivalent.
ETE 3124C (EET 329) PULSE AND DIGITAL CIRCUITS (5) An introduction to non-linear circuits including logic gates, multivibrators, waveshaping, trigger circuits, sweep generators, clipper and clamper circuits, etc. (includes lab). Prerequisite: EET 312 or equivalent.
ETE 342 IC (EET 340) COMMUNICATION SYSTEMS (5) Definitions, basic concepts and application of analog and digital modulation techniques. Modulators for generating various signals and demodulators for information recovery are studied. Quantization. Decoding. Effect of noise in communication systems. Prerequisite: EET 310 or equivalent.
ETE 3422 (EET 342) TRANSMISSION SYSTEM FOR COMMUNICATION (5) Terminoloy, definitions and methods by which transmission objectives for message channels are established. Noise and its measurement. Crosstalk. Analog and digital transmission lines. Wideband data transmission (includes lab.) Prerequisite: EET 340.
ETE 4565C (EET 415) ELECTRICAL POWER SYSTEMS I. Power network concepts, AC \& DC transmission power transmissions, power transmission lines, power network representations, basic network solutions, symmetrical fault studies, symmetrical components. Prerequisite: EET 318.
ETE 4324C (EET 420) PROCESS CONTROL INSTRUMENTATION (5) Servomechanisms analysis and design. Sensors, transducers, recorders, error detecting devices and other electronic and electromechanical components of control systems. Basic lab experiments on servomotors, tachometers, synchros, operational amplifiers as components and systems. Use of analog computer. Prerequisite: EET 320.
ETE 4325C (EET 422) ADVANCED CONTROL SYSTEMS (5) Design of control systems using bode plots and root-locus techniques. Application of industrial controllers in temperature control, pressure control, and other applications. Grounding techniques in control systems. Prerequisite: EET 320.
ETE 4567C (EET 425) ELECTRICAL POWER SYSTEMS II (5) Unsymmetrical faults and loads, the bus impedance matrix solutions for fault studies. Control of voltage, watts, vars. Load flow, economic dispatch and system stability. Prerequisite: EET 415.
ETE 4123C (EET 428) ELECTRONIC CIRCUIT ANALYSIS (5) Analysis and design of electronic circuits using bipolar transistors, FET's and MOSFET's. Application of frequency response techniques to the analysis and design of feedback amplifiers, tuned amplifiers, oscillators, modulators and demodulators, power amplifiers etc. Introduction to integrated circuits. Prerequisites: EET 316 and EET 328 or equivalent.
ETE 4161C (EET 430) INTEGRATED CIRCUITS ANALYSIS AND APPLICATION (5) Application of state-of-the-art integrated circuits. Comparison of different IC's from the SSI, MSI, and LSI areas. Design and characteristics of linear and digital integrated circuits. Prerequisite: EET 428.
ETE 4426C (EET 440) ADVANCED COMMUNICATION SYSTEMS (5) Study of advanced communication systems and techniques. Emphasis is placed on the study of digital and FM systems. Phase-lock techniques, noise analysis, threshold data, and transmission are among the subjects extensively covered (includes lab). Prerequisite: EET 340.
ETE 4170C (EET 466) PASSIVE AND ACTIVE FILTERS (5) Practical application of passive and active filters to communication and process control systems. Laboratory applications. Prerequisite: EET 320.
ETE 4665C (EET 468) DIGITAL PROCESS CONTROL SYSTEMS (5) Study of digital process control systems. Time frequency response to discrete systems. Digital controllers. Application to industrial processes. Laboratory work with digital components and systems (include lab.) Prerequisite: EET 320 or equivalent.

## ENGINEERING TECHNOLOGY

ETG 4905 (ENT 495) INDEPENDENT STUDY (1-5) Specialized intensive study in an area of special interest to the student. Consent of faculty instructor required.
ETG 4930 (ENT 497) SPECIAL TOPICS (1-5) For a group of students who wish an intensive study of a topic not offered in the University. Consent of faculty supervisor and division director is required.

## ENVIRONMENTAL AND URBAN SYSTEMS

— (EUS 300) INTRODUCTION TO ENVIRONMENTAL AND URBAN SYSTEMS (5) This course is designed for non-majors as an integrated approach to the role of technological man in the biosphere. Emphasis is placed on methods for the environment quality improvement of land, air, water, transportation, and planning systems.
EVS 3360 (EUS 310) AIR RESOURCES (5) An introductory course on characteristics of the earth's atmosphere and aspects of air pollution. Classification and sources of air pollutants. Effects of air pollutants on health, vegetation and property. Control measures, legislation and projections.
EVS 3601C (EUS 320) ENVIRONMENTAL HEALTH (5) The effects of environmental pollutants on man's health and the quality of life.

EVS 3420C (EUS 325) ENVIRONMENTAL INSTRUMENTATION (5) A lab/tield course devoted to evaluate critically basic instrumental methods of environmental sampling and analysis. Field sampling (sample preparation and storage), laboratory skills and legal considerations.
EVS 3428 (EUS 327) ENVIRONMENTAL MANAGEMENT (5) The wise use of land and water for parks and recreational areas. The environmental design and need for green spaces. Ecologically safe methods for the control of vegetation and insects are emphasized.
ETC 3570 (EUS 330) INTRODUCTION TO TRANSPORTATION SYSTEMS (5) Role of transportation in urban and regional development; elements of the transportation system; characteristics and design considerations of various modes; the travel way; facilities; control and guidance; selected design standards and technology; operational characteristics; planning techniques. URP 3000 (EUS 340) URBAN PLANNING CONCEPTS (5) Planning fundamentals; objectives and scope of urban planning; theories of land use patterns; population studies; cohort survival technique; employment studies; economic studies; estimating demand for various land usage; physical, social, political and managerial conditions; comprehensive plan and its elements; aesthetics and design concepts for communities; implementation tactics.
URP 4030 (EUS 348) ANALYSIS OF TECHNOLOGICAL SYSTEMS (5) Fundamental concepts of systems analysis; types of systems; input-output relationship; positive and negative teedback control; generation of system alternatives; tradeoff and sensitivity analysis; elementary optimization techniques.
EVS 3215 C (EUS 350) APPLIED HYDRAULICS (5) A course to provide background in basic hydraulic technology. The fundamental theorems are studied first then applied to the collection and distribution of water and to the collection and treatment of wastewaters.
EVS 3264C (EUS 352) WATER RESOURCES (5) Study of the hydrologic cycle; ground and surface water occurrence and quality; sanitary protection of surface and groundwater; sources of pollution; water quality management; multipurpose uses of water and reuse; determination of municipal, industrial and agricultural water requirements.
EVS 3219 C (EUS 356) AQUATIC SYSTEMS (5) Biological, chemical and physical aspects of freshwater lentic and lotic ecosystems. Emphasis is placed on the freshwater systems of South Florida.
ETC 4560 (EUS 430) TRANSPORTATION PLANNING (5) Principles of transportation planning; origin-destination studies; methodology used in generating transportation plans; techniques for predicting and evaluating the consequences of various alternatives; transportation planning for the Dade County region. Prerequisite EUS 330.
URP 4021 (EUS 445) URBAN LAND USE PLANNING (5) Elements of the general land use plan; location and space requirements; the use of models in planning; development of the land use plan; policy plan; implementation. Prerequisite: EUS 340.
URP 4011 (EUS 449) PLANNING IMPLEMENTATION (5) Planning law and administration; practice in formulation of zoning ordinance; land subdivision, urban renewal; trends and innovations in control of growth-case studies in USA; critical path method (CPM); planning, programming, budgeting systems (PPBS) and capital improvement programs. Prerequisite: EUS 340.

EVS 4233 (EUS 450) UNIT OPERATIONS I (5) Principles of wastewater treatment. Physical and biological unit treatment operations including sludge digestion. Significance of laboratory tests. Laboratory work. Occasional field trips are required. Prerequisite: EUS 350.
EVS $4234 C$ (EUS 451) UNIT OPERATIONS II (5) A continuation of EUS 450 incorporating chemical unit operations including effluent disinfection. Laboratory work. Occasional field trips required. Prerequisite: EUS 450.
EVS 3463C (EUS 455) WATER SUPPLY SYSTEMS (5) Development of water supplies; treatment of water including disinfection techniques. Distribution systems. Laboratory work. Prerequisites: EUS 352 and EUS 450, or consent of instructor.
EVS 4905 (EUS 495) INDEPENDENT STUDY ( $1-5$ ) Individual research studies available to academically qualified students. Consent of instructor required.
EVS 4930 (EUS 497) SPECIAL TOPICS (1-5) Specific aspects of environmental technology or urban systems not available through formal course study. Open to academically qualified students. Consent of instructor required.
EVS 4369 (EUS 510) AIR QUALITY MANAGEMENT (5) A course in air resources designed to review the administrative, legislative and regulatory process in air pollution control. Agencies, surveillance networks, data, criteria for establishing standards, regulations and educational programs. Prerequisite: EUS 310 or EVR 431.
EVS 3361 (EUS 512) AIR SAMPLING AND ANALYSIS (5) Practical laboratory work and theoretical aspects involved in a wide range of air sampling and analysis systems. Critical comparison and examination of methods and instrumentation. Source testing, instrumental sensitivity, applicability and remote sensing systems. Prerequisite: EUS 310 or EVR 431.
EVS 3362 (EUS 513) AIR POLLUTION CONTROL (5) Air pollution control-devices, principles, efficiencies, costs. Gas scrubbers, electrostatic precipitators, thermal deposition, filters, condensors, after burners. By-product recovery. Stoichiometry of combustion mixtures and basic industrial plant design will be discussed. Prerequisite: EUS 310 or EVR 431.
EVS 4741 (EUS 518) NOISE (5) Fundamentals of sound and noise. Health hazards and other effects. Case studies-measurement and noise control in transportation, environment, construction and industry. Abatement laws and ordinances in Dade County and worldwide.
EVS 3421C (EUS 520) INDUSTRIAL AND ENVIRONMENTAL TOXICOLOGY (5) Introduction to toxicological studies in the urban environment. Prerequisites: EUS 320 or consent of instructor.
EVS 4682 (EUS 522) SOLID WASTE MANAGEMENT (5) In-depth study of the solid waste problem. Topics include municipal, industrial, and agricultural generation of wastes; municipal collection systems; methods of disposal; hazardous wastes, and energetic considerations in the recovery and recycle of wastes.
EVS 4425 C (EUS 524) VECTOR AND PEST CONTROL (5) Effects and management of public health vectors and communicable diseases. Prerequisite: EUS 320 or consent of instructor.
EVS 4426 C (EUS 525) ADVANCED ENVIRONMENTAL INSTRUMENTATION (5) A laboratory oriented course dealing with the most sensitive and sophisticated instruments used in environmental analysis. Theory of specialized laboratory procedures and instruments. Optics, electronics, design, cost, versatility and operational instrument parameter considerations. Assigned projects. Prerequisite: EUS 325 or consent of instructor.
ETC 5571 (EUS 530) ADVANCED TRANSPORTATION SYSTEMS (5) Examination of innovative transportation systems technology; technical feasibility; system attributes; energy requirements; marketability of proposed systems; probable effect on modal choice behavior; evaluation of possible applications to the Greater Miami area. Prerequisite: EUS 430.

ETC 5572 (EUS 542) INTRODUCTION TO URBAN SYSTEMS MODELING (5) Review of models available for planning applications; transportation modeling; systems view of the urban area; planning applications of modeling. Prerequisite: MAS 311 or consent of the instructor.
URP 5425 (EUS 545) ENVIRONMENTAL PLANNING (5) Ecological principles necessary to preserve a quality environment are presented by means of planning policies, processes and environmental indicators; emphasis will be placed on the impact of growth on environmental quality. Prerequisiteṡ: EUS 310, EUS 340 and EUS 352.

- (EUS 548) URBAN AND REGIONAL ANALYSIS (5) Theories of urban and regional growth; collective utility analysis; input-output models in planning; application of linear programming to regional social accounting; economic base analysis. Prerequisite: MAS 311 or consent of the instructor.
EVS 5242 (EUS 550) WATER QUALITY MANAGEMENT (5) Predicting and evaluating the effects of human activities upon streams, lakes, estuaries and groundwaters, and their relation to water quality and protection of water resources. Prerequisite: EUS 451 or consent of instructor.
EVS 4235C (EUS 552) WASTEWATER COLLECTION AND TREATMENT (5) Wastewater collection systems. Integration of unit operations into the planning and design of treatment plants, including sludge handling and disposal. Prerequisites: EUS 450 and EUS 451, or consent of instructor.
EVS 4218 (EUS 554) ADVANCED HYDRAULICS (5) An advanced course on hydraulics. Topics include open channel flows, spilfways, stilling basins, energy-dissipating devices, rheology, and principles of fluidics. Prerequisite: EUS 350 or consent of instructor.
EVS 3268C (EUS 556) MARINE TECHNOLOGY (5) Technological aspects of ocean systems. Prerequisite: EUS 356 or consent of instructor.
OCB 4702 (EUS 557) AQUATIC PRODUCTS (5) Commercial products, already developed, which may be obtained from aquatic systems. Prerequisite: EUS 556 or consent of instructor.
EVS 5266 (EUS 558) BIOLOGICAL MONITORING OF FRESHWATER ECOSYSTEMS (5) The use of aquatic insects and other invertebrates to monitor changes in the aquatic environment. The ecological aspects of aquatic insects in relation to pollution stress are assessed. Prerequisite: EUS 356 or consent of instructor.
EVS 5267 (EUS 559) WATER QUALITY INDICATORS (5) Ecological studies of micro- and macroorganisms which are indicators of water quality. Emphasis will be placed on bioassays and early warning systems. Prerequisite: EUS 558 or consent of instructor.
EVS 5905 (EUS 595) INDEPENDENT STUDY (1-5) Individual research studies available to academically qualified students on graduate status.
EVS 5930 (EUS 597) SPECIAL TOPICS (1-5) Specific aspects of environmental technology and urban systems not available through formal course study. Open to academically qualified students only.
URP 6821 (EUS 602) URBAN SYSTEMS ANALYSIS (5) The urban areas as a complex system; modeling the urban growth processes; statistical decision making games; modeling and simulation; cost effectiveness; application of the theory; a system-wide view of the Miami area. Prerequisite: MAS 311 or consent of the instructor.
EVS 6422 (EUS 604) ENVIRONMENTAL ASSESSMENT (5) An examination of alternative techniques useful for the analysis and evaluation of environmental impacts of man's activities. Prerequisite: EUS 602.
EVS 6424 (EUS 614) AIR-LAND INTERFACE STUDIES (5) An environmental evaluation of the relationship between the atmosphere and the continental surfaces in a non-urban or natural system. Prerequisites: EVR 511 or consent of instructor.
- (EUS 615) AIR-WATER INTERFACE STUDIES (5) Mechanisms of materials transfer from water bodies to the atmosphere and from the atmosphere to the water will be discussed. Prerequisite: EUS 310 or EVR 431 or EUS 510.
EVS $6603 C$ (EUS 620) ADVANCED INDUSTRIAL AND ENVIRONMENTAL TOXICOLOGY Laboratory investigations with toxic substances, especially those related to man-made pollution. Prerequisites: EUS 320 and EUS 520.
ETC 5573 (EUS 638) URBAN MASS TRANSIT PLANNING (5) The mass transportation problem; demand analysis and projection; marketing urban mass transit; existing urban mass transit systems in the U.S.; techniques for planning mass transit systems; governmental regulation and subsidies to the transportation sector. Prerequisite: EUS 530.
URP 5423 (EUS 642) ENVIRONMENTAL MODELING (5) Evaluation of regional resources; environmental stresses and considerations in regional systems; systems analysis in environmental management and its relation to decision making; modeling of air and water systems. Prerequisites: MAS 311, EUS 542 or consent of instructor.
EVS 6050C (EUS 649) ADVANCED PLANNING IMPLEMENTATION Critical examination of traditional implementation tools. New growth management strategies-moratoria, timing, capital improvement programs, PPBS. Case studies from U.S.A. Innovative methods and governmental policies. Prerequisites: EUS 445 and EUS 449.
EVS 6051 C (EUS 650) ADVANCED UNIT OPERATIONS I (5) Theory and design of physical, chemical, and biological unit operations as applied to the advanced treatment of water and wastewater. Prerequisite: EUS 550.
EVS 6052 (EUS 652) ADVANCED UNIT OPERATIONS II (5) A continuation of EUS 650 including the reuse of treated wastewaters and of sludges. Prerequisite: EUS 650.
EVS 6053 C (EUS 654) ADVANCED TREATMENT SYSTEMS (5) Integration of unit operations into advanced treatment systems for waters and wastewaters. Prerequisite: EUS 652.
EVS 5269C (EUS 655) INDUSTRIAL WASTEWATER TREATMENT (5) Characteristics and composition of industrial wastewaters. Sampling techniques and analyses. Water conservation and reuse. Joint industrial-municipal collection and treatment of wastewaters. Prerequisite: EUS 654.
EVS 6054 (EUS 656) AQUATIC RECLAMATION (5) Evaluation of techniques to improve the water quality of lakes, canals and rivers. Cultural eutrophication corrective measures are emphasized. Prerequisites: EUS 356, EUS 559 or consent of instructor.
EVS 4939 (EUS 690) SEMINAR (1-3) The course consists of oral presentations made by students, guests and faculty members on current topics and research activities in environmental and urban systems.
EVS 6970 (EUS 699) THESIS (1-10)


## FAMILY AND CHILD DEVELOPMENT

CHD 3220 (FCD 301) CHILD DEVELOPMENT: INFANCY AND EARLY CHILDHOOD (5) Systematic study of total developmental process in the child from conception through early childhood, emphasizing the effects of home and family environment. Includes observational experiences. Prerequisite: PSY 330 or equivalent.
FAD 3232 (FCD 305) CHANGING ROLES IN FAMILY RELATIONSHIPS (3) Emphasizes attitudes, feelings communications, life styles in varying interpersonal relationships.
CHD 4230 (FCD 401) CHILD DEVELOPMENT: LATER CHILDHOOD (5) 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.
FAD 4230 (FCD 405) THE 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.

- (FCD 495) HUMAN DEVELOPMENT PRACTICUM (2-5) 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: FCD 301, 401, 405; or equivalent.
CHD 5264 (FCD 501) ADVANCED STUDIES IN CHILD DEVELOPMENT (5) Survey of current literature on selected areas, analysis of trends and issues, and investigation of recent research in Child Development. Prerequisites: FCD 301, 401; or equivalent.
FAD 5260 (FCD 505) FAMILY DEVELOPMENT (5) The dynamics of family interaction and structure, including analysis of socioeconomic and cultural influences, crisis producing situations, and current issues and trends affecting the family unit.
FAD 5255 (FCD 515) PARENT-CHILD INTERACTION IN VARYING ENVIRONMENTS (5) The effect of varying environments upon members of households especially interpersonal relationships, family values, life styles and interaction between members.
FAD 5450 (FCD 595) WORKSHOP IN FAMILY AND CHILD DEVELOPMENT (1-5) Short-term intensive study of special facets, issues and trends of Child Development and/or Family Development.
FAD 5900 (FCD 596) INDEPENDENT STUDY IN FAMILY AND CHILD DEVELOPMENT (2-5) Individually selected program of supervised study in a specific area of Family and Child Development. Prerequisite: Permission of Instructor.
(HHE 495) CAREER TRAINEESHIP IN HOME ECONOMICS (15) Community based, supervised practical experience in home economics related career to provide opportunity for career exploration in chosen field and application of knowledge to practical situations. Permission of Instructor.
HDE 3949 (COE 351-451) COOPERATIVE EDUCATION IN HOME ECONOMICS (5-15) Supervised full time work quarter for Home Economics Students. Limited to students admitted the Coop Program with consent of advisor, Evaluation and Reports required.


## HOME MANAGEMENT AND FAMILY ECONOMICS

COA 3410 (HMF 306) CONSUMER RESOURCES MANAGEMENT (3) Evaluation of information needed by consumers to make wise spending decisions, including sources of consumer help, information and protection, pertinent legislation, and application of money management principles.
HME 4230 (HMF 406) MANAGEMENT OF PERSONAL AND FAMILY RESOURCES (3) Application of management principles to problems related to personal and family living involving human and non-human resources. Includes human development problems observed in the community.
HME 5940 (HMF 495) FIELD EXPERIENCE IN HOME AND CONSUMER MANAGEMENT (3-5) Consideration of management decisions made by family members of different ethnic groups and/or life styles, influence of these decisions on family relationships. Includes field experience. Prerequisite: HMF 306, 406, or equivalent.
EEX 5771 (HMF 506) INDEPENDENT LIVING FOR THE HANDICAPPED (5) Designed to enable home economists to work with people with handicaps. Experience provided in adopting home management skills to the needs of the handicapped homemaker. Prerequisite: HMF 406 or equivalent.
HME 5225 (HMF 507) PROBLEMS OF HOME MANAGEMENT IN CONTEMPORARY SOCIETY (5) Influence of diversified cultural impact on management life styles with emphasis on problems of management of resources with one parent homes, retirement, poverty, death, working parents, migrant families and other diverse situations. Prerequisites: HMF 306, HMF 406 or Instructors approval.

- (HMF 595) WORKSHOP IN HOME MANAGEMENT AND FAMILY ECONOMICS (1-5) Short term intensive study of special facets, issues and trends of Home Management and Family Economics.
HME 5905 (HMF 596) INDEPENDENT STUDY IN HOME MANAGEMENT AND FAMILY ECONOMICS (3-5) Individually selected program of supervised study in a specific area of Home Management or Family Economics. Prerequisite: Permission of Instructor.


## INDUSTRIAL ARTS TECHNOLOGY

BCN 3702 (IAT 305) CONSTRUCTION TECHNOLOGY (5) Laboratory experiences of basic production, management and personnel practices as they relate to construction systems and projects.
ETI 3417C (IAT 306) MANUFACTURING TECHNOLOGY (5) Laboratory experiences of basic manufacturing, management, personnel, and production practices as they relate to products and processes. Safety procedures
ARV 3210 (IAT 307) REPROGRAPHICS (5) Laboratory experiences in the theory and practice of communicating through graphics; includes experiences in copywriting, editing, image generation, image assembly, photo conversion, image carrier preparation, transfer, and finishing.
ETC 4252L (IAT 405) CONSTRUCTION PROCESSES (5) Laboratory experiences in the principles and practices of the construction trades, includes concrete and plaster trades, electrical, plumbing, carpentry, iron work, sheetmetal, roof and finishing trades in setting foundations, erecting structures, installing mechanical and electrical systems, applying surface material and finishing.

BCN 4033 (IAT 406) INDUSTRIAL RESEARCH AND DEVELOPMENT (5) Laboratory experiences in formulating, researching, designing, and developing prototypes of constructed and manufactured products and processes. Prerequisite: IAT 305 or IAT 306.

ARV 4250 (IAT 407) PLANOGRAPHIC PROCESSES (5) Laboratory experiences in the theory and practice of offset lithography. Emphasis will be directed toward skill development in design and copy preparation, process photography, stripping, platemaking, and duplicator operation.
ARV 4150 (IAT 408) PHOTOGRAPHICS (5) Laboratory experiences in the theory and practice of photography as used in visual communications. Develops proficiencies in camera work, developing, and printing.
ETM 4823 C (IAT 409) MATERIALS OF INDUSTRY (5) Laboratory experiences in the theory and practice of characteristics of materials of industry. Includes test and measurement of stress, strain, torsion, tensile strength, fatigue, and hardness of metals, wood, fabrics, ceramics and synthetics.
ETD 4525C (IAT 415) DRAFTING I (5) Laboratory experiences in the principles and practice of idea development and expression through free hand sketching and conventional instrument drafting. A beginning course for students with no prior drafting experience.
ETD 4526C (IAT 416) DRAFTING II (5) Laboratory experiences in the principles and practices of product design and communication. Includes conventions, projections, and dimensions and problems of making drawings for product production. Prerequisite: IAT 415 or equivalent.
ETM 4407 (IAT 417) MECHANICAL POWER SYSTEMS I (5) Laboratory experiences in the theory of operation and related maintenance of single and multiple cylinder reciprocating engines. Includes introductory experience with mechanical, fluid, and pneumatic power systems.
ETE 4562 (IAT 418) ELECTRICAL/ELECTRONIC POWER SYSTEMS (5) Introductory course designed primarily for the novice in electricity/electronics. Laboratory experience consists of planned activities centered about electrical/electronic instrumentation and power systems.
ETI 4421C (IAT 419) MATERIALS PROCESSING (5) Laboratory experiences in the principles and practices of separating, forming, and combining techniques to produce components, subassemblies, assemblies and finished products. Includes a variety of materials, equipment and fabrication techniques.
BCN 4251C (IAT 420) ARCHITECTURAL DRAFTING (5) Laboratory experiences in designing structures, developing working drawings and specifications for constructed projects. Includes development of site, foundation, floor, elevations, plumbing plans, and specifications.
ETM 4408 (IAT 422) MECHANICAL POWER SYSTEMS II (5) Advanced laboratory experiences with reciprocating engines. Introductory study of turbine, diesel, and rotary engines. Introductory study of aircraft structures and basic aero dynamics. Prerequisite: IAT 417 or equivalent.
ETG 4905 (IAT 495) INDEPENDENT STUDY (1-5) Specialized intensive study in an area of special interest to the student. Consent of faculty instructor required.
ETG 4930 (IAT 497) SPECIAL TOPICS (1-5) For a group of students who wish an intensive study of a topic not offered in the University. Consent of faculty supevisor and division director required.

## INDUSTRIAL TECHNOLOGY

ETI $3670^{\circ}$ (ITE 300) INDUSTRIAL FINANCIAL DECISIONS (5) The accounting process and use of financial techniques and data in planning, controlling, and coordinating industrial activities. This course is intended to familiarize the student with the accounting concepts, analytical methods, and use of accounting information for purposes of operation and control.
MAN 3504 (ITE 301) INDUSTRIAL OPERATIONS (5) The industrial structure is studied to see how the various areas and functions are related to each other. The material covered should give the student an overview of the operations of the organization and an understanding of the fundamental principles of management which lead toward effective coordination and control.
-_ (ITE 302) INTRODUCTION TO LABOR STUDIES (5) 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 on labor.
ETI 3444 (ITE 312) AUTOMATION (5) A study of the technology of automation including the economics of management policies for the major industrial changes influencing automation planning.
ETI 3110 (ITE 324) QUALITY CONTROL (5) Modern concepts of managing the quality function of industry to maximize customer satisfaction at minimum quality cost. The economics of quality, process control, organization, quality improvement, vendor quality.
ETI 3645 (ITE 330) PRODUCTION PLANNING AND CONTROL I (5) Introduction to production planning and control concepts including their function within total planning, forecasting, estimating, processing instructions, and manpower allocations. Prerequisite: ITE 301 or equivalent.
ETI 3646 (ITE 331) PRODUCTION PLANNING AND CONTROL II (5) The functions of a production planning and control organization at work. Topics in the area of inventory control, scheduling, dispatching and flow control. Prerequisite: ITE 330 or equivalent.
ETI 3700 (ITE 350) SAFETY IN INDUSTRY (5) Introduces occupational safety and health hazards associated with mechanical systems, materials handling, electrical systems, and chemical processes. Illustrated controls through engineering revision, safeguarding and personal protective equipment. Emphasis placed on recognition, evaluation and control of occupational safety and health hazards.
BCN 3730 (ITE 351 ) CONSTRUCTION SAFETY (5) 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.
ETI 4660 (ITE 400) MATERIALS HANDLING (5) A survey of materials handling elements, the unit load, packaging, bulk handling, and the economics of materials handling. Improvement of existing handling methods, justification for handling equipment, special handling techniques, and the management of the materials handling divisions in the industrial organization.

ETI 3661 (ITE 401) PLANT LAYOUT (5) To effect the coordination of the physical plant facilities to combine the men, materials and machines necessary for operation in the most economical arrangement. Prerequisite: ITE 400 or equivalent.
ETI 4690 (ITE 410) INDUSTRIAL SALES (5) Fundamentals of technical sales. Analysis of buyer's needs. Experiments, trial runs and demonstrations. The sale of machinery, raw materials and technical services. Credit and financing considerations. Measures of performance. Case studies.
ETI 4683 (ITE 422) HUMAN FACTORS ENGINEERING (5) 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.
(ITE 423) METHOD IMPROVEMENT (5) Methods engineering and measurement of human work systems. Techniques for operation analysis, work measurement and work sampling. Predetermined motion-time systems and standard data development are explored. Prerequisite: ITE 301; Prerequisite or corequisite: Statistics.
(ITE 428) LABOR AND INDUSTRIAL DISPUTE RESOLUTION (5) Theory and practice of dispute resolution in industry arbitration process, grievances, mediation, factfinding and conciliation. Arbitration of industrial claims and disputes, commercial arbitration. Prerequisites: ITE 302 or equivalent.

- (ITE 429) ADMINISTRATION OF LABOR ORGANIZATIONS (5) Administration of labor organizations, labor policies and practices, legal requirements and financial administration of unions. Prerequisite: ITE 302 or equivalent.
ETI 4650 (ITE 440) INDUSTRIAL INFORMATION SYSTEMS (5) Introduction to system concepts. Planning design and implementation of information systems, decision-making with systems, and system organization. Prerequisite: MAS 300 or 311 or equivalent.
ETI 4708 (ITE 450) HEALTH HAZARDS IN INDUSTRY (5) A continuation of Safety in Industry. An introduction to OSHA regulations on health hazards. Instrumentation. Noise, radiation, and dust problems in the industry. Special hazards with solvents, asbestos, lead, silica, and other chemicals. OSHA compliance procedures. Prerequisite: ITE 350 or equivalent.
HES 4432 (ITE 460) SAFETY MANAGEMENT (5) Basic concepts of safety management. Fundamentals of loss control, policies, accountability, measurement and appraisal of the safety function in industry. The technique of operations review. Systems safety. Motivation. Products safety. Case studies. Prerequisites: ITE 351 and ITE 450 or equivalent.
ETI 4632 (ITE 471) PERSONNEL RELATIONS (5) A study of the functions of personnel relations. Topics covered include determining job requirements, manpower requirements, selection, interviewing and counseling, tests, training, morale and motivation, job evaluation, wage classification, merit rating, and union-management relations.
ETI 4681 (ITE 474) INDUSTRIAL SUPERVISION (5) Overview of the supervisor's functions, responsibility, and over-all role in management in industry.
ETI 4452 (ITE 476) MAINTENANCE PLANNING (5) A study of the maintenance function in the industrial setting including the planning and implementation of preventative maintenance techniques.
$\qquad$ (ITE 477) APPLIED SYSTEMS RESEARCH (5) Basic industrial research techniques, operational production problems, matrix applications, inventory control, network analysis. Prerequisites: MAS 322 (or equivalent), MAS 345.
ETI 4620 (ITE 480) VALUE ANALYSIS (5) How to increase the value of products or services by holding quality while reducing costs, holding costs while increasing quality, or both with emphasis on material shortages. Specific steps of value analysis used to improve industrial problem solving.
ETI 4671 (ITE 485) ENGINEERING ECONOMY (5) The study of the economics of decision-making in business and industry. Includes an analysis of the concepts of break-even, least cost and the differences between alternatives when related to the time value of money. Budgeting, labor and the cost control, relative to the industrial engineering technologist, is also considered.
ETI 4691 (ITE 490) WOMEN IN INDUSTRY (5) Development of supervisory and technical skills for women in industrial operations. Practice in planning, organizing, decision-making, and employee direction with particular emphasis on the woman as supervisor, manager or in the technical profession.
ETI 4905 (ITE 495) INDEPENDENT STUDY (1-5) Specialized intensive study in an area of special interest to the siudent. Consent of faculty instructor required.
ETG 4930 (ITE 497) SPECIAL TOPICS (1-5) Specialized design program for a group of students who wish an intensive study of a topic not offered in the University. Consent of faculty instructor required.


## MECHANICAL ENGINEERING TECHNOLOGY

ETI 3411 C (MET 300) MANUFACTURING PROCESSES I (5) An introduction into the processes used to convert raw materials into finished products. Includes information on casting, forging, machining, and forming (includes lab).
ETM 3312 (MET 310) FLUID POWER (5) A study of the development, transmission and utilization of power through fluid power circuits and controls (includes lab). Prerequisite: EUS 350 or equivalent.
ETG 3510 (MET 351) DYNAMICS (5) Study of the motion of particles and members a applied to technical problems. Impact momentum and mechanical energy. Prerequisites: MAS 302, and CSN 351 or equivalent.
ETM 3801 (MET 353) BASIC MATERIALS (5) A study of ferrous and nonferrous metals and alloys. Includes atomic structure, bonding, and arrangement of atoms; phase diagrams; reactions within solid materials, and the interrelation of these to show how structure determines the properties of a material.
BCN 3560 (MET 360) MECHANICAL SYSTEMS IN CONSTRUCTION (5) A survey of plumbing, heating, air cond itioning and ventilation systems for building (includes lab).
ETM 3516 (MET 362) MECHANICAL DESIGN I (5) Design analysis of elementary machine members including shafting, springs, screws, belts, clutches, brakes, chains, welds, and rivets. Prerequisites: MET 351, CSN 352 or equivalent.
ETM 4205C (MET 459) APPLIED THERMODYNAMICS (5) Fundamental concepts of basic thermodynamics, including thermodynamic properties and processes, first and second laws of thermodynamics and application of the principles to energy conversion systems, introduction to heat transfer (includes lab). Prerequisite: MAS 302.
ETM 4225C (MET 460) ENERGY SYSTEMS (5) Review of theory and engineering aspects of conventional energy conversions systems, fuels and combustion, fossil fuels, and nuclear power plants, Mechanical Engineering aspects of direct energy conversion (includes lab). Prerequisite: MET 459 or equivalent.

ETM 4235C (MET 461) HEAT TRANSFER (5) Fundamental concepts of conduction convection and radiation heat transfer including practical numerical analysis, in addition to conventional analytical and empirical methods. Prerequisites: MAS 302, MAS 311 and MET 459 or equivalent.
ETM 4517 (MET 462) MECHANICAL DESIGN II (5) Continuation of the design analysis of elementary machine members including lubrication, bearings, and gearing. Introduction to advanced analysis techniques. Prerequisite: MET 362.
ETM 4640 C (MET 463) AIR CONDITIONING REFRIGERATION PRINCIPLES (5) The theory, operation and control of heat pump cooling and heating, chemical absorption cooling and steam jet refrigeration systems. Includes laboratory. Prerequisite: MET 459.
ETM 4641 (MET 464) AIR CONDITIONING DESIGN I (3) Psychrometry comfort; mechanical refrigeration; heat pumps; load calculators; cooling coil performance; heating and humidification; air distribution duct design fans. Prerequisite: MET 459.
ETM 4642 (MET 465) AIR CONDITIONING DESIGN II (3) Air conditioning systems; piping, pumps, hydronics; chillers, boilers, piping and combinations; cooling towers; heat recovery systems; automatic control; instruments, Prerequisite: MET 464.

ETM 4406C (MET 470) MECHANICAL LAB I (2) The most modern available testing equipment is used for experiment in hydraulics, fluid power equipment, internal combustion engines including the Stirling Cycle Hot Air Engine, gas turbines, steam turbines, boilers, centrifugal and axial fans, rotary and sliding van compressors, convection and radiation and solar energy. Prerequisite: MET 459.
ETM 4643C (MET 471) AIR CONDITIONING AND REFRIGERATION LAB (2) Experiments to be conducted in air conditioning, refrigeration, reverse cycle and strip heating, water cooling towers, automotive air conditioning, absorption refrigeration and solar energy applications to heating and cooling. Prerequisite: MET 459.

## TECHNOLOGY

OTH 3123 (TEY 320) TECHNOLOGY FOR OCCUPATIONAL THERAPY (5) The basic properties of woods and metals and the techniques used by occupational therapists in planning a project based on a hypothetical patient's problem.
(TEY 355) TECHNICAL COMMUNICATIONS (3) The goal of this course is to give the student an understanding of the role of graphic and written language in the conception and communication of technical ideas. The course is flexible in order to accommodate different backgrounds in the students. Basic graphical methods including multiview and isometric drawings; flow diagrams; charts, graphs and diagrams; graphical presentation of data; use of resource materials in the library, and standards for written reports are discussed.

## ROTC PROGRAMS <br> AIR FORCE ROTC

Florida International University, in cooperation with the University of Miami, offers Air Force ROTC to full-time students through an enrollment agreement between the two institutions. All classes and leadership labs are taught on the University of Miami campus. Questions regarding the Air Force ROTC program should be directed to the Department of Aerospace Studies at the University of Miami.
LOWER DIVISION PREPARATION:
Required Courses: Aerospace Studies 100 and 200 (see remarks) ( 4 semesters credit)
Remarks: Lower division requirements may be waived if the student (1) is a veteran, or (2) is selected for a two-year (upper division only) program and attends a six-week preparatory camp before enrolling in AIS 301.
UPPER DIVISION PROGRAM:
Required Courses:
AIS 301, 302
AIS 401, 402
Remarks: Upper Division Program is designed to prepare interested and qualified students for commissioning as officers in the U.S. Air Force upon graduation. Students are furnished uniforms and textbooks and receive $\$ 100.00$ per month during the academic year.

## ARMY ROTC PROGRAM

Florida International's ROTC Program is offered under a cross-enrollment agreement with the University of Miami. The classroom portion of the courses is taught at Florida International while the weekly drills are held at the University of Miami. Any questions should be referred to the Military Science Department at the University of Miami.

## LOWER DIVISION PREPARATION: <br> Required Courses: Military Science I and II (See remarks)

Remarks: The lower division preparation may be waived if the student (1) is a veteran or (2) attends a basic camp prior to entering MIL 301.

UPPER DIVISION PROGRAM:
Required Courses:
MIL 301, 302
MIL 401, 402
Remarks: The program is designed to select interested and qualified individuals for entry into the U.S. Army at a management level. During the program, students will receive $\$ 100 /$ month (for 10 months/year) and will attend a summer camp prior to commissioning as a second lieutenant.

## 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 precommissioning training during the summer. Financial Assistance and Flight Indoctrination Programs are available. Qualified seniors attend twelve weeks of training in the Officer Candidate Course (OCC) after graduation. For details, contact the Placement Office or the Marine Officer Selection Officer when he is on campus.

## COURSE OFFERINGS


#### Abstract

AIR FORCE ROTC (AIS 301) FIRST YEAR ADVANCED (3) (F) Professionalism, responsibilities, the Military Justice System; leadership theory and practices; management tools, principles, practice; problem solving. _ (AIS 302) FIRST YEAR ADVANCED (3) (W) Continuation of AIS 301. (AIS 401) SECOND YEAR ADVANCED (3) (F) Principal requisites for maintaining adequate national security forces. Functional processes and institutional structure involved in the formulation and implementation of U.S. defense policy. - (AIS 402) SECOND YEAR ADVANCED (3) (W) Political, economic and social constraints affecting the formulation of U.S. defense policy. The impact of both technological and international developments upon strategic preparedness and the overall defense policy-making process.

\section*{ARMY ROTC} $\qquad$ (MIL 301) MILITARY LEADERSHIP AND MOTIVATION (3) (ADVANCED MS III) A behavioral science approach to military leadership and motivation with emphasis on crisis-rriented organizations. -. (MIL 302) ADVANCED MILITARY III (3) Applied tactics; principles and fundamentals of tactical operations. Advanced leadership. - (MIL 401) ADVANCED MILITARY SCIENCE IV (3) World power relationships: world change and military implications. Applied leadership. Military administration and justice. - (MIL 402) ADVANCED MILITARY SCIENCE IV (3) Theory and dynamics of the military team. Applied leadership.


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Learning Resources Specialist. Leila A. WalkerAudiovisual Specialist.Joan Elefante
MEDIA CENTER, North Miami Campus
Associate Director David L. Wilson
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Associate Dean Mary L. Volcansek
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Economics ..... Babatunde Thomas
English Harry Antrim
Fine Arts
Art... Frank Wyroba
Music (Program) Philip H. Fink
Theatre (Program) Philip Giberson
History Darden Asbury Pyron*
International Relations Ken I. Boodhoo
Liberal Studies ..... Richard Dwyer*
Mathematical Sciences Samuel S. Shapiro
Modern Languages ..... Frances Aid
Philosophy and Religion. ..... George Kovacs
Physical Sciences John Sheldon
Political Science Joyce R. Lilie
Psychology Ronald S. Tikofsky
Sociology and Anthropology Barry Levine

* New appointments to be made by September 1, 1977


## FACULTY

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BERK, TOBY, Ph.D. (Purdue University), Associate Professor, Mathematical Sciences
BLUM, MILTON, Ph.D. (New York University), Professor, Psychology
BOODHOO, KEN, Ph.D. (University of the West Indies, Jamaica), Chairperson and Associate Professor, International Relations
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BRAIN, CARLOS, Ph.D. (West Virginia University), Assistant Professor Mathematical Sciences
BROWN, JERRY, Ph.D. (Cornell University), Associate Professor, Sociology and Anthropology
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CALLAWAY, KATHLEEN, M.A. (University of Virginia), Assistant Professor, English CASEY, THOMAS, JR., Ph.D. (Tulane University), Associate Professor, Economics CHAI, CHARLES, Ph.D. (University of Connecticut), Associate Professor, Political Science CHEN, CHUN-FAN, Ph.D. (University of Michigan), Assistant Professor, Biological Sciences
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COMFORT, JOHN C., Ph.D. (Case Western Reserve University), Assistant Professor, Mathematical Sciences
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CROSBY, JAMES, Ph.D. (Yale University), Professor, Modern Languages
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| Associate Dean. | George Sutija |
| Assistant Dean. | Donald W. Fair |
| Chairpersons: |  |
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| Management | Steven Altman |
| Policy, Marketing, an | J.A.F. Nicholls |
| Public Administration | George Sutija |

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Associate Dean. Paul D. Gallagher
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General Professional Education \& Educational Administration................. Peter F. Oliva
Secondary Education................................................................... Robert Shostak
Psycho-Educational Services........................................................ Donald C. Smith
Childhood Education.............................................................. George S. Morrison
Vocational \& Adult Education................................................ Dominic A. Mohamed

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Medical Technology.................................................................. Margaret E. Waid
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Occupational Therapy (Acting).......................................................... Beth Weiner
Physical Therapy........................................................................ Roger C. Skovly
Social Work........................................................................ L. Yvonne Bacarisse

## FACULTY

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

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| SPRING QUARTER, 1978 |  |
| :---: | :---: |
| January 2 | Last Day for Receipt of Applications for Foreign Students Applying From out of the Country |
| March 7 | Last Day for Receipt of Applications for Regular Admission to Spring Quarter |
| March 27 | Registration for New and Special Students |
| March 28 | Classes Begin |
| April 3. | Last Day to Complete Late Registration Last Day of Official Drop and Add Period Last Day to Drop Courses or Withdraw from the University without Incurring a Financial Liability |
| April 10 | Last Day to Pay Fees Without a $\$ 25.00$ Late Fee |
| April 17. | Last Day to Apply for Spring Quarter Graduation |
| Aprit 24. | Last Day to Pay Fees to Avoid Cancellation of Enrollment |
| May 8. | Last Day to Drop a Course With a Grade of DR Last Day to Withdraw from the University with WI Grade |
| May 15. | Last Day to Reinstate Cancelled Enrollments ( $\$ 25.00$ Reinstatement Fee) |
| May 29 | Memorial Day Holiday (University Closed) |
| June 9. | Classes End |
| June 10 | Official Commencement Exercises |
| June 13. | All Grades Due in Registration Office by 12:00 Noon |
| SUMMER QUARTER, 1978 |  |
| March 27 | Last Day for Receipt of Applications for Foreign Students Applying from out of the Country |
| May 30. | Last Day for Receipt of Applications for Regular Admission to Summer Quarter |
| June 19 | Registration for New and Special Students |
| June 20 | Classes Begin |
| June 26 | Last Day to Complete Late Registration Last Day of Official Drop and Add Period Last Day to Drop Courses or Withdraw from the University Without Incurring a Financial Liability |
| July 3 | Last Day to Pay Fees Without a $\$ 25.00$ Late Fee |
| July 4 | Independence Day Holiday (University Closed) |
| July 10 | Last Day to Apply for Summer Quarter Graduation |
| July 17 | Last Day to Pay Fees to Avoid Cancellation of Enrollment |
| July 31....................... | Last Day to Drop a Course With a Grade of DR Last Day to Withdraw from the University With WI Grade |
| August 7. | Last Day to Reinstate Cancelled Enrollments ( $\$ 25.00$ Reinstatement Fee) |
| August 25. | Classes End |
| August 29. | All Grades Due in Registration Office by 12:00 Noon |

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[^0]:    Anthropology
    ANT 4362 (ANT 429) Mayan Civilization
    Economics
    ECS 3440 (ECO 316) Economics of Central America
    History
    LAH 3930 (HIS 385-389) Regional History: Latin America
    International Relations
    INR 3245 (INR 342) International Relations of Latin America
    GEA 3400 (INR 362) Population and Geography of Latin America
    Philosophy and Religion
    PHH 3042 (PHI 318) Latin American Philosophies
    REL 4481 (REL 426) Contemporary Latin American Thought
    Political Science
    CPO 3303 (POS 304) Government and Politics of South America
    CPO 3333 (POS 316) Government and Politics of Central America
    CPO 3304 (POS 326) Theories of Latin American Politics

[^1]:    (ACC/BUA 300) ACCOUNTING FOR DECISIONS (5) (F,S,W,SS) Accounting concepts and techniques essential to administration of a business enterprise and the determination of income and financial position, asset and equity accounting in proprietorships and corporation.
    ECO 3003 (ECO 301/BUA 310) ECONOMICS, MAN AND SOCIETY (5) (F,S,W,SS) Relationship of economics to individual and group action. Identification of economic and non-economic objectives and problems. Analysis of economic behavior of individuals, business firms, public agencies, and interest groups. Public issue interpretation in the light of economic theory. STA $3132 /$ STA 3013 (MAS/BUA 304) QUANTITATIVE METHODS FOR ADMINISTRATION (5) (F,S,W,SS) The use of statistical tools in management, introduction of probability, descriptive statistics and statistical inference as included.
    FIN 3403 (BUA 301) FINANCIAL MANAGEMENT (5) (F,S,W,SS) The financial functions of obtaining capital, managing assets, and of expending resources are examined from the perspective of a manager, as well as a financial officer. Attention will also be directed to some aspects of security market operations. Prerequisite: ACC 300 or equivalent.

[^2]:    EDF 3827 (EDU 305) SCHOOLING IN AMERICA (5) (F,W,S,SS) Systematic analysis of the contemporary enterprise of schooling and development of demonstrated understanding of the nature of educational systems and the impact of political, legal, fiscal, and cultural issues upon these systems.
    EDG 3321 (EDU 311) GENERAL TEACHING LABORATORY I-BASIC TEACHING SKILLS (5) (F,W,S,SS) Practice in generic teaching skills, techniques and strategies basic to all age levels and subject matter areas. Lecture, seminar and laboratory. EDG 3322 (EDU 312) GENERAL TEACHING LABORATORY II-HUMAN RELATIONS SKILLS (5) (F,W,S,SS) Development of human relations skills to facilitate interaction and prepare students to deal with individuals and groups in a multi-ethnic urban classroom.
    EDF 5287 (EDU 505) INSTRUCTIONAL TECHNOLOGY: SYSTEMS APPROACH (4) (F) Development of instructional competencies with an emphasis on the use of a systems approach in the design, implementation and evaluation of programs. EDG 5325 (EOU 506) ANALYSIS OF TEACHING (4) (W) Examination of the research on instruction in teaching and the development of skills in systems of both observation and analysis of teacher behavior.

[^3]:    CCJ 3020 (CRJ 300) AN OVERVIEW OF CRIMINAL JUSTICE SYSTEMS (5) A survey of the agencies and processes involved in the administration of justice. Interrelationships and functions of the legislature, police, prosecutor, defender, courts, and corrections are examined.

[^4]:    CCJ 6055 (CRJ 600) SEMINAR IN THE CRIMINAL JUSTICE SYSTEMS (5) Advanced study of problems, trends and critical issues involved in the administration of criminal law as a means of social control. Emphasis will be placed on systematic relationships and systems theory building.
    CCJ 6477 (CRJ 601) INFORMATION SYSTEMS FOR CRIMINAL JUSTICE (5) An advanced seminar in the survey and application of electronic data of use to the criminal justice sector. Prerequisite: MAS 316 or permission of instructor.
    CCJ 6476 (CRJ 602) COMPREHENSIVE CRIMINAL JUSTICE PLANNING (5) The planning environment of criminal justice will be examined. Emphasis will be placed on the role and methods of managing and organizing the planning process applicable to systematizing criminal justice. Case studies will be developed.
    CCJ 6706 (CRJ 603) APPLIED STATISTICAL TECHNIQUES FOR CRIMINAL JUSTICE (5) Statistical tools applicable to criminal justice research will be examined. Emphasis will be placed on developing an understanding of the various techniques and their application. The use of computerized statistical packages will be present. (MAS 307-308 or permission of instructor)

[^5]:    *In addition to the admission policies for programs listed above, the School of Hotel, Food and Travel offers a special educational program leading toward a Bachelor of Science degree with a major in General Hospitality Management for some students who have not yet completed two years of college, but who have at least: a) a high school diploma; b) a minimum of 40 quarter hours of credit earned through documented life experience, CLEP, previous college work, and military schools; c) permission of the Dean after a personal interview; d) and who will enroll concurrently in a junior college to satisfy their remaining general education requirements. Specifically, the students will complete at last 90 quarter hours in addition to the program above and including 9 quarter hours each in the areas of social science, natural science, English composition and humanities; 4 quarter hours in mathematics, and 14 quarter hours of electives in the above areas. Enrolled students are required to make satisfactory progress toward completion of both the general education requirements and the required professional courses and satisfy all other University requirements for a bachelor's degree. Progress will be monitored each quarter or semester by the School's Academic Advisor and all general education requirements must be completed prior to the student's last quarter of residence.

