Acceptance Letter

1965-66

UNIVERSITY OF SOUTH FLORIDA
VISITING THE UNIVERSITY

Prospective students are invited to visit the University whenever possible. Normal office hours are 8 a.m. to 5 p.m., Monday through Friday. Given advance notice, the Registrar's Office will arrange tour guides for visiting groups.

The University is located on Fowler Avenue (State Route 582) approximately two miles east of Nebraska Avenue (U.S. Route 41).

CORRESPONDENCE

Correspondence regarding various phases of the University program should be directed as follows:

Application and admission information
   Director of Admissions, Registrar's Office

Conferences and workshops
   Center for Continuing Education

Courses and programs for freshmen
   Office of the Dean, College of Basic Studies

Courses and programs for upperclassmen and graduates
   Office of the Dean of the appropriate college

Evening classes
   Center for Continuing Education

Financial assistance
   Director of Financial Aids

Graduate study
   Office of the Dean of the appropriate college

Gifts and bequests
   University of South Florida Foundation

Facilities for handicapped students
   Dean of Student Affairs

Housing assistance
   Housing Office, Auxiliary Services

Placement and employment
   Division of Personnel Services

Transcripts and records
   Registrar's Office

General Information
   Registrar's Office

University of South Florida
   Tampa, Florida 33620
   University Telephone: 988-4131
   (Area Code 813)

The University of South Florida reserves the right to withdraw or change the announcements included in this Bulletin.
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Calendar</td>
<td>5</td>
</tr>
<tr>
<td>General Information</td>
<td>9</td>
</tr>
<tr>
<td>Admission</td>
<td>13</td>
</tr>
<tr>
<td>Academic Policies and Procedures</td>
<td>18</td>
</tr>
<tr>
<td>Student Welfare</td>
<td>33</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>45</td>
</tr>
<tr>
<td>College of Basic Studies</td>
<td>48</td>
</tr>
<tr>
<td>College of Business Administration</td>
<td>51</td>
</tr>
<tr>
<td>College of Education</td>
<td>55</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>66</td>
</tr>
<tr>
<td>College of Liberal Arts</td>
<td>71</td>
</tr>
<tr>
<td>Graduate Study</td>
<td>84</td>
</tr>
<tr>
<td>Course Descriptions</td>
<td>87</td>
</tr>
<tr>
<td>Glossary</td>
<td>162</td>
</tr>
<tr>
<td>University Administration</td>
<td>163</td>
</tr>
<tr>
<td>Academic Staff</td>
<td>167</td>
</tr>
<tr>
<td>Index</td>
<td>179</td>
</tr>
<tr>
<td></td>
<td>APRIL</td>
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ACADEMIC CALENDAR

TRIMESTER III, 1964-65
(including III-A and III-B)

April 6, Tuesday
April 22-23 Thursday-Friday
April 26, Monday
April 28, Wednesday

May 5, Wednesday
May 10, Monday

May 14, Friday
May 25, Tuesday
June 2, Wednesday
June 9, Wednesday
June 10, Thursday

June 10-11 Thursday-Friday
June 11, Friday
June 14, Monday

June 17-18 Thursday-Friday
June 21, Monday
June 23, Wednesday
June 30, Wednesday
July 5, Monday
July 6, Tuesday

July 22, Thursday
July 27, Tuesday
July 29, Thursday
July 31, Saturday

July 31-August 5 Saturday-Thursday
August 3, Tuesday
August 4, Wednesday

August 4-5 Thursday-August 5
August 5, Thursday
August 6, Friday

Last day to apply for admission, Trimester III and III-A.
Orientation and registration of cleared students (by appointment), Trimester III and III-A.
Classes begin for Trimester III and III-A.
Last day to register or to change classes, Trimester III and III-A.
Last day to drop courses without penalty, III-A.
Last day to apply for degree to be earned at end of Trimester III-A.
Last day to drop courses without penalty, III.
Last day to apply for admission, Trimester III-B.
Last day to drop III-A courses with or without penalty.
Trimester III-A classes end.
Final grades for all graduating seniors (III-A) due in Registrar's Office.
Final examinations, Trimester III-A.
Mid-term break, Trimester III.
Trimester III-A ends.
All final grades for III-A due in Registrar's Office 8:00 a.m.
Registration of cleared students (by appointment), Trimester III-B.
Classes begin for Trimester III-B.
Last day to register or to change classes, III-B.
Last day to drop courses without penalty, III-B.
Independence Day holiday.
Last day to apply for degree to be earned at end of Trimester III and III-B.
Last day to drop courses with or without penalty, III.
Last day to drop courses with or without penalty, III-B.
Trimester III classes end.
Final grades for all graduating seniors (III) due in Registrar's Office.
Final examinations, Trimester III.
Trimester III-B classes end.
Final grades for all graduating seniors (III-B) due in Registrar's Office.
Final examinations, Trimester III-B.
End of Trimester III and III-B.
All final grades for III and III-B due in Registrar's Office.

(See footnotes at end of calendar, page 7)
August 6, Friday
September 1-4
   Wednesday-Saturday
September 6, Monday
September 7, Tuesday
September 9, Thursday
September 24, Friday
October 4, Monday
November 25-26
   Thursday-Friday
December 3, Friday
December 10, Friday
December 13, Monday
December 13-18
   Monday-Saturday
December 18, Saturday
December 20, Monday

TRIMESTER I, 1965-66

Last day to apply for admission, Trimester I.
Orientation and registration of cleared students (by appointment).
Labor Day holiday.
Classes begin.†
Last day to register or to change classes.
Last day to drop courses without penalty.♦
Last day to apply for degree to be earned at end of Trimester I.
Thanksgiving holiday.

TRIMESTER II, 1965-66

Last day to apply for admission, Trimester II.
Orientation and registration of cleared students (by appointment).
Classes begin.†
Last day to register or to change classes.
Last day to drop courses without penalty.♦
Last day to apply for degree to be earned at end of Trimester II.
Gasparilla Day, holiday
Good Friday, holiday
Last day to drop courses with or without penalty.‡
Classes end.
Final grades for all graduating seniors due in Registrar's Office.
Final examinations.

TRIMESTER III, 1965-66
(including III-A and III-B)

Last day to apply for admission, Trimester III and III-A.
Orientation, and registration of cleared students (by appointment), Trimester III and III-A.
Classes begin, Trimester III and III-A.†
Last day to register or to change classes, Trimester III and III-A.
Last day to drop courses without penalty, III-A.♦
Last day to apply for degree to be earned at end of Trimester III-A.
Last day to drop courses without penalty, III.♦

(See footnotes at end of calendar, page 7)
May 31, Tuesday
June 8, Wednesday
June 15, Wednesday
June 16, Thursday
June 16-17, Thursday-Friday
June 17, Friday
June 20, Monday
June 21-22, Tuesday-Wednesday
June 23, Thursday
June 27, Monday
July 4, Monday
July 5, Tuesday
July 11, Monday
July 29, Friday
August 5, Friday
August 8, Monday
August 8-13, Monday-Saturday
August 13, Saturday
August 15, Monday
August 5, Friday

Last day to apply for admission, Trimester III-B.
Last day to drop courses with or without penalty, III-A.
Trimester III-A classes end.
Final grades for all graduating seniors (III-A) due in Registrar's Office.
Final examinations, Trimester III-A.
Mid-term break, Trimester III.
Trimester III-A ends.
All final grades for III-A due in the Registrar's Office, 8:00 a.m.
Orientation, and registration of cleared students (by appointment), Trimester III-B.
Classes begin, Trimester III-B.
Last day to register or to change classes, III-B.
Independence Day holiday
Last day to drop courses without penalty, III-B.
Last day to apply for degree to be earned at end of Trimester III and III-B.
Last day to drop courses with or without penalty, III and III-B.
Classes end, Trimester III and III-B
Final grades for all graduating seniors (III and III-B) due in Registrar's Office.
Final examinations, III and III-B.
End of Trimester III and III-B.
All final grades for III and III-B due in Registrar's Office, 8:00 a.m.
Last day to apply for admission, Trimester I, 1966-67.

† A five dollar ($5.00) late fee will be charged all persons completing registration on or after the first day of classes.
* After the last day to drop a class without penalty, progress in the dropped class will determine grade recorded. This is also the last day to remove an "X" grade (or to apply to remove CB 100 or 200 "X" grade) of the preceding term (not applicable in III-A and III-B).
† Dropping courses after this date results in automatic failure.
GENERAL INFORMATION

History

The University of South Florida was founded December 18, 1956, by the State Board of Education, following more than two years of preparatory study by the State Legislature, the Board of Education, and the State Board of Control (now the Board of Regents). When it was opened to a charter class of 2,000 freshmen on September 26, 1960, it became the first state university in the United States to be totally planned and initiated in this century. It also represented the first step in a broad and comprehensive expansion of the State University System of Florida.

This system of public universities now includes the University of Florida in Gainesville, Florida State University and Florida A & M University in Tallahassee, the University of South Florida, Florida Atlantic University in Boca Raton and the Florida Institute for Continuing University Studies, a statewide extension network. New universities are being planned near Pensacola and near Orlando. In addition, there are 29 public junior colleges in population centers throughout the state.

More than 750 students graduated from the University of South Florida in 1963-64. Total enrollment for the fall of 1965 will be approximately 8,000.

Accreditation

The University has been formally recognized as a new institution by the Southern Association of Colleges and Schools, the official accrediting agency for all educational institutions in the South.

The Campus

On a 1,734-acre campus eight air miles northeast of downtown Tampa, the University is ideally located for steady growth and development in the heart of an expanding metropolitan area having nearly a million people within a 30-mile radius. The campus is midway between U. S. Highways 41 and 301 on State Highway 582. Interstate 75, now under construction, will pass two miles to the west.

The physical plant of the University, now including 16 major academic and residence buildings, is currently valued at more than $18 million. The buildings are of similar, modern architectural design and all are completely air conditioned. Construction will begin on new buildings costing about $10 million during 1965 with completion in 1966. Major buildings now in use are:

Administration Building, housing administrative and business offices and a number of special service units of the institution;

Library, a five-story structure designed for 250,000 volumes in open stacks;

University Center, with student and faculty offices, meeting rooms, recreation areas and classrooms, as well as a cafeteria, post office, and the University Bookstore;
**GENERAL INFORMATION**

*Theatre*, seating 550 persons for cultural events and also serving as a lecture and teaching auditorium;

*Chemistry Building*, with classrooms and laboratories for chemistry and offices for faculty;

*Life Sciences Building*, housing the University’s programs in biological sciences;

*Fine Arts-Humanities Building*, with separate wings for humanities, art and music;

*Physics Building*, housing physics, astronomy, and mathematics, and the Planetarium; and

*Residence Halls and Service Core*, housing 1,967 students and providing central dining, recreational and service facilities in eight separate but coordinated buildings.

Major buildings scheduled for completion in 1966 are:

*Business Administration Classroom Building*, which will house the Dean of the College of Business Administration, faculty, classrooms, and 500-seat teaching auditorium;

*College of Education Classroom Building*, which will house the Dean of the College of Education, faculty, classrooms, an auditorium seating 200, and an Instructional Materials Center;

*Science Technology Building*, which will house the Dean of the College of Engineering, faculty, classrooms, laboratories – including a 6,000-square-foot roof laboratory; and

*Physical Education Classroom Building*, which will house the Director of the Physical Education Division, faculty, classrooms, gymnasium, activities area, and a swimming pool.

**Internal Organization**

The University is organized internally in five colleges, with supporting services designed for this basic pattern. The five colleges are: Basic Studies, in which all freshmen and sophomores enroll and from which a minimum of 36 credit hours must be earned during the first two years; Business Administration, which offers majors in such fields as economics, accounting, management, marketing, and office administration; Education, which provides teacher training in all major teaching fields; Engineering, which is a new addition to the University’s programs; and Liberal Arts, which offers programs in the areas of fine arts, natural sciences, social sciences, and languages and literature.

Bachelor’s degrees are offered by all the University’s colleges, with major programs available in more than 40 different areas. The master of arts degree is offered in elementary and secondary education, and in some areas of business, liberal arts and engineering.

The University’s teaching faculty, numbering more than 300, represents all major areas of higher learning, and about 65 per cent hold doctoral degrees.

For administrative purposes, the University is organized into the three broad areas of academic affairs, student affairs, and administration and business affairs. The administrative officers who head these three units serve with the President at the Executive Committee, the principal policy-making and advisory body of the University. The President is responsible to the Board of Regents for internal policy and procedure of the University. In addition to the Executive Committee, advice and assistance to the President in the determination of policy is given by the University Senate, comprising elected representatives from all areas of the University community, including the student body.
The Foundation

The University of South Florida Foundation is a non-profit corporation whose purpose it is to provide supplementary funds beyond the basic needs of the University by supporting programs not normally receiving state funds. Examples are funds for student aid, exceptional research needs, distinctive library collections, and many others. Both current gifts and bequests for the University's use should be made through the Foundation. Membership in the Foundation is open to all persons interested in the welfare and development of the University.

The Foundation is serving as the temporary headquarters of the Alumni Association, which was organized in December, 1963, upon graduation of the first class.

Purposes and Goals

A university is defined as an institution of higher learning consisting of several schools or colleges and offering programs in the liberal arts as well as in a number of professional areas. It is, however, more than this; it is a place where new knowledge is sought, and old knowledge is synthesized in new ways through research and scholarship for the benefit of mankind.

It is not, however, a trade school where the detailed techniques of a trade can be learned by practice. It deals with professional areas more in theory than in practice, providing the broad background and understanding necessary to the development of specific skills. In this way it develops the intellectual judgements necessary to deal with constantly changing problems of a profession.

A university should not be regarded simply as a place to prepare for a profession, important as this may be. One of its most important functions is to provide all its students with a better understanding of life in a rapidly changing world. Man is surrounded by a natural environment and confronted by rapidly increasing knowledge of that environment. These are matters of human affairs which he needs to know about as an educated citizen and as a professional person. Hence, a university has an important obligation to provide in its educational program for all students those common elements which make for more responsible and responsive living.

A university is also a servant of the society which supports it, and at the same time it is one of the leaders of that society. It is the medium through which the greatest wisdom of the past and the living spirit of the present are passed on to new generations of young people to be used by them as leaders in the further advances of society toward goals of better and finer living.

In the classroom, subjects are dealt with objectively, critically, analytically and constructively, as well as inspirationally and creatively. The student is expected to learn to be analytical as well as creative in his own approach and to understand that such activities, to be constructive, must be carried out with a minimum of emotional bias and prejudice. He must learn to understand that in a democracy points of view will differ and there may be no wholly right or wrong answers to many questions, only better or worse answers from the viewpoint of society or the individual. He must be prepared to examine objectively his own position on such matters and develop for himself a tenable position or philosophy with which he can continue to live.

The University of South Florida, in trying to attain this character, has set up for itself the primary goal of placing "Accent on Learning" as its most important reason for being. Toward that end, the University has these specific objectives:

1. To provide the citizens of Florida with an outstanding public institution of higher learning, giving leadership and service in the intellectual, cultural, economic and scientific interests of the state.
II. To create a community of scholars dedicated to teamwork in the search for truth, the exchange of ideas and the establishment of high standards of intellectual inquiry and creative activity.

The faculty has been carefully chosen for its training, competence and ability to teach. In an unusual sense it is a team. The faculty has already shown its outstanding ability to carry on creative work and significant research and to provide opportunities for able students to learn the meaning of, and assist in, such work as part of the process of education.

III. To provide opportunity for the development and training of the mind which promotes maturity, objectivity and creativity.

All degree programs of the University are designed to promote the following general aims for all students: (1) the necessary skills in writing, speaking, reading and listening; (2) self-reliance through the ability to think clearly; (3) understanding of oneself and one’s relationship to others; (4) growing convictions based on the search for truth; (5) understanding and appreciation of our cultural, social, scientific and spiritual heritage; (6) intelligent approach to local, national and world problems leading to good citizenship and leadership in life; (7) some practical understanding of another language; (8) professional competence based on high ethical standards; and (9) healthful development of the body.

IV. To provide a broad cultural and basic educational pattern for all students, together with programs of liberal, pre-professional and professional studies, and to supplement these with opportunities for independent development and work experience.

Recent studies indicate a strong trend in American liberal arts colleges toward the inclusion of more professional preparation in their programs and, conversely, for the professional colleges to include more general and liberal studies in theirs. Thus, the professional and the liberal arts colleges are coming closer together in the effort to provide a continuum of studies which includes the general, the liberal and the professional in the same program. The University of South Florida is attempting this in a way that provides greater unity of knowledge for the student.

For each student the educational program combines preparation in basic studies with work in the liberal arts and the sciences and with professional studies. Ideally, a student’s program will be devoted about one-third to basic studies, one-third to professional studies and one-third to elective and related choices.

A LOOK AT THE FUTURE

The University of South Florida’s location in a large and expanding metropolitan area, coupled with the broad growth and development of Florida in the space age, suggests a future of rapid change and expansion for the University. It is estimated that more than 10,000 students will be enrolled by 1968. Construction will continue at a rapid pace each year for several years to come. During 1965-66 alone, some $10 million in new construction will be completed on the campus. New faculty are joining the University staff at a steady rate. In every respect, the University of South Florida is a vital part of the state’s inevitable growth, and it is destined to become a large, multi-purpose university.
ADMISSION

The University of South Florida requires definite ability and competency on the part of students. Those having these abilities and skills and who are seriously interested in earning an education can expect to succeed in college. Students who lack them are almost sure to encounter serious difficulty. Until such students have corrected some of their academic deficiencies by private study, review work in high school, or perhaps study in a junior college, they may not be accepted.

Whether or not students have a reasonable possibility of being admitted to and succeeding in the University will be appraised by the Registrar. He will admit students who meet the formal requirement of the University for admission. He will suggest other possibilities to those who do not. He will refer borderline decisions to the University Committee on Academic Standards. This committee's decisions will be final.

The University requires a medical examination from each full-time (7 hours or more) student filed with the Student Health Service. Full-time students must also have had recent immunizations against smallpox, tetanus and polio. The University may refuse admission to a student whose record shows previous misconduct not in the best interest of citizens of the University community.

A student from a non-accredited or disaccredited Florida secondary school may be admitted provided he meets all of the requirements for students from accredited Florida secondary schools and, in the judgement of the Academic Standards Committee, can be expected to do successful academic work.

When students apply for admission to any university, they are asked to have a transcript of their previous academic work sent to the registrar. When students leave an institution, they may request a transcript of work done there. College or university transcripts show courses taken, grades and credits earned. High school transcripts show rank in high school graduating class which indicates how the student's grades compare with others of his class. College or university transcripts show grade point average or ratio, which is a numerical index showing the proportion of A's, B's, C's, D's, and F's the student earned. Such records may also show the results of standard tests students took prior to being admitted to the college or university, or other tests required of all students. Such scores are most frequently expressed as percentiles indicating the percentage of all other students taking the same tests who scored below the student in question.

ADMISSION TO THE UNIVERSITY

FRESHMEN

It is recommended that all prospective freshmen who wish to be admitted to the University of South Florida earn at least 14 high school units in the areas of English, mathematics, foreign languages, social studies, and natural sciences.
Freshmen enter the University from four principal sources, and special qualifications are established for each. Borderline students are urged to begin in June rather than waiting until September.

The four sources are:

1. Graduates of Florida high schools, who must have a favorable character recommendation from officials of their high school, must have an overall average of "C" or better in all academic subjects and must earn an acceptable score on the Florida State-Wide Twelfth Grade Tests.

2. Graduates of high schools outside Florida, who must have a favorable character recommendation from officials of their high school, must have grades placing them in the upper 40 per cent of their graduating class and must have acceptable test scores (examples: 900 or higher on the Scholastic Aptitude Test - 450 or higher on the verbal portion).

3. High school graduates by Armed Forces Tests of General Education Development (G.E.D.), who must have a favorable recommendation from their employer, must have an acceptable high school record for the portion attended and must have a minimum individual score (percentile) of 50 and a minimum average of 60 on the G.E.D. test.

4. Early applicants, who wish to enroll prior to high school graduation, must have outstanding high school records (minimum average of 3.5, or B+), must show high performance on tests such as the College Qualification Test and must score a minimum of 425 on the Florida State-Wide Twelfth Grade Tests. Early applicants are interviewed by a number of University officials and are comprehensively tested before their applications are approved.

TRANSFER STUDENTS

Degree-seeking students wishing to transfer to the University must have a minimum average of "C" for all college work previously attempted and must be eligible to return to the last institution in which they were enrolled. Those with less than 60 hours of transferable college credit must meet the University's freshman entrance requirements. Non-degree seeking transfer students who wish to change to a degree-seeking status must first meet the degree-seeking admission requirements or earn a minimum of 15 credit hours with a minimum average of 2.5 (C+).

After a prospective transfer student has applied to the University and all official records are received directly from each institution involved, his records are evaluated to determine how many of his credits are transferable. Only work in which the student has earned a grade of "C" or better may be transferred. The grade point ratio from non-Florida state universities does not transfer. Credit will not be awarded for college level G.E.D. tests, for basic R.O.T.C., military science, nor for courses given credit without a grade such as "Orientation".

Final determination regarding the applicability of transferred credits to graduation requirements is up to the college concerned.

The final 60 hours of work taken for the bachelor's degree must be earned in a senior institution, and a maximum of 30 hours of extension and correspondence courses and Armed Forces credit can be applied toward a degree.

Service school courses will be evaluated with reference to the recommendation of the American Council on Education when official credentials have been presented. Such recommendation, however, is not binding upon the University.

A transient student interested in enrolling for a summer session or for one term only before returning to his parent institution should write for transient application papers. No evaluation of transferred credit is prepared for transient students.

A transfer student from a state-operated junior college or university may
satisfy the basic studies requirements of the University of South Florida by completing (before transfer) the general education program prescribed by that institution. Graduation for those attending a junior college is recommended. Students' general education programs in private colleges and out-of-state schools, and students with incomplete general education programs from state institutions will be evaluated on an individual basis.

Graduates of accredited junior colleges are not required to take additional work in physical education.

Students already graduated from accredited four-year institutions who apply for admission to work toward another degree will not be required to meet the regular basic studies requirements. The Registrar's Office will review the transcripts of such students and, if there are glaring deficiencies, possibly recommended additional work in some areas.

Qualified transfer students will be admitted to an upper level college by the Admissions Office.

MATURE STUDENTS

Mature persons (25 or older) may, by providing evidence that they are qualified to do the proposed work, enroll as non-degree students (in day classes or in the evening sessions) without meeting the requirements established for degree programs. They may transfer to degree programs later if their work as non-degree students indicates the likelihood of success. Work taken for credit as a non-degree student may later be counted in a degree program if it is applicable and of satisfactory grade.

EVENING SESSION STUDENTS

While serving degree-seeking and non-degree seeking students, the Evening Sessions of the University of South Florida offer only courses for full academic credit. Any student accepted as a candidate for a degree may enroll in courses offered in the evening which are appropriate to this program. The admissions requirements and achievement levels in the day courses and in the evening sessions are the same. The evening sessions are more fully explained on page 46.

SPECIAL CONSIDERATION

Freshmen or transfers with above average ability who do not meet all the aforementioned requirements may apply for special consideration. The application accompanied by a full letter of explanation and supporting information should be mailed to the Director of Admissions. It should be noted, however, that the regular guidelines are regarded as sound for the student and for the institution. Few exceptions are made.

Whenever a student is admitted after special consideration, he will usually be placed on Academic Warning or Final Academic Warning; therefore, he should be familiar with the meaning of these terms which are described on page 18.

Procedures for Applying

Application papers may be requested as early as 12 months prior to anticipated enrollment. Most of the secondary schools in Florida have application forms. Public school teachers wishing courses for certificate extension and other non-degree seeking students who feel that they fall into a special category should indicate the category in their initial inquiry and should inquire about special application forms.

There are definite advantages in applying early. Housing priority is explained elsewhere in the catalog. Each trimester has its own application deadline, usually
ADMISSION

about 30 days prior to the first day of classes for the fall and about two weeks prior to classes for other trimesters. The application will be acknowledged and qualified students will be accepted. Upon receipt of test scores and evidence of completion of high school work, or upon the arrival of the final college transcript, final decisions will be made and the candidate notified.

All academic records must be mailed to the University of South Florida directly from the appropriate institution (i.e., high school record from high school attended; college record from each college attended; G.E.D. test scores from appropriate high school or State Department of Education; U.S.A.F.I. scores from Madison, Wisconsin; S.A.T. scores from high school or central office).

A letter of recommendation from the employer should be secured and mailed to the Registrar if the applicant has been employed for more than six months. An applicant who has not attended a school or been employed within 12 months preceding the application should write a letter to the Registrar describing how the time was spent (as a housewife, disabled, etc.).

In an effort to assist high school and college guidance counselors, the University mails transcripts — indicating credit transferred, courses taken at the University, and grades earned — to high schools and junior colleges for their former students.
REAPPLICATION

Any student who has been enrolled at the University of South Florida during a given calendar year, upon resuming his studies will not have to reapply. Any student who has not been enrolled at the University during the calendar year in which he wishes to re-enter (exception: those enrolled in Trimester I) will be classified as a Former Student Returning and must secure from the Registrar’s Office a special application for students in that category. Failure to submit these papers a month prior to the anticipated date of enrollment will result in late registration and will require a late fee.

A student who has submitted application papers for a previous term but has never enrolled at the University should request papers to “up-date” his file. Failure to up-date the application a month prior to the application date of enrollment will result in late registration and will require a late fee.

All students who withdraw while on “Final Academic Warning” must secure the approval of the Academic Standards Committee before they can register for a subsequent trimester.

Summer Advising Conferences

It is anticipated that new students entering the University in September will attend one of the advising conferences held each summer. The conference is designed to acquaint students with the University and with each other and to accomplish in an organized and efficient manner those steps necessary to the completion of registration. Advising conferences are also held for new students entering the University for the winter or summer trimesters.

New students’ participation in the advising program is urged because it assures maximum attention to the curricular and extracurricular needs of the individual student. Some testing is included in the conference principally for the purpose of providing advisers with information about the student. Such information is necessary to realistic planning and the choice of appropriate courses.

The conference also facilitates the transition from high school to college by assisting the student toward an understanding of the objectives of and opportunities in the University community. It further assures a specified period of time for private conference with a faculty adviser with a view to increasing the student’s understanding of the programs and courses available through the University.

Orientation Testing

After admission, all students who are working toward an academic degree will take a battery of tests, the results of which will be used in advising them throughout their academic careers. This battery consists of measures of academic aptitude, reading and writing ability and measures of some of the other skills needed by college students.

On the basis of these results some students may be advised to enroll for independent study; other students may be advised to seek remedial help concerning deficiencies these tests reveal. The tests are usually taken either in the counseling conferences for new students in the summer, or during the orientation week if not taken earlier. Students not enrolled in a degree program will be urged to take the full battery of orientation tests.

The orientation test results are made available to advisers. Students concerned about their performance on these tests may talk with their advisers about the matter.
ACADEMIC POLICIES AND PROCEDURES

The University is concerned that each student make reasonable progress toward his educational goal, and will aid each student through guidance and faculty advising. Whenever this progress is hindered, blocked or interrupted, the University will, through additional guidance, special counseling or restrictions on the student's activities, aid the student to resume satisfactory advancement. He may be required to leave the University for a period sufficient to gain adequate maturity and motivation.

To be in satisfactory academic standing at the University a student must be properly admitted and be matriculated for a degree or have qualified as a special student and normally hold a cumulative grade point ratio of 2.0. The precise averages for good standing are described below. Falling below these points should suggest to the student that he must change his pattern of work to restore himself to a satisfactory status.

Any student is not in good standing whenever his cumulative grade point ratio falls below 1.5 and his attempted hours are less than 30, or below 1.7 when his attempted hours are between 30 and 59, or below 2.0 when he has attempted more than 59 credit hours. Such a situation occurs generally because the student lacks the maturity, diligence, or motivation to realize the necessity for adequate scholarly effort. Whenever a student falls into this status, he will be placed on Academic Warning and a notification to this effect will be sent to him and his permanent record will be posted accordingly. The student will be required to meet with his faculty adviser for additional assistance in identifying and correcting his difficulties.

A transfer student who was not in good standing at his prior institution but who for special reasons has been admitted to the University will be placed immediately on Academic Warning for a trial period.

All students who do not raise their grade point ratio to a level of good standing within the trimester in residence after being placed on Academic Warning shall be placed on Final Academic Warning.

Whenever a student is placed on Final Academic Warning, a notification of this will be sent to the student's parents or guardian unless the student is 21 years of age or older and is living independently of his parent or guardian. The student will be required to meet with his faculty adviser for additional assistance, and must forego holding any executive or committee office in any student or campus organization, and forego participation in any student or campus organization which represents the University. The permanent academic record of the student's progress will show that he was placed on Final Academic Warning and he must earn at least a 2.0 average regardless of credit hours attempted during his next trimester in residence. Failure to do so implies that the student has disqualified himself from continuous attendance at the University and that he must wait at least one full trimester before becoming eligible to be considered by the Academic Standards Committee for readmission to the University. Any student who withdraws from the University while
on Final Academic Warning must petition and secure approval of the Academic Standards Committee to re-enter the University.

The Academic Standards Committee meets regularly to review petitions submitted by students to waive certain academic regulations. Students must petition the Committee to return to the University after having been disqualified from further immediate attendance or for reasons pertaining to admission, registration or other academic policies and procedures.

DISQUALIFICATION AND READMISSION

A disqualified student seeking to gain readmission must apply to the Registrar. If the student attends another college or university during this intervening period, he will be classified as a transfer student and his admission will be based on his total educational record. In rare and exceptional cases a disqualified student may petition the Academic Standards Committee for earlier readmission when it can be clearly demonstrated that circumstances beyond the student's control accounted for his academic problems.

A student who fails to qualify for admission to upper level work after attempting 90 credits will normally disqualify himself from further attendance at the University and thus not become eligible for readmission.

Any student who is readmitted to the University following disqualification will be placed immediately on a Final Academic Warning status.

A student's registration is subject to cancellation if he owes the University for any item other than a non-delinquent loan. Settlement of accounts can be made at the University Cashier's Office.

LEAVES OF ABSENCE

Any student in a warning or final warning status may be asked to take a mandatory leave of absence of one or more full trimesters before resuming his studies. At the end of the mandatory leave of absence period the student must petition the Academic Standards Committee for readmission to the University.

Any student may be urged to take a leave of absence if his teachers and advisers believe such an action will assist the student.

The administration of the system of Academic Warning status, Final Academic Warning status, and academic disqualification is the responsibility of the Registrar. He will work closely with other University officials and faculty advisers in these matters.

Students having questions or problems about these matters should go either to their adviser, the Registrar or the dean of the college in which they are enrolled.

ADDS

After a student has completed his registration on the date assigned to him, he may add courses only during the first three days of classes (hours to be announced).

AUDITS

If a student wishes to audit a course, he must obtain written permission from the instructor of the course and section in which he wishes to enroll. If permission is granted, the student may register for the course but without credit. However, the student must pay the regular registration fee for that course.

CANCELLATIONS (Prior to first day of classes)

If a student, after completing his registration, wishes to cancel it, he may do so by completing a Withdrawal Form in the Registrar's Office, and will receive a
complete refund of registration fees. However, since he has not attended classes, it will be necessary for him to make application for readmission to the University for future attendance.

**COURSE WAIVERS**

See information under College of Basic Studies, page 48.

**DROPS**

After a student has completed his registration and classes have begun, he may drop courses without penalty of an "F" grade during the first three weeks of classes. Beginning with the fourth week of classes and through the week before the last week of classes, the student may drop a course without a penalty of an "F" grade if he is doing passing work in the course, or he may drop the course with a penalty of an "F" grade if he is doing failing work in the course. If the student drops the course without penalty, he will receive a grade of "W" which indicates that he was doing passing work at the time of dropping the course. If the student drops a course during the last week of classes, he will receive an automatic "F" in each course dropped. Drop forms may be obtained in the Registrar's Office.

**WITHDRAWALS**

Any student may withdraw from the University without penalty of an "F" grade before the last week of classes. He may do so by obtaining a withdrawal application from the Registrar's Office. If a student withdraws during the last week of classes, he will automatically receive an "F" grade in each of his courses. If the student is on Conditional Registration or Final Academic Warning and withdraws from the University, it will be necessary for him to petition the Academic Standards Committee before being readmitted.

**CLASS STANDING**

A student's class is determined by the number of credits he has earned without relation to his grade point ratio.

- Freshman: up to 29 credit hours
- Sophomore: 30 to 59 credit hours
- Junior: 60 to 89 credit hours
- Senior: 90 or more credit hours

The classification of Non-Degree Student is given to those who are not enrolled in a program leading to a degree and who have accumulated fewer than 30 credit hours. Special Students who accumulate 30 or more hours are advised to enroll for a degree program.

**ADMISSION TO THE UPPER LEVEL**

Qualified transfer students will be admitted to an upper level college by the Admissions Office.

Courses and programs offered at the junior and senior levels are generally considered to be "upper level".

Generally, a student enrolled in the College of Basic Studies will be eligible for admission to an upper level college when he has completed the lower division requirements of the College of Basic Studies, taken a comprehensive examination some time during his sophomore year, demonstrated the required proficiency in four areas of physical education and completed at least 60 credit hours with a least a 2.0 ratio. A student with 54 hours and a ratio of 2.0 or better may be admitted with special permission of the dean of the college involved. Qualified students
will be identified and referred to an upper level program by a member of the College of Basic Studies advising corps.

In addition, students must meet the specific admission requirements of the college to which they are applying. These requirements are shown elsewhere in this catalog and should be verified with the college before application is made.

Students transferring into upper level college programs from other institutions must meet the same standards and requirements as those whose first two years were taken at the University of South Florida.

All students must complete at least the last 30 hours of their undergraduate credit on the campus (after having been accepted to an upper level program) to qualify for a University of South Florida degree.

DOUBLE MAJOR

Students may elect to graduate with two majors in disciplines within the same division, the same college, or in more than one division or college. In that event, the student should meet all requirements of each major separately. He must apply independently and be assigned an adviser in each discipline. He must be certified for graduation by the appropriate dean or divisional director for each major.

CHANGE OF MAJOR

Any student in the upper level who wishes to change his major should fill out the Change of Major Form (in triplicate) in the Registrar's Office. This form must be signed by the student's adviser, the dean or director of the former major, and the dean or director of the new major.

APPLICATION FOR DEGREE

Each student who plans to complete his graduation requirements by the end of a trimester must complete the Application for Degree no later than the first day of the fifth week of that trimester. The application is to be filled in at the Registrar's Office.

GRADUATION REQUIREMENTS

While each college sets specific requirements for graduation, the general University requirements must be met by every student upon whom a degree is conferred.

These general requirements specify that a student must earn at least 120 hours of credit with at least a "C" average for all University of South Florida courses attempted in order to be eligible for graduation. At least 40 of his credit hours must be for upper division level work (courses numbered 300 or above).

In addition to specific requirements of their major and of the college in which they are enrolled, candidates for graduation must also pass the senior seminar offered by the College of Basic Studies, take the Graduate Record Examinations Aptitude Test and be recommended for graduation by the dean of their college.

All students must complete at least the last 30 hours of their undergraduate credit on the campus after having been admitted to an upper level college to qualify for a University of South Florida baccalaureate degree.

If changes are made in major or graduation requirements during the time a student is enrolled in the University, the student has the choice of being graduated under the old or the new requirements.

While every effort will be made to give each student appropriate advice in meeting major and graduation requirements, the final responsibility for meeting these rests with the student. He should study the catalog carefully and seek advice when in doubt.
GRADUATION WITH HONORS

Each student graduating from the University with a grade point ratio of 3.5 or higher will receive a special notation on his diploma indicating that he has been graduated with honors.

Availability of Courses and Programs

The University does not commit itself to offer all of the courses, programs and majors listed in this catalog unless there is sufficient demand to justify them. Some courses, for example, may be offered only in alternate trimesters or years, or even less frequently if there is little demand. Some of the less popular majors may not become available until later in the University's development. Students wishing such majors may take what is offered here and major in some closely related field or transfer to an institution which offers the desired program.

Notice of Change

Notifications regarding change of address, change of name, change in marital status, and change of citizenship should be filed promptly in the Registrar's Office.

Florida College Exchange

Through an exchange agreement, students of the University of South Florida, with the approval of their advisers, may elect courses in Greek, Hebrew, Bible, or religious education at nearby Florida College. Credit for acceptable work may be transferred to the University and counted as elective credit toward graduation. Students from Florida College have a similar transfer arrangement.

Costs for students under these dual enrollment plans are based on credit hours of work taken, and payment is made to the appropriate institution in accordance with its per-hour fee rate.

Intra-American Exchange Program

Through a reciprocal exchange agreement, University of South Florida students may apply for a semester's work at the University of Massachusetts in Amherst, Massachusetts. Exchange students are selected during Trimester I. Acceptable grades are transferred to the University of South Florida and counted as credit toward graduation. The University of Massachusetts students enjoy the same exchange opportunity.

During the 1965-66 academic year, the program will include the University of Maine in Orono, Maine.

Student costs remain essentially the same, but students must pay transportation costs to and from the exchange institution. Further information may be obtained from the Office of the Dean, College of Education, University of South Florida.

Selective Service and V.A. Certifications

From time to time, in addition to regular transcripts, the student may need special "student status" certifications from the Registrar.

The Selective Service System requires the University to submit a Selective Service Enrollment Certificate to local draft boards for every full-time (12 credit
hours or more) undergraduate student at the beginning of each academic year (fall trimester). Upon receipt of this certificate the local draft board will classify the student 2-S (deferred because of activity in study). The undergraduate student will remain 2-S until he graduates if he continues to pursue a full-time course of instruction leading toward a degree.

Students desiring further information concerning Selective Service requirements should inquire at the Registrar's Office.

The University of South Florida is approved for the education and training of veterans by the Veterans Administration. The War Orphans Educational Assistance Act of 1956 (Public Law 634) provides educational benefits to the children of veterans who have died as a result of a "disease or injury incurred or aggravated in the armed forces during World War I, World War II, or the Korean Conflict." Inquiries relating to veterans education should be addressed to the Veterans Administration, Regional Office, P. O. Box 1437, St. Petersburg, Florida.

**Academic Advising**

At the University of South Florida, academic advising is the province of the teaching faculty. It is thus an extension of the teaching function—a conscious concern for the academic and educational questions that most students have about the importance of their studies, the proper direction of their educational development, and the practical values of their educational objective.

Since the beginning student generally is in greater need of advice and guidance, a selected corps of advisers serves students who are registered in the College of Basic Studies. Members of the advising corps are faculty members who are relieved of some teaching responsibility in order to devote relatively more time to student advising. Faculty members participating in the program represent all of the colleges and divisions of the University and are chosen because of their interest and experience in curricular advising. The advising program in the College of Basic Studies is designed to provide students during their first two years with whatever assistance is necessary in order to move them toward their educational goals in a timely fashion. Coordination of the advising program for students enrolled in the College of Basic Studies is the responsibility of the Coordinator of Student Advising under the dean of that college.

Students entering the upper level programs, usually at the beginning of the junior year, are assigned to an adviser in their major field. Curricular advising in the upper level programs is the responsibility of the division directors in the College of Liberal Arts and of the coordinators designated by the respective deans in the Colleges of Business Administration, Education, and Engineering.

All degree-seeking students entering the University are urged to participate in a two-day orientation conference, at which time they meet with an adviser in their proposed field of study to prepare a schedule of courses. Prior to this meeting, advisers are provided with pertinent information, such as admission data and test scores, concerning each student. During the orientation conference, or shortly after the beginning of classes, the new student is assigned to a specific adviser in accordance with his stated educational objective. The student who has not yet decided on an objective is assigned without regard to the adviser's area of specialization.

A student is expected to meet at least once each term with his adviser for purposes of program planning. However, he is encouraged to visit his adviser whenever he feels in need of help with academic or personal problems. Although the adviser is essentially a resource person for assistance with academic and curricular matters, he can often refer the student to a source of specialized help when the problem is one with which he is not qualified to deal.
Although it is not necessary for a student to have a specific educational goal in mind at the time he enters the University, he should discuss with his adviser any general educational objective he might have at their first meeting. Some courses of study require enrollment in key courses during the first year if the student is not to lose time in his work toward a degree. Both engineering and the medical sciences are curricula which illustrate this point.

Provisions are made to permit a change of adviser when it appears to be in the best educational interests of the student. A change of educational objective is the most common reason for reassignment, but reassignment may be made at any time the student or adviser believes a change is desirable.

While the University provides advising services to assist students with academic planning, the responsibility for seeing that all requirements are met rests with the student.

**SPECIAL ACADEMIC FEATURES**

The University of South Florida seeks to achieve its objectives not only through its formally organized colleges and courses but also through certain special services. These are programs or activities which clearly are designed to enhance the education of students but do so through means other than orthodox courses and classes. Many of these do not even offer academic credit, although some may be means by which students do earn credits. Regardless of whether or not these activities count toward the definite graduation requirements, they can be tremendously significant in the lives of students who participate in them.

**CREDIT BY EXAMINATION**

Students may apply to take lower division basic studies courses by Credit by Examination. If the application is approved and presented at regular registration, they take the final examination with the class. Those making "B" or higher on the examination will receive college credit for the course. Those making "C" are still eligible for waiver but without credit. Those making "D" or lower lose the waiver privilege and must take the course in class or use the course as the one authorized omission. Students who have completed more than two college courses in the field of study concerned may not earn credit by examination; however, they may take the examination and secure a waiver by scoring a "C" or higher.

**INDEPENDENT STUDY**

Students wishing to take a course by independent study must contact the instructor of the course and complete a written contract. This contract specifies the requirements to be completed by the student including tests, periodic class attendance, term papers, etc. If the course is in the College of Basic Studies, approval for independent study may be given by the course chairman. A copy of the contract is to be sent to the Coordinator of Independent Study. The student must take the final examination in the course, or the equivalent.

Not all courses in the University can be taken by independent study. The respective colleges have jurisdiction in the determination of which courses may be taken in this manner.

The regular grading system applies to all independent study students. Grades earned by independent study have the same status as those acquired through regular class attendance.

**ADVANCED PLACEMENT-CREDIT PROGRAM**

The University of South Florida participates in the Advanced Placement Program conducted by the College Entrance Examination Board, which provides 13
college-level advanced placement examinations in American history, biology, chemistry, English, European history, French, intermediate German, advanced German, Latin IV, Latin V, mathematics, physics, and Spanish. Examinations in Russian are being added.

Examination papers are graded by selected committees on a five-point scale: 5 — high honors, 4 — honors, 3 — good, 2 — credit, 1 — no credit.

The University allows automatic advanced placement credit for scores of 3, 4 and 5, and allows advanced placement with or without credit for scores of 2, upon recommendation of the program concerned.

Credit may be applied to basic studies courses where appropriate, or to comparable liberal arts courses as best fits the needs of the student.

Participation in this advanced placement program does not affect the University’s regulation concerning waiver, credit by examination, independent study, or other provisions for the advanced placement of qualified students.

**ADVANCED PLACEMENT-NON-CREDIT PROGRAM**

Frequently a superior student, particularly in the fields of science and mathematics, is allowed to enter advanced courses in those subjects. It is possible for students well trained in mathematics to enter calculus as freshmen. It is also possible for well trained students to enter physics or chemistry without having other college level science. Before permission is granted to do so, students are required to take a science and mathematics examination to determine whether or not they actually have the knowledge and competency to succeed in these advanced courses. This same procedure is applied to other subjects.

**EXTRA LOADS**

The normal load for full-time students ranges from 12 to 18 hours each trimester. For most students seriously involved in study this is ample. However, some students find they can, with profit, take even heavier loads. To do so they must receive permission of the dean of the college in which they are enrolled and should clearly understand the difficulties they will encounter in taking as many as 21 hours. For some students, however, an overload is the best way for them to gain maximally from their college education. It should be noted, however, that under the trimester system the carrying of overloads is more difficult than under the semester system.

Registration for more than 18 credits requires approval of the dean or division director of the student’s college. A first-trimester freshman is only rarely permitted to undertake more than 18 credits. Thereafter, permission may be granted if the student’s grade point is 3.0 or higher. Freshmen and sophomores who wish to carry more than 18 credits should be referred to the Dean of the College of Basic Studies or to the Coordinator of Advising.

**HONORS**

The University of South Florida, emphasizing as it does solid academic achievement, is developing ways of recognizing distinguished student achievement. Each trimester an honors list is prepared showing students who earned a grade point average of 3.5 or higher for that trimester, and students who maintain this level of accomplishment are recognized each fall at an honors convocation. The Gold Key honor society recognizes outstanding students.

**COOPERATIVE EDUCATION PROGRAM**

The Cooperative Education Program has as its objective a balanced education where work experience is an integral part of formal education, and theory is blended with practice. In addition to regular classroom and laboratory exercises, it acquaints
the student with the world of work and a professional environment. Students become acquainted with professional skills while obtaining their academic training. The ultimate objective of the program is to bring business, industry and governmental agencies close to the educational program of the University and have the graduates absorbed into permanent employment of the Southeast's leading employers.

The Cooperative Education Program is particularly designed for recent high school graduates rather than older, more mature students with considerable work experience. It also requires students of demonstrated academic ability. A student must have a minimum of 24 hours of academic work completed with a grade point average of 2.0 or better before being assigned to a team.

All University of South Florida cooperative programs are four years in length except in the field of engineering, which is a five-year program. Following two trimesters on campus the student is assigned to a team and alternates between trimesters of training (paid employment) and trimesters of study until he reaches the senior level, when he returns to the campus to complete his academic requirements.

The University will assign students to work relevant to their educational and professional goal. Usually students are first placed on those jobs where they can learn the fundamentals. They may then advance in the type of work they do from work period to work period. During the early years of the program, most of the cooperative employers will be in Florida, many in the Tampa Bay area.

Many types of enterprises have joined the University as cooperative employers. Some of the first to welcome the program have included public utilities, financial institutions, chemical plants, department stores, hospitals, school systems, the construction industry, and the National Aeronautics and Space Administration. This latter agency has taken a number of teams at the George Marshall Space Flight Center at Huntsville, Alabama; the Launch Operations Center at Cape Kennedy, Florida; the Manned Spacecraft Center at Houston, Texas; and the Goddard Space Flight Center at Greenbelt, Maryland.

Students are encouraged to make application for placement in the program during their first trimester on campus even though they must complete at least 24 hours of academic work before being assigned to an employer.

Students accepted into the Cooperative Education Program must remain in the program until they reach senior standing, unless released by the director of the program. Students signing an agreement covering training periods are obligated to fulfill the agreement.

Students who fail to report for a training period after signing an agreement, or who fail to remain in the program until they reach senior level, unless granted a release from their commitment, will not be permitted to register as full-time students (12 or more trimester hours, taken on campus). Students who fail to keep their agreement to work to the end of any given training assignment will not be permitted to register as full-time students during their next trimester on campus.

Cooperative Education students are encouraged to take one course during each training period. This may be a regular course taken by class attendance, by independent study, or credit by examination, at the University of South Florida or any other accredited college or university, a course from the extension division of the Florida Institute for Continuing University Studies, or a special problems course in an area appropriate to the student's major interests. Most of these Special Problems courses at the University of South Florida carry a course number of 481. They may be repeated and credit may vary from one to three hours per trimester for Cooperative Education students, the amount to be determined at the time of advising.

A special course is available for Cooperative Education students—CB 471, Cooperative Education Research Report, 1-4 credits. This course is designed specifically for Cooperative Education students in which the student pursues for a mini-
mum of two work trimesters a research subject dealing with his training assignment and his major area of professional interest. The Cooperative Education student is assigned to a professor in his major field and will confer regularly with him on the subject, structure and content of the written research project. The findings of this project would be embodied in an intensive written report. This course may be used with designators other than CB if approved by the dean and department head of the college and area concerned. Further information may be obtained in the Office of Cooperative Education.

The registration fee for the training period is $40.00 and, in general, covers the fee for one course up to four hours in value (see Cooperative Education Handbook for exceptions), student publications, and privileges enjoyed by other full-time students. Transfer students are welcome to select the program and should make application during their first trimester at the University.

GRADES AND EXAMINATIONS

There will be a final examination for most courses offered by the University. These will be given during a regularly scheduled examination period. Final examinations may not be given at any other time except in those courses the very nature of which makes other arrangements necessary.

Courses which meet only at night will normally have the final examinations scheduled at night. Courses which meet during the daytime but which have evening sections will normally be scheduled for final examinations during the daytime. Students should therefore be prepared to make any necessary arrangements to meet their final examination schedule.

There will be a common trimester final examination for each 100 and 200 level course in the College of Basic Studies, prepared by the Office of Evaluation Services. While the nature of this final examination will vary with the nature of the particular course, final examinations will count for 40 per cent of the student’s final grade.

The University of South Florida maintains a five letter grading system. While pluses and minuses may be used for computation of grades or other purposes, no pluses or minuses will be recorded on student’s permanent records. The five letters are:

A – Superior performance
B – Excellent performance
C – Average performance
D – Below average performance, but passing
F – Failure

An “X” grade may be used for any authorized failure to meet the requirements of a course. An “X” grade resulting from any cause other than a 100 or 200 level basic studies final must be removed within three weeks of the next trimester the student is enrolled. Permission to remove an “X” resulting from a basic studies final must be secured from the Dean of Basic Studies within the first three weeks of the next enrollment and the exam completed at the end of the trimester for which permission is granted. Failure to meet applicable conditions will change the “X” to “F”. Until removed, the “X” is computed in the grade point ratio as “F”.

A “Y” grade is used chiefly in the College of Basic Studies and is a failing grade. It is used when the instructor believes that regardless of the grade a student earns on a final examination he should fail the course. A “Y” grade insures this failure. It is viewed as final and is recorded as “F”.

A “W” indicates withdrawal without penalty from the course. A student may drop a course and receive a grade of “W” during the no-penalty period for the
first three weeks of classes in a full trimester or for the first eight days of classes in Trimester III-A or III-B. After the no-penalty period and until the last full week before final examination, a student may drop courses with or without penalty. If the student is doing passing work at the time of withdrawing from the course, he will receive a "W" grade; if he is doing failing work, he will receive an "F" grade. If a student drops from a course during the last week before final examinations or during the final examination period, he will receive an automatic "F" for that course.

The University has a system of grade points used in computing grade point ratios. The range extends from "A" equals 4 to "F" equals 0. Grade point ratios are computed by multiplying the number of credits assigned to each course by the point value of the grade given. The total of the credit points for all courses taken divided by the total number of credit hours earned equals the grade point ratio. For example, a student taking five three-credit courses who earned two A's and three B's would have a grade point ratio of 3.4.

If a student repeats a course for any reason, his grade point ratio will include each grade received. For example, if a three-hour course is repeated, it is computed as six trimester hours attempted.

**ACADEMIC SERVICES**

A number of University offices, programs, and facilities provide valuable supporting services to the academic program.

**Data Processing**

Centralized record keeping for the University is provided by the Division of Data Processing. Among records and materials compiled in the division are financial and accounting reports, student academic records, class rolls and assignments, library records, mailing lists, directories, statistical records, and research data.

The facilities of the division include an IBM 1410 computer and are used for research, as a teaching laboratory for business courses in data processing, and for numerical analysis and statistics in mathematics courses.

**Educational Resources**

The Division of Educational Resources is responsible for a variety of all-University services, including the purchase, rental, cataloging, maintenance, and distribution of instructional materials to assist faculty, staff and students in the realization of their educational goals.

**Radio.** WUSF is an FM radio station operating on 89.7 mc. This station is available to disseminate University information, broaden the University’s cultural offerings, and actively participate in the teaching program. The station is also used as a laboratory for students interested in broadcasting, and some students are involved in the station’s daily operation. WUSF is located on the ground floor of the Library.

**Television.** A closed-circuit system capable of six-channel simultaneous transmission is connected to various campus buildings by direct cable. A video tape recorder provides flexibility for the system. The television operation is available for direct teaching, educational enrichment, special events, and as a laboratory for students with special interest in broadcasting. Student assistants are used in almost all phases of the system’s operation. Both the studio and central distribution center are located on the ground floor of the Library. A UHF station, Channel 16, is contemplated for on-the-air operations within a year or two.
INSTRUCTIONAL MATERIALS SERVICE. Audio-visual equipment and instructional materials for the classroom, University events and other functions are procured through this department. Operators for equipment are supplied when necessary, and some equipment is available on a loan basis. Public address systems, tape recorders and projectors of all kinds are available. There is production service for audio tapes and synchronized sound/picture presentations of various kinds.

GRAPHICS. A variety of graphic services are available upon request for use in the classroom as well as the overall University program. Overhead transparencies, reproduction processes, original art work, posters, signs and art layouts for publication and printing are offered.

PHOTOGRAPHY. University photographs for publication as well as internal use can be requested. The service includes motion picture production in both 16mm and 8mm, enlarging and reduction of materials, the production of filmstrips and 2x2 slide duplication.

INSTRUCTIONAL MATERIALS CENTER. The Center is responsible for acquiring, cataloging and maintaining a library of instructional materials including films, filmstrips, tapes, records, maps and slides. These materials are available to the faculty and staff for academic purposes. Certain records, filmstrips and other materials are loaned to faculty, staff and students for independent study and recreational purposes.

The Library

It is important that a library should take into account not alone the books on its shelves but also the people it serves. This point of view is central in the philosophy of the University of South Florida Library. A library is good, not because of the volumes it has, but because it is used by people who derive personal benefit from its use and who produce something as a result of its use that will be of benefit to our society.

The Library staff is interested that students come to regard books as a way of life and that they use the Library regularly. It is the Library’s aim that students should buy, read and discuss books and feel bereft when deprived of books. The University expects students to become thoroughly familiar with the University Library book collection, to master the techniques of using it, and — before graduation — to achieve a familiarity with books which will carry over into later life.

The Library has about 100,000 volumes, and these holdings are being increased at the rate of approximately 20,000 volumes each year. The Library also subscribes to about 2,200 journals. These resources provide a beginning toward library service for the University community.

The Library collection is made available to readers by means of an open stack system. The Library’s basic policy is to encourage users to become familiar with many kinds of books by browsing through the stacks. There are reference librarians to assist in bibliographical searches or in locating material. Specialized areas include a recreational reading area in the first floor lobby, special collections area (including a Florida collection), a United States Government documents collection, and an art gallery.

Sponsored Research

Research is an important aspect of the educational program at the University of South Florida. Faculty members are encouraged to pursue research activities, and many students participate in research and training projects supported by funds given to the University by public and private granting agencies. Research is integrated with the instructional program in a very real sense.
The Office of Sponsored Research is the central coordinating unit for research and other sponsored educational activities on the campus. It provides information about granting agencies and serves as a consultation center for faculty who desire help in processing research proposals.

Although the Office of Sponsored Research operates primarily for the benefit of the faculty, students who have an appropriate interest in research are welcome to visit the office.

FEES

The following fee schedule applies to all University of South Florida students, both undergraduate and graduate. All fees are subject to change without prior notice. The University will make every effort to advertise any such changes if they occur.

A. Initial application fee (paid only once—not refundable) $10.00

B. The following fees must be paid in full at the time of registration:

1. **Registration Fee and Tuition**
   - **Regular Trimester:**
     - Students registering for less than seven trimester hours (credit or non-credit), per trimester hour $10.00
     - Students registering for seven or more trimester hours (credit or non-credit) $113.00
   - **One-Half Trimester:**
     - Students registering for less than five trimester hours (credit or non-credit), per trimester hour $10.00
     - Students registering for five or more trimester hours (credit or non-credit) $60.00

2. **Applied Music Fees**
   - $35.00

3. **Late Registration Fee**
   - $5.00

4. **Audit Fees** (same rate as if registered for credit)

5. **Cooperative Education Program** (for work trimester) $40.00

6. **Student Deposit** (for full-time students) $15.00

C. Room and board to be paid in accordance with information in the Housing and Food Service Contract.

1. **Room and Board (students living on campus)**
   - **Per Trimester**
     - Plan A — 21 meals per week $335.40
     - Plan 2 — 15 meals per week 310.00

2. **Food Service Plan (students living off campus)**
   - **Plan A — 21 meals per week** $185.40
   - **Plan 2 — 15 meals per week** 160.00
   - **Commuter’s Food Plan (five meals per week)** 55.00

*Tuition is paid by non-Florida residents in addition to the registration fee. Florida residents pay only the registration fee.*
FLORIDA RESIDENCY

A Florida resident, for purposes of admission, expenses and other University classification needs, is one whose parent or guardian (or the applicant if over 21) is a citizen of the United States and has resided permanently in the state of Florida for at least 12 months immediately preceding registration at the University. No applicant can claim Florida residence only by virtue of the fact that he or she has attended any school, college, or university in the state for the 12-month period immediately preceding registration. The owning of property in Florida while being physically located in another state does not qualify a person to claim Florida residence.

REFUND OF FEES

Students who find it necessary to withdraw from the University may be permitted to have a refund of fees upon presentation to the University Business Office of an authorization issued by the Registrar's Office. These refunds will be made under the following conditions.

1. No part of the student activity fee will be refunded if the student fails to surrender his original (current trimester) identification card;
2. Deductions from authorized refunds will be made for unpaid accounts due the University;
3. No part of the student building fee will be refunded once the trimester has started and the student has begun to attend classes. (The student building fee is included as a part of the registration fee which is charged to all students.) Therefore, registration, tuition and other instructional fees will be refunded depending upon the date of withdrawal, and after that part of the registration fee
which has been allocated to the student building fund has been deducted, as follows:

a. A full refund will be made if withdrawal is effected on or before the first day of classes in any trimester or summer session.

b. A fixed charge of $5.00 in each regular trimester and $3.00 in each summer session will be deducted from the total fee refund after the first day of classes, but on or before the final day of late registration.

c. A 50 per cent refund of the fees will be made if withdrawal is effected after the conclusion of the late registration period but on or before the day which marks the end of the third week of classes in a regular trimester or the first week of classes in Trimester III-B.

d. No refund will be authorized on withdrawals which take place after the end of the third week of classes in a regular trimester or the first week of classes in Trimester III-B.

4. A deposit on room rent and board of $40.00 for each session is made with the application for University housing. No refunds will be authorized on this payment after space is reserved for a student. Policies and regulations for housing and food service are explained fully in the housing contract and brochure.

STUDENT DEPOSIT FEES AND CHECK CASHING SERVICE

At the student’s first registration, every full-time student is required to pay a refundable deposit of $15.00 to cover cost of replacement due to any loss or breakage of University equipment. The student will be required to maintain his deposit at a minimum of $5.00 and will not be billed during the enrollment period except when the deposit falls below this amount. If the deposit falls below the minimum before the end of attendance at the University, the student will be notified by the University Cashier to bring his deposit up to $15.00. Failure to comply will deny the student the privilege to re-register.

If a student changes from full- to part-time, or withdraws from the University, he may apply to the Cashier’s Office for a refund of the deposit. All deposits will be refunded by check within 30 days after application has been made. If the student has registered on a full-time basis, the deposit will be extended for that period.

The University will accept personal checks for accounts due the University. Each student is urged to make his own financial arrangements through his choice of commercial banks. The University Cashier, or any of the auxiliary services, such as the Bookstore, will cash personal checks not exceeding $50.00.
STUDENT WELFARE

The University of South Florida provides for the total growth and development of its students; not only giving attention to intellectual aspects of this growth, but also providing for the physical, social, emotional, and spiritual aspects. The University, through its services and programs, desires to help students acquire a maturing sense of values, a sound intellectual competence, and an understanding of the responsibilities which accompany these.

Student Affairs

Implementation of the personnel service program for students is the concern of the office of the Dean of Student Affairs. Orientation of new students, residence hall programs, loans, student activities, student organizations, class attendance, disciplinary action, and personal counseling are major functions of Student Affairs. The University provides the leadership and professional services for maintaining the educational philosophy of this program.

The Office of Dean of Women is available to help women students. Personal counsel and advice about student women's organizations are provided by this office. Attendance in classes, academic difficulties, social standards, and advisement to the Council on Religious Activities are also concerns of the Dean of Women.

The Office of Dean of Men is available to help men students. Personal counsel, advice about organizations, social standards, and orientation of new students are concerns of the Dean of Men. This office also serves in an advisory capacity for foreign students.

Information and advice about student organizations is provided by the Office of Director of Student Organizations. This office assists in the organization of new groups and serves as an advisory center for programs of activities, membership requirements, names of student leaders, financial advice, and assistance for advisers. Active participation in student organizations can be a valuable part of the student's total education, and develops desirable qualities and traits of leadership, personality, and character.

Student Health Service

Health services are provided for students through a Health Center on campus and through a voluntary health insurance plan.

The Health Center provides the services of a full-time physician and 24-hour nursing care throughout the school year. Commonly used prescription medications are dispensed by the Health Center to students paying the health fee. Infirmary care is made available to full-time students with minor illnesses which preclude class attendance and emergency care is given all students. Off-campus hospital and
medical care will be the financial responsibility of the individual student or his family except the University will pay for expenses up to $100 per student per year when approved by the University physician.

The University requires a medical examination from each full-time student to be filed with the Student Health Service. Full-time students must also have had recent immunizations against smallpox, tetanus and polio.

Insurance

HEALTH INSURANCE

A low-cost major medical and hospital insurance plan is available to all full-time students to supplement the above student health program. The plan provides for insured coverage of more serious medical problems which cannot be cared for on campus. Since the Health Center and the health insurance plan provide complementary services, all students are encouraged to give this insurance coverage careful consideration.

TRAVEL INSURANCE

Students may obtain accident insurance for a nominal charge at the Travel Desk in the Division of Procurement for field trips and personal travel.

PERSONAL PROPERTY INSURANCE

Students living in the residence halls may obtain insurance on personal property at the rate of $5 for personal property valued up to $500. Applications are available in the Housing Office and payment is made to the Cashier in the Finance and Accounting Office.

Developmental Center

The Developmental Center provides services for students desiring professional assistance in the areas of reading, vocational guidance, personal counseling, tutoring, speech and hearing. These services are available to assist students in evaluating and remedying problems which interfere with efficient learning and satisfying participation in campus life.

The Reading Service provides diagnosis and evaluation as well as developmental exercises and techniques for improvement. In addition, a one-trimester non-credit course in developmental reading is offered. Through this program students have the opportunity to reach maximum level reading effectiveness with improved comprehension and retention.

The Speech and Hearing Service offers diagnostic and therapeutic sessions for students whose speech or hearing interferes with effective communication. The summer counseling conferences include screening in both speech and hearing.

Counseling Services are available for students requesting help in career planning and in dealing with personal problems. Through testing and interview the counselors assist any student to evaluate his personal aptitudes for his educational and career goals. Any student may ask for help in the Center when he feels that increased understanding of himself and of his relations with others would lead to more confident and satisfactory living and learning.

Students desiring special assistance in their courses may apply to the Developmental Center for tutoring provided by other students in various subjects and courses. Fees are charged by the tutors according to standard rates established by the Developmental Center staff.

Application for any of these services of the Developmental Center may be made by any student at any time and as often as desired. Regular registration procedures will be followed for specific courses such as Developmental Reading.
Housing

Living conditions suitable for study often affect the quality of academic work. The provision of adequate living conditions for students is accordingly a responsibility to be shared by students, their parents, and the University.

Students may apply for housing on campus only after they have applied for admission to the University.

Students whose family residence is outside the commuting area of the University, and who are not planning to reside with their parents or guardians, are expected to live in University residence halls up to the limit of the accommodations. Excepted from this residence requirement are those married and living with their spouses, those over 25 years of age, and those who are divorced.

Students previously living in University residence halls are given room assignment preference if they return the following term.

RESIDENCE HALLS

Accommodations for students are available in the University's modern residence halls and apartments. Residences are completely air conditioned and provide for the living, educational, social, and personal needs of students.

In general, students live in study-sleeping rooms furnished with beds, dressers, mirrors, desks, lamps, drapes, and chairs. Linen service is provided. In residence halls a student counselor lives with each group of 40 to 50 students. A faculty counselor available for personal and academic counseling lives in each residence hall.

The University's residence halls are grouped in units called complexes. The first completed complex — Argos — includes Alpha, Beta and Gamma residence halls and Argos Center. In the second complex — Andros — the first completed unit includes Delta, Zeta, Eta and Epsilon residence halls. Argos Center houses a cafeteria, snack bar, lounges, recreation and TV room, conference rooms, mail center, barber shop, and Argos Shop (an annex of the University Bookstore). An outdoor swimming pool is available for student use.

The residence hall program emphasizes gracious living, attractive surroundings, opportunity for group activity, self-government, and counseling services by professional people.
OFF-CAMPUS HOUSING

Should space not be available in University residence halls, students are to live in other housing acceptable both to their parents and to the University.

Single students under 25 years of age may not rent facilities off campus without the written approval of the Housing Department after a personal interview with a member of the Student Affairs staff.

The University does not recommend that single students be permitted to rent houses, apartments, or trailers. Students not accommodated on the campus or living at home should arrange through the Housing Department to rent rooms in private homes in the vicinity of the University. All single students living off campus are expected to live with relatives or in housing approved by the Housing Department.

Accommodations listed by the University will meet normal collegiate standards. Rental arrangements may best be made after personal inspection of facilities and conference with the householder before school opens. Fall trimester arrangements may be made during the summer.

Food Service

All students in residence halls on the campus receive three meals a day in the cafeterias. The cost is included in the total charge for room and board. A food service boarding plan, with three meals a day, is available to those living off campus. Snack bars, open during the day and evening, provide sandwiches and fountain service. Several small dining rooms may be reserved by committees or special groups wishing to take their trays to a private place for luncheon or dinner meetings.

The University Center

Through its committees and staff, the University Center provides a social, cultural and recreational program to make leisure activity meaningful. The program is designed to supplement educational experiences by providing opportunities for self-directed activity.

The Center’s program contributes to achievement of the educational goals of the University by providing a natural laboratory for experiences in citizenship—a community center where all may have a part in the direction of community enterprises. Academic and non-academic interests are related so that students’ development may be well-rounded and complete. Enhancement of social skills and emotional development of the individual are also goals of the program.

The University Center Program Council has as its objective to provide a balanced program of activities reflecting the special social and recreational needs of all students’ out-of-class interests. All activities are planned, arranged and directed
by student committees. A student may volunteer to serve on such committees as
dance, recreation, activities, music, hospitality, talks and topics, public relations, art
and exhibits, movies, house functions, and special projects.

The University Center also provides many of the personal services and facili-
ties essential to University life outside the classrooms. It has conference and activity
areas, lounges, a cafeteria, dining rooms, a snack bar, student organization offices,
craft and photography shops, recreation rooms, a ballroom, book lockers, lounges for
music, radio and television listening, recreation rooms, a mail center, the University
Bookstore, Student Health Service, a browsing library and various other services,
coordinated by the University Center Director’s Office and Information Desk. Food
Services and Bookstore operations are coordinated through the Director of Auxiliary
Services. Many of the Center’s facilities and services provide for personal and social
needs.

University Bookstore

Students may purchase books, school supplies, sundries, stationery, and art, engi-
neering and other equipment in the University Bookstore. A complete selection of
non-required books, many in inexpensive paper-bound editions, is available as re-
source material and recreational reading. Such items as pillows, bedspreads, bed
lamps, and other residence hall needs may be purchased in Argos Shop, located
in the residence halls area.

Financial Aids

The student financial aids program at the University of South Florida is intended
to assist qualified students to obtain a university education when they might other-
wise lack financial resources. Financial assistance, with the exception of Service
Awards, is granted on the basis of financial need, academic promise or attainment
and character.

Scholarships are available, suited to student financial need and academic prom-
ise. Registration Fee Work Scholarships are awarded which require about four hours
of work on campus per week. University of South Florida Foundation Grant-in-Aid
Scholarships and Service Awards are available if the student makes timely applica-
tion and is qualified for the award.

Scholarship applications are accepted only once each year and must be filed
no later than February 1 for scholarships which will begin with the fall trimester.
National Defense Student Loan applications for the entire academic year and/or
Trimester I must be filed no later than April 15; Trimester II applications must be
filed no later than September 15; and Trimester III applications must be received
no later than February 1. Florida State Student Loan applications may be sub-
mittted at any time and are awarded by trimester only. The loan may be extended
to the next trimester if the student maintains the required academic standards.

National Defense Education Act Student Loans permit entering freshmen, trans-
fer students, and regular students to borrow up to $5,000, with a maximum of $500
each trimester. Repayments begin one year after the borrower ceases to be a full-
time student, at which time the loan draws interest of 3 per cent. Payment must be
made within ten years. Part of the loan may be cancelled if the student teaches in
an elementary or secondary school.

Florida State Education Loans permit any student who has been a resident of
Florida for a minimum of three years to borrow a maximum of $113 per trimester
with a maximum of $339 for the academic year. Repayments begin approximately
one year after the borrower ceases to be a full-time student, at which time the loan
begins drawing a 4 per cent interest. Repayment of the loan must be completed within five years.

Additional long-term loans may be granted, subject to the availability of funds, from the following programs: Sertoma Memorial Loan Fund for residents of Hillsborough County (number and amount of loans vary), the James J. Love Memorial Scholarship Loan Fund, preference to Gadsden County residents (number and amount of loans vary).

Applications for long-term loans from hometown participating banks through the United Student Aid Loan Fund Program may be submitted at any time within the academic year and will be granted on the basis of qualification and availability of funds. A loan of up to $500 may be granted with repayment beginning the first of the fifth month after the student graduates, with full repayment being made within 36 months. If a student drops from school, payments will begin after 30 days.

Short-term loans are available throughout the academic year to meet financial emergencies. These loans must be repaid before the end of the trimester in which the loan was granted.

Applications for scholarships and/or student loans should be made to the Director of Financial Aids, 166 Administration Building, University of South Florida, Tampa, Florida 33620.

Students with a minimum of 24 hours of academic credit and a grade average of 2.0 or better may apply for a Cooperative Education team. Further information on the Cooperative Education Program is given on page 25.

The following scholarships, with their minimum value given in parentheses, are currently available to qualified students.

- Ernest Atkins Scholarship ($226), Brandon Women’s Service League Scholarship ($200), Pauline Bush Scholarship ($300), Chi Omega Scholarship ($226), Elizabeth Cone Book Scholarship (varies), Ione Lister Simmons Creative Writing Scholarship (varies), Eleanor Gilbert Scholarship ($250), General Telephone Scholarships (two, $226), Graham Jones Paper Company Scholarships (two, $226), Knight and Wall Scholarship ($451), Winn-Dixie Junior Senior Scholarship (varies up to $200), Maas Brothers Scholarship ($301), Mental Retardation Scholarships for Seniors as Future Teachers of Mentally Retarded (five, $1,600 plus tuition), Southern Society for Paint Technology Scholarships (number and amount vary), University of South Florida Tuition Fee Work Scholarships (number approximately 120, $226), State Teachers Scholarships (number varies, $200 per trimester; application should be made to the student’s County Superintendent of Public Schools prior to October).

- The Vocational Rehabilitation Division, State Department of Education, Tallahassee, Florida, provides limited assistance to persons who are handicapped students. The Florida Council for the Blind, P.O. Box 1229, Tampa, provides financial help for blind students.

Details on specifications and qualifications for these scholarships are available in the Financial Aids Office.

Placement Services

The purpose of the Placement Office of the Division of Personnel Services is to assist students and alumni in realizing their career objectives. This office, together with the Cooperative Education Program and the Financial Aids Office, attempts to insure that economic considerations will not impede the progress of any student who is seriously in pursuit of a college education.
Every effort is made to insure part-time placement for undergraduate students who express a need for employment. Students may register for part-time placement both on and off campus, as well as for seasonal employment throughout the world. Up-to-date job listings are maintained during the year to assist the student seeking part-time employment.

One of the recognized goals of a college education is to maximize career satisfaction, and the Placement Office exists to facilitate the achievement of this end. The Career Planning Information Center provides the student with materials on vocational guidance, career opportunities, and employers. It is maintained in the Placement Office as an adjunct to the Graduate Placement Service, the Cooperative Education Program and the Counseling Center, for the benefit of all students.

The Placement Office also serves as a central source of information on graduate schools and programs and maintains a variety of material on financial assistance available to graduate students. In addition to graduate school catalogs and information on individual college and university stipends, material and applications are maintained on such national and international awards as Fulbright and Rhodes Scholarships, National Science Foundation Fellowships, and many others. All students with an interest in attending graduate school are encouraged to begin their investigation of opportunities in this office.

Students register with Placement Services early in their graduating year. This enables them to interview on campus with recruiters from educational systems, businesses, industries, and governmental agencies throughout the country. Every registrant receives 25 free copies of his personal resume. In addition, these credentials may be used when applying to graduate school. The above services are also available to alumni desiring career relocations.

**STUDENT CONDUCT, DRESS, AND DISCIPLINE**

Social standards governing activities of student groups have been developed jointly by students, faculty and the Student Affairs staff. Social standards boards review violations of these codes. Self-discipline and awareness of social obligations are the objectives of the program.

Students attending the University of South Florida are considered to be responsible young adults working with their faculty colleagues in search of knowledge. It is hoped that rigid regulation of personal conduct will not be necessary, for freedom as an objective of education is difficult without the existence of freedom.

Such freedom must be balanced by individual responsibility and respect for the rights, responsibilities and freedom of others. Students will, therefore, be considered responsible for their own decisions and actions both on or off campus. Failure to assume this responsibility or actions which jeopardize the rights and freedoms of others or the integrity of the University will result in disciplinary review.

Just as the University expects high standards of academic performance, so does it expect high standards of individual conduct. Similarly, it expects dress to be appropriate to the activities in which the individuals are engaged.

Noticeable or gross departures from expected standards of conduct or dress on the part of students will first be considered errors in judgment. Advisers or other officers of the institution will discuss such lapses with the student concerned. Persistent violations of expected standards or established regulations will involve appropriate disciplinary action. The University may deny admission or continued attendance to those whose decisions and actions are contrary to the purposes and procedures of the University.
EXTRA-CLASS LIFE

Experiences which develop in students a firm and enlightened belief in democracy, an understanding of its methods, and a sense of personal responsibility are essential for a free society. The social experiences of working in extra-curricular activities provide valuable personal understanding, emotional maturity, recreation, and social skills. Out-of-class activities of the University are related to these ends. Student activities, clubs and organizations are incorporated in the University's total educational program through the staff of Student Affairs and faculty advisers. The Director of Student Organizations, Dean of Women, Dean of Men, and the University Center and residence halls are particularly concerned with this co-curricular area of student life.

Student Association

The Student Association includes all regularly enrolled students of the University. Each student carrying seven or more credit hours per trimester is a voting member of the University of South Florida Student Association. Through its councils and elected officers, the Association directs, under the supervision of the Dean of Student Affairs, many student activities. Elections for membership on councils, executive positions within council and the Student Association are held annually.

Each major student activity is represented in the Association by a council which directs and coordinates its activities. Currently there are the Fine Arts Council, Intramural Council, Religious Activities Council, Fraternal Societies Council, Residence Hall Council, Communications Council and the University Center Council. Councils will be formed to represent newly developed activities.

The Student Association is the way in which students participate in the government of University life. In addition, the Student Association elects student representatives to the University Senate.
Clubs and Other Organizations

Students have formed clubs, organizations, and councils in almost every field of interest. New groups are being formed and will continue to develop. Groups presently organized cover the most frequently desired kinds of activities.

ART, MUSIC, AND DRAMA CLUBS

The excellent arts program, and the facilities of the Fine Arts-Humanities Building and the Theatre, has attracted students into the Botega Art Club, Bay Players, University Choir, and other organizations for theatre, orchestra and band. All students are welcome to participate in these organizations. (The University Orchestra, Band and Chorus are academic units; see Music course descriptions.)

COMMUNICATIONS CLUBS AND PUBLICATIONS

The University has encouraged and is developing a growing program of campus communication through various publications. These publications are all-University in approach and coverage. They are staffed by students under the general supervision of a faculty adviser.

The campus newspaper, which for the first five years of the University's life has been a special Monday edition of the Tampa Times, provides professional experience for those students interested in journalism. Laboratory sessions of journalism classes in newswriting, news editing, and makeup are used to produce major sections of the newspaper. Any student interested in working on the newspaper in any capacity is not only encouraged but urged to do so. About one-third of the staff each trimester is not enrolled in journalism classes.

A University yearbook, The Aegean, is produced once a year. All students are eligible to work on this publication and much valuable experience in photography, layout, editing, and business techniques is received by these students.

A campus literary magazine, i.e., is produced periodically. While the magazine is sponsored by the Literary Society, anyone at the University may submit manuscripts for consideration. This publication is devoted primarily to fiction, poetry and literary criticism.

Interested students are invited to join the staff of any campus publication.

The USF Press Club is open to all students in publications and journalism and serves the needs and interests of students in the general field of mass communications.

FRATERNITIES AND SORORITIES

There are currently seven local fraternities and five local sororities functioning on the campus. They carry out a program of social, educational, service and recreational activities for their members. Membership in these organizations is open to students, by invitation only, once the student has completed 12 credit hours with a "C" average or better. Their programs are coordinated through a Council of Fraternal Societies with the advice of faculty and staff members.

RELIGIOUS CLUBS

The University has encouraged student religious organizations to develop associations and centers. Five denominations are building centers in a reserved area on campus. The Episcopal Center was dedicated in the fall of 1962, and the Baptist Center in the spring of 1964. Centers sponsored by the Christians, Methodist, and Presbyterians will follow shortly. The United Campus Christian Fellowship has a center near the campus, and a nearby center is also planned by the Roman Catholics.
STUDENT WELFARE

Student religious clubs active on campus include the Baptist Student Union, Catholic Student Organization, Canterbury Club, Christian Life Fellowship, Christian Science Organization, Inter-Varsity Christian Fellowship, Jewish Student Union, Lutheran Club, United Campus Christian Fellowship, Wesley Foundation, and Westminster Fellowship.

SERVICE CLUBS

Circle K, Collegiate Civitan (men), and Collegiate Civinettes (women) provide associations for leadership and University service experiences.

SPECIAL INTEREST CLUBS

Students have organized and continue to organize clubs covering a broad range of special interests. Membership is usually open to anyone having an interest in the club's activities. Clubs active at present include Amicus Curia (pre-law), Broadcasting Club, Business Administration Club, USF Civil War Round Table, Exceptional Child Club, Foreign Language Club, Forensics Club, Geography Club, Gold Key Honor Society, International Students Organization, Le Cercle Francais (French Club), Psychology Club, Reader's Theatre Club, Senior Accounting Organization, USF Student Florida Education Association, Tampa League of Women Voters - USF Unit, Cooperative Education Club, USF Young Americans for Freedom, Young Democrats, and Young Republicans.

SPORTS CLUBS

For the sports enthusiast, whether beginner or expert, there are a variety of sports clubs functioning on the campus. Present clubs include those devoted to archery, dancing, fencing, golf, gymnastics, judo, riflery, sailing, sports cars, swimming, tennis, water skiing, and weight lifting.

Cultural Events

Each trimester a committee of the University arranges a full schedule of concerts, exhibits, plays, lectures, films and forums for the cultural enrichment and entertainment of the University community. These programs consist of performances by individuals and groups within the University, as well as presentations by well-known professionals.

Many of these events are presented both during the day and in the evening, and most are free of charge. Programs on the events calendar are also open to the general public.

Within the Division of Fine Arts there are performing groups in music and theatre arts which draw heavily on student talent; student artists also have opportunities to exhibit their works.

Intramural and Recreational Sports

Outside its academic program, the University of South Florida provides a variety of physical and recreational activities designed to meet the needs and interests of students. Believing that a sound and complete education includes a proper balance of work and study with physical activity, the University program includes intramural sports competition for men and women, sports clubs and all-University events days in addition to basic instructional programs in physical education.

The intramural sports program emphasizes activities that are especially suited to the Florida climate. Competition is scheduled in such individual sports as swim-
ming, tennis, track, golf, cross country, table tennis, bowling and archery, as well as the team sports of touch football, basketball, soccer, volleyball and softball. Competition is scheduled through fraternal societies, residence halls and independent divisions. Team and individual awards are presented. Sports club affiliations provide excellent opportunities to pursue individual interests with like-minded students.

At the University of South Florida it is intended that these activities will be so conceived and executed that they are laboratories of learning and a means of releasing physical and emotional energies. They are planned to give meaning, balance and reinforcement to the curriculum and to be positive factors in the mental, emotional and physical health of students.

**Intercollegiate Athletics**

The University of South Florida anticipates entering into intercollegiate competition in baseball, golf, soccer, swimming, tennis, track, and cross country during 1965-66. An athletic council has been formulated to develop policies. A proposed budget has been approved which would permit acquiring the necessary equipment, allocating service awards and arranging schedules.

Actual competition will be predicated upon the availability of adequate facilities so as not to interrupt intramural programs designed for all students, ability to arrange schedules, and availability of interested and qualified participants.
ACADEMIC PROGRAMS

The University of South Florida programs are presently conducted through five colleges. The College of Basic Studies provides the basic general education needed by all students. The College of Business Administration offers professional courses appropriate for its general field as does the College of Education. The College of Engineering, new this year, offers a limited number of programs in engineering. The College of Liberal Arts offers courses in the arts and sciences, including a variety of professional and preprofessional programs. Each of these colleges has its own requirements and standards. However, all share University-wide emphases and common requirements for graduation. All presently offer the Bachelor of Arts, although other degrees will be offered in the future. The Master of Arts is offered in elementary education.

Each college has prepared its course offerings with strong undergraduate programs clearly in mind. Students are urged to make their college education a broad one, reserving intensive specialization until they are on a job or have gone on to graduate or professional school. To insure that this happens, the University has established the policy that no major may require more than 40 credit hours in any one subject and each student must qualify in at least 60 credit hours outside the division of the major. Students taking more than 40 credit hours in one subject must take them in excess credits beyond the minimum required for graduation.

Each college accepts the idea that a college education begins with a broad base of general courses, proceeds to more specialized work and ends with a formal effort to bring together the many separate threads of an education into a significant pattern. Thus, all students enroll first in basic studies courses, then in courses in the college where they wish to concentrate, and finally in a senior integrating seminar. It is hoped that students will constantly attempt to synthesize their education as they move along and that they will have had considerable experience by the time they reach their senior seminar.

None of the colleges is formally organized by subject matter departments. The decision to use more comprehensive divisional units was based on the belief that students should be encouraged to take courses in a number of related subjects rather than to concentrate all their energies on one or a few subjects alone. The College of Liberal Arts is, however, organized to include specific programs such as history, English, mathematics, music, and chemistry, within the broader divisions. Thus each student may, if he wishes, graduate with either a subject major, a divisional major or with a major embracing courses in several different divisions, or even colleges.

Summer Sessions

The Summer Sessions (Trimester III-B) constitute an integral part of the academic program of the University of South Florida. Many summer courses are identical with those offered at other times during the academic year and are taught by the regular University Instructional staff or by outstanding visiting teachers. In addition
to these regular courses, there are various workshops, institutes and conferences conducted by specialists.

While the Summer Sessions may serve as a continuation of the third trimester of the academic year for regular students, these courses and programs have an added emphasis for in-service teachers and for beginning freshmen just graduated from high school.

The Evening Sessions

The Evening Sessions of the University of South Florida are designed to meet educational needs of people within commuting distance. Course offerings are created to provide community service and to meet the cultural and professional needs of persons otherwise occupied during the day but who wish to spend leisure time in organized study. For these people, the Evening Sessions provide work toward a university degree or offer selected courses for personal or professional advancement.

The admission requirements for the Evening Sessions are the same as those for other students. Evening students must complete an application for admission to the University of South Florida and present all material required and described earlier under Admission to the University.

Students admitted to the Evening Sessions may select courses to fit their needs without necessarily meeting prerequisites. However, students who do waive these requirements must possess sufficient background and experience to compensate for them. The student and his adviser should determine the need for prerequisites and the level of courses in which he will enroll.

The Office of the Coordinator of Continuing Education is open each evening classes are in session. Other administrative offices of the University are open only during normal operating hours of the day. Students are free to consult with the Coordinator of Continuing Education on any evening or during the day on any problems or questions that may arise.

Courses of the Evening Sessions normally meet one time per week on either Monday, Tuesday, Wednesday, or Thursday evening. A few courses meet two times per week. The courses of the Sessions contain the same material and requirements as the equivalents offered during the day. Each student will be expected to meet the same standards of performance and pass the same examinations full-time day students are required to complete. Grades and progress will be based on the same system applicable to full-time students.

The faculty of the Evening Sessions consists of faculty members who also teach courses offered during the day. They also serve as advisers for part-time students. Students will be assigned to advisers shortly after admission to the University and will continue with the assigned adviser so long as they remain students at the University and the relationship remains satisfactory. Advisers are assigned on the basis of the educational objectives of the student. Any change in advisers will be accomplished through the Coordinator of Continuing Education.

Students may enroll in courses offered by any of the colleges of the University. As a general rule, part-time students attending night classes are encouraged to take no more than two courses. No evening student may enroll in more than three courses in any one trimester.

Evening programs in the fields of accounting and management have been developed to allow students to earn the bachelor of arts degree without taking day-time courses. Required and elective courses are offered during the Evening Sessions in a progressive sequence.

Students seeking degrees through the Evening Sessions must meet the same degree requirements as full-time day students. These requirements are set forth under the curricula of the various colleges.
Pre-Professional Programs

In addition to the vocational training which students can complete at the University of South Florida, programs are provided which are basic to completing a vocational preparation at another institution. The University offers curricula to prepare students for entrance directly into such professional schools as medicine, dentistry, veterinary medicine, law or theology. Whether or not a student entering one of these programs will stay four years at the University of South Florida or will transfer before the completion of four years depends on which professional school he elects to attend. Some medical schools accept outstanding students at the end of the junior year, but most require a bachelor's degree for admission. The same differences are found in law schools and other professional programs. Students who are planning to enter one of these pre-professional curricula should discuss their program with their adviser, should read carefully the bulletins of institutions to which they might transfer, and should consider the specific branch of professional education they ultimately wish to enter.

The University offers two types of programs for prospective engineering students. One is a full undergraduate engineering program offered by the University of South Florida beginning in September, 1964. The other is a two-year program from which a student transfers to a more highly specialized engineering school.

Similar combinations are possible for home economics, with students finishing their degree from Florida State University or other institutions having a home economics curriculum. Florida State also offers a degree in nursing, the first part of which can be taken at the University of South Florida. Agriculture, architecture, forestry, health services, pharmacy, library work, and social work are other vocations in which joint programs are possible.

The prospective student interested in any career requiring collegiate education may safely take at least the first part of that education at the University of South Florida without danger of losing substantial numbers of credits when he transfers to the institution in which he will complete his work.
College of BASIC STUDIES

The College of Basic Studies provides that part of a formal university education which should be common to all graduates of the University of South Florida. All students enter the college as freshmen and must complete its requirements before entering one of the other colleges of the University.

Lower division courses are offered by the college in seven areas (see list under Waiver, below). Completion of six credits each in six of these areas satisfies the lower division basic studies requirement. In Natural Science and Foreign Languages the student may choose from more than one course; only one from an area can be used to satisfy basic studies requirements. Ordinarily, a student would enroll in three basic studies courses in each of his first four trimesters, completing his program with introductory courses from the other colleges. Which area to omit is to be decided by each student, in conference with his adviser. A suggested guide is to omit the area in which competence is greatest or the one most closely related to a proposed major. Students may, of course, take all seven courses for credit.

Waiver

Some entering students have already achieved competence in one or more areas of the basic studies. These students may request a waiver of one or more of the basic studies requirements. Applications for waiver must be completed in the Registrar's Office during the first trimester the student is in attendance at the University. Routine approval will be granted when applications meet the following conditions: (1) a score of 425 or higher on the Florida State-Wide Twelfth Grade Tests; (2) a grade of "C" or better in each of three or four years of relevant high school work. Requirements specific to the area in which waiver is requested are as follows:

Functional English: No waiver available.

Behavioral Science: Evidence of competence acquired elsewhere.

Natural Science:

(A student passing BZ 201, BO 202 and ZO 202 with a grade of "C" or higher in each course can receive an automatic waiver of CB 105-106.)

(A student passing two 8-hour liberal arts sequences in separate Physical Science disciplines with a grade of "C" or higher in each course can receive an automatic waiver of CB 107-108.)

Functional Mathematics:

Three or more years of high school mathematics, including two years of algebra and one semester each of geometry and trigonometry.

48
(A student passing liberal arts mathematics courses through MA 205 with a grade of "C" or higher in each course can receive an automatic waiver of CB 109-110.)

Functional Foreign Languages: Three or more years of one foreign language.
American Idea: Four or more years of high school social studies, including one year of world history and one year of American history.
Humanities: Evidence of competence acquired elsewhere.

Lower division basic studies requirements may be satisfied by independent study or credit by examination, according to the procedures described on page 24 of this catalog. Students who have completed more than two college courses in the field of study concerned may not earn credit by examination. They may, however, take the examination and secure a waiver by scoring a "C" or higher.

Placement of Students in Language Classes

The appropriate placement of students in language classes is often a difficult matter calling for consultation with a member of the language staff. The general placement rule that one year of high school language is equivalent to one trimester of college language can be applied in most cases. Thus, if a student has had four years of high school language; he should enroll in the third year of language; three years would put him in the second trimester of second year; two years in the first trimester of second year; and one year in the second trimester of first year. However, if the student's background is inadequate, he may be allowed to drop back one trimester with the written permission of a member of the language staff. If a student has had two years or less of a foreign language in high school five or more years previous to enrollment in a language at the University of South Florida, he may disregard these language courses and register in a beginning course.

Advanced Basic Studies Major

An Advanced Basic Studies Major consists of CB 301-302, CB 303-304, CB 305-306, and CB 307-308, plus a concentration of 12 credits in an upper level program approved by the adviser. Not more than 24 credits from a single program can be counted toward a basic studies degree unless the student is completing a double major. Students seeking a double major may petition to the dean's office to waive the 24-credit limit.

Humanities Major

Requirements for a major in Humanities are 30 credits of upper division Humanities courses (at least 12 of these credits must be in 400-level courses, including HU 471 and 491) and six credits in a creative or performing art. Combined majors for secondary school teachers in Humanities/English and Humanities/Modern Foreign Languages are also available; for requirements, see College of Education.

Basic Physical Education

The required program in Basic Physical Education is planned to build on the prior knowledge and experience of students. Those who have already obtained the necessary knowledge and all or part of the skills required may meet these requirements
by proficiency examination or evidence of adequate prior experience. For others not so prepared, appropriate courses are offered.

The four-trimester requirement in Basic Physical Education must include: (1) Functional Physical Education, (2) aquatic activity, (3) individual or dual activity, and (4) an activity elected from any area.

Functional Physical Education (PE 101) is a prerequisite to all areas except aquatics, and must be met through regular class enrollment or authorized independent study. Students enrolled in PE 101 scoring less than the 25th percentile in the motor fitness test will be required to take special conditioning. Medically limited students will be assigned to an appropriate activity course or courses on the basis of their limitations.

Normally a student will register for one of the required areas during each of his first four trimesters. PE 101 may be taken either term of his first two trimesters of the freshman year, but should be taken during that year. Three of the requirements must be completed before a student can be admitted to an upper level and the fourth before he attains senior status.

The Basic Physical Education requirements will be waived for any student who has reached his 25th birthday at the time of his first enrollment at the University of South Florida. This does not prohibit such students from electing to take physical education. Prior military service is not a substitute for the requirements of physical education. Physical education proficiencies and enrollment in appropriate physical education courses will be established individually for handicapped students by a joint decision of the Director of Physical Education and the Director of the Student Health Center.

For the three required areas other than PE 101, requirements may be met by whichever of the following methods are deemed most suitable to the students and staff:

1. By proficiency examination. Proficiency examinations may be attempted prior to or concurrently with PE 101. Students may not attempt a proficiency examination in any activity for which they are currently enrolled. There is no penalty for failing proficiency tests, and they may be retaken. Proficiency examinations are not available for every activity listed in the curriculum. There are two parts to the proficiency examination: (1) a written test covering rules, history, strategy and basic fundamentals and (2) a skill test in the chosen activity administered only to those who have successfully passed the written portion. The level of competency needed for successful completion of the written and skill tests is basically that of a student who has taken the course and received a grade of "B" or better.

2. By presenting evidence of adequate prior experience. If evidence presented indicates a fairly high degree of skill in a designated area, the student is not required to take a proficiency examination. Current life saving certificates, membership on swimming teams, city, state or national ratings, established handicaps, two high school or collegiate varsity awards are examples of evidence necessary to meet the Basic Physical Education requirement by prior experience.

3. By enrolling in one aquatics activity, one individual or dual sport and one elective from any area and receiving a passing grade.

No credit points are given for Basic Physical Education. For programs in Professional Physical Education, see the College of Education.
The College of Business Administration places emphasis upon its students acquiring knowledge about, and a better understanding of, the challenge and opportunities of the rapidly changing environment in which students will work or operate a business.

Procedures and practices used efficiently today could become obsolete even before the student graduates. Therefore, it is more important that the student learn principles inherent in a subject he studies and to use these effectively under different circumstances than to be concerned with memorizing fixed information.

With this goal in mind, the college seeks to meet the following principles:

1. To prepare students for a succession of jobs rather than their first job or for top management.
2. To give the student a broad, foundation in general and liberal education, a thorough grounding in basic business courses, some technical competence in at least one significant area of business and the ability to apply these to major practical business problems.
3. To strengthen students' powers of imaginative thinking, creative independent analysis and sensitiveness to social and ethical values.
4. To instill in each student a desire for learning that will continue after he has graduated and taken his place in the business community.
5. To convey to each student the spirit of pioneering, risk and adventure long a unique characteristic of the American business scene.

UNDERGRADUATE ADMISSION AND DEGREE REQUIREMENTS

Students will be admitted to the College of Business Administration who have fulfilled the following requirements:

1. Successful completion of at least six of the seven lower level courses in the College of Basic Studies.
2. Satisfactory completion of the four required physical education competencies.
3. Completion of 60 or more credit hours with a grade point ratio of 2.0 or higher.
4. Satisfactory completion of the foundation courses Elementary Accounting (AC 201-202) and Economic Principles (EC 201-202). Provisional admission is possible in some instances.

Transfer Students

The College of Business Administration is organized as a professional school within the University. A professional program of education for business leadership must be based on a foundation of comprehensive general education; consequently, most of
this basic work must be taken prior to admission to the college. It should be further noted that approximately one-half of the work leading to the bachelor's degree in business is required from academic areas outside of business.

The following conditions will serve as a guide in expediting admission to the college and in preparing for a professional career in business leadership:

Junior college students should complete the program of general education as required by the junior college. Certification to this effect will be accepted as fulfilling the general education requirements of the University of South Florida. Students attending a four-year college, who wish to transfer after two years, should follow a program in general education similar to that required at the University of South Florida.

Prerequisite courses in business subjects during the first two years should be limited to such courses as are offered to freshmen and sophomores at the university of the student's choice. Normally these will consist of six hours of economic principles and six hours of accounting principles. Transfer credit will be allowed for these courses.

Any remaining electives after fulfilling (a) the general education requirements of the junior college and (b) the prerequisite business courses listed above should be taken in such areas as mathematics, the natural sciences, the social sciences, and humanities.

A maximum of nine hours of credit may be allowed for courses taken during the first two years of study which are available only as third or fourth year professional courses in the College of Business Administration at the University of South Florida. Examples of such courses would be Principles of Management, Marketing or Finance, Business Statistics, and Business Law. Any credit granted for such work may be in the form of undistributed business elective credit with no more than three hours transferred for credit in the student's major area.

Requirements for Graduation

Graduation requirements are 120 credit hours, including Basic Studies requirements, 39 credit hours; electives outside Business and Economics, 18 credit hours; Business Core of AC 201-202, EC 201-202, 301, and 331; GA 361; FI 301; MM 301; MK 301; and GA 499, 33 credit hours; courses in Business and Economics, depending on the major, 18 credit hours (transfer students must complete at least six of these hours at the University of South Florida); and business electives not in the student's major field, 12 credit hours.

Candidates for graduation must also take the Graduate Record Examination Aptitude Test.

The only exceptions to these requirements are those allowed students in the Business Teacher Education Program.

CURRICULA AND PROGRAMS

1. ACCOUNTING

Major Requirements: AC 301, 302, 421, and three of the following: AC 323, 401, 411, 423, 425, and 431. (AC 323, 401, 411, and 423 are all required to qualify for CPA examination.)

Business Electives: GA 362, 371, and two other business courses.

General Electives: These 18 hours must be taken outside the College of Business Administration. It is strongly recommended that all accounting students take SH 201.

Recommended Courses in College of Basic Studies: CB 101-102, 103-104, 109-110, 201-202, and two of the following: CB 105-106 or 107-108, 111-118, and 203-204.
2. ECONOMICS

Students may concentrate in General Economics, Labor and Industrial Relations, or International Trade.

**Major Requirements:** EC 311, 323, 401, and three other courses in desired concentration as follows:
- General Economics — EC 405, 423, and one additional upper-level economics course.
- Labor and Industrial Relations — EC 313, 411, and one additional upper-level economics course.

**Business Electives:** Four courses in the College of Business Administration. International Trade majors are required to take FI 351 and three other business courses.

**General Electives:** These 18 hours must be taken outside the College of Business Administration.

**Recommended Courses in College of Basic Studies:** CB 101-102, 103-104, and 109-110.

3. FINANCE

**Major Requirements:** FI 321, 411, 421, 431, 498, and EC 323.

**Business Electives:** Four courses in the College of Business Administration.

**General Electives:** These 18 hours must be taken outside the College of Business Administration. It is strongly recommended that all finance majors take SH 201.

**Recommended Courses in College of Basic Studies:** CB 101-102 and 109-110.

4. MANAGEMENT

Students may concentrate in Industrial Management or Personnel Management.

**Major Requirements:** GA 351, MM 341, 489, and three other courses in desired concentration as follows:
- Industrial Management — MM 371, 421, and 431.
- Personnel Management — MM 343, 441, and 445.

**Business Electives:** Four courses in the College of Business Administration.

**General Electives:** These 18 hours must be taken outside the College of Business Administration.

**Recommended Courses in College of Basic Studies:** CB 101-102, 103-104, 107-108, 109-110, 105-106 or 203-204, and 111-118 or 201-202.

5. MARKETING

**Major Requirements:** MK 311, 315, 411, 413, 415, and 419.

**Business Electives:** Four courses in the College of Business Administration.

**General Electives:** These 18 hours must be taken outside the College of Business Administration. It is strongly recommended that all marketing students take SH 201.

**Recommended Courses in College of Basic Studies:** CH 101-102, 103-104, and 109-110.

6. OFFICE ADMINISTRATION AND BUSINESS TEACHER EDUCATION

**Major Requirements:** OA 141, 143, 251, 253, 351, 361, and 461. If waiver is granted for OA 141, 251, or 253, Office Administration students will substitute OA 353 or a business elective. If waiver is granted for OA 141, BTE students will substitute OA 353. If waiver is granted for OA 251, 253, BTE students will substitute electives in general education or liberal arts (i.e., Speech, Introduction to Teaching, etc.).
BUSINESS ADMINISTRATION

Required Business Course: BTE students must take GA 371 to comply with state certification regulations.

Business Electives: BTE students have no business electives. OA students have nine hours of such electives. The following are suggested: AC 305, MM 341, and GA 371.

General Electives: OA students have 21 hours of electives which must be taken outside the College of Business Administration. Those taking BTE have three hours of such electives and these must be in general education to comply with state certification regulations.

Professional Education: Students taking the BTE program must take the following courses to meet state certification requirements: ED 305, 307, 401, 443, 491, and 499.

Recommended Courses in College of Basic Studies: CB 101-102, 103-104, 105-106 or 107-108, 109-110, 201-202, and 203-204.

DISTRIBUTIVE EDUCATION

Major Requirements: MK 311, 315, 411, DE 406, 407, and GA 371. (If DE 406 is waived, MK 413 will be substituted.)

Business Electives: None.

General Electives: Nine hours.

Professional Education: Students must take the following courses to meet state certification requirements: ED 305, 307, 401, 445, and 499.

On-the-Job-Experience: The current state certification requirements of two years or the completion of 2,100 hours of training under the supervision of the teacher-trainer may be substituted.

*See College of Education section for alternative programs.

GRADUATE ADMISSION AND DEGREE REQUIREMENTS

Admission and Background

Courses will be offered in the College of Business Administration leading to the degree of Master of Business Administration. The college proposes to start this initial program offered at the graduate level in September 1965.

Students should consult the Graduate Study section of this catalog for information on the requirements for admission to graduate study. The College of Business Administration will generally follow these same standards.

It is anticipated that students applying for admission will have very diverse backgrounds. For example, the students may hold bachelor’s degrees in Business Administration, Engineering, Liberal Arts, or Education. Therefore, in order to improve the probability that students will be able to accomplish advanced course work at an acceptable level of performance, 27 credit hours of undergraduate business foundation courses, or their equivalent, are considered necessary including: Accounting, 6 credits; Economics, 6 credits; Statistics, 3 credits; Law, 3 credits; Management, 3 credits; Finance, 3 credits; and Marketing, 3 credits.

The Master of Business Administration Program

The program requires that the student satisfactorily complete a total of 36 credit hours including: AC 501, EC 501, 503, 505, and 507; FI 501; MK 501; MM 501, 503, 505; and 6 credit hours of College of Business Administration senior level elective courses* with an overall “B” average (3.0 grade point ratio). In addition, a written and oral examination will be given near the end of the last trimester of work on which the student must give a satisfactory performance.

* These six hours are to be selected by the student in consultation with his adviser.
College of Education

The College of Education places an emphasis on each student learning what is relevant for the world of today and in his getting deeply involved in his own educational process. Thus, the emphasis is on the student learning to do his own thinking about himself and his universe.

The College of Education is committed to a continuous and systematic examination of the professional program of teacher education. Promising methods or techniques are examined experimentally under controlled conditions, which make possible an objective appraisal of effects in terms of specified learning outcomes.

The University of South Florida follows an all-University approach to teacher education. Its programs for the preparation of teachers represent cooperative effort in planning and practice by faculties of all academic areas, coordinated through the University Council on Teacher Education. Courses needed by teacher candidates but designed also for other students are offered outside the College of Education. Courses in the University which are primarily designed for teacher candidates are taught by the College of Education.

In the total teacher education program there is a special concern for developing in the student a deep interest in intellectual inquiry and the ability to inspire this interest in others. It is the task of the College of Education to give leadership to the total teacher education program, including subject matter and process.

Admission Requirements

While each student admitted to the University is expected to have the qualifications to graduate, this does not necessarily mean that he is expected to have the qualifications to become a teacher.

All students wishing to enter a teacher education program may enroll in the College of Education at the beginning of their junior year. This enrollment does not include admission to an approved teacher education program.

College of Basic Studies students are encouraged to apply for admission to a teacher education program during the trimester in which they accumulate 60 hours of credit. Associate of arts degree holders from state junior colleges and other transfer students with more than 60 semester or trimester hours of college credit should apply their first trimester in residence. A student who wishes to graduate within the normal 120 hours should apply and qualify for admission to a teacher education program by the 90-hour level.

Prospective secondary and K-12 teachers are enrolled in teacher education programs involving both the College of Education and the College of Business Administration or the College of Liberal Arts.

Admission to a teacher education program requires that—

1. The student contact the College of Education Guidance Office during the first or second week of a trimester, and
(a) declare a major and make formal application to that program,
(b) arrange to take a required battery of tests, and
(c) schedule an interview with a designated member in the College of Education.
2. The applicant receives the approval from his program selection committee. Among
the criteria to be considered by the committee are the following:
(a) completion of a minimum of 30 hours of basic studies and an overall mini­
   mum grade point ratio of 2.0,
(b) recommendation of the medical center, student affairs, and the speech and
   hearing clinic,
(c) demonstrated proficiency in spoken and written grammar and satisfactory
   scores on the battery of tests and inventories,
(d) recommendation of the faculty member who conducted the interview, and
(e) additional criteria at the discretion of the program selection committee.
3. The applicant receives approval by the College of Education Selections Com­
   mittee.
Acceptance is only one phase of a continuous and cumulative selections which
continues through the supervised teaching experience.

Admission to Supervised Teaching Experience
The required supervised teaching experience in the teacher education programs
consists of one full trimester of observation and supervised teaching in elementary
or secondary schools. In certain specialized subject areas (e.g., Business Education,
Specialization Education, Distributive Education) the student teaching-seminar
experience may vary.
An intent to student teach should be filed immediately after being admitted
to a teacher education program. In order to assure placement in the public schools,
it is necessary that this intent be filed during the school year prior to the experience.
Special requirements for enrollment in the supervised teaching and seminar
courses are:
1. admission to the teacher education program,
2. completion of an application for supervised teaching,
3. successful teacher aide experience,
4. an overall 2.0 grade point ratio,
5. a 2.0 grade point average in the professional education sequence,
6. completion of at least two-thirds of teaching specialization with a minimum of
   2.0 grade point ratio, and
7. three letters of recommendation from faculty members, including one in the pro­
   fessional education area, one in the specialization area, and one from the student's
   adviser.

College Requirements for Graduation
A student to be certified by the College of Education as having completed its re­
quirements must have earned 120 credit hours with a minimum overall grade point
ratio of 2.0. An average of 2.0 or better also must be made in the student's profes­
ional education sequence and in his teaching specialization courses. Satisfactory
completion of supervised teaching is required. To complete ED 499, a score of
500 or above on the National Teachers Examination or a minimum score of 800 on
the Graduate Record Examination is required. A student must also have completed
the major requirements in an approved teaching program (which includes general
preparation, teaching specialization, and professional preparation), taken the Gradu-
ate Record Examination Aptitude Test and passed the senior seminar in the College of Basic Studies. A minimum of nine credits in professional courses and 12 credits in specialization courses must have been earned in residence.

**SPECIFIC REQUIREMENTS**

A minimum of 120 credit hours, including: Basic Studies requirements, 39 credit hours; Major Concentration, 27 to 52 hours; Professional Education Core of ED 305, 307, 401, and either 440 or 441-465, 12 credit hours; Senior Seminar in Education (ED 491), 3 credit hours; and Supervised Teaching (ED 499), 9 credit hours. The remaining credit hours up to the minimum of 120 will be elected by the student with the help of his adviser.

**Recommendation for Florida Certification**

The dean of the College of Education has the responsibility of recommending for Florida state teacher certification any applicant who graduates from the University of South Florida. The decision on whether to make the recommendation will be on the basis of the applicant’s character, academic proficiency, commitment to teaching, emotional stability, personal and social qualities, and his demonstrated teaching ability during the internship period. Before recommending teacher certification, the dean will consult with various faculty members who have taught the student at the University.

**NON-DEGREE STUDENTS SEEKING CERTIFICATION**

A person who has previously earned a bachelor's degree and has a desire to satisfy certification requirements may enroll in courses in which he has met the course prerequisite.

A holder of a bachelor's degree wishing to enroll in ED 498 and 499 should file an intent to student teach with the College of Education Guidance Office. Approval of the application by the Selections Committee of the College of Education and satisfactory completion of 12 credit hours of course work in residence are prerequisite to registration in ED 498 and 499 by students in this non-degree seeking category.

**Research and Development Program in Special Education**

The solutions to most human problems can no longer be approached from the viewpoint of one discipline. This is particularly true when planning and executing major projects of theoretical and practical significance for the care and education of exceptional children and youth. In recognition of this, an all-University interdisciplinary program has been designed to facilitate cooperation of all groups interested in the welfare of the exceptional pupil. This program in Special Education is designed to educate the teacher of the exceptional child.

**TEACHER EDUCATION CURRICULA AND PROGRAMS**

There are three distinct areas in the teacher education program, and all teacher candidates must meet certain minimum requirements in each. The three areas and their requirements are as follows:

1. **General Preparation (39 to 45 credits)**

   Elementary teacher candidates must take CB 101-102, 103-104, 109-110, 201-202, 203-204, 401, and either 105-106 or 107-108. ED 101 is strongly recommended. If substitutions are made, they must be part of a planned program.
Secondary and K-12 teacher candidates have the same general preparation requirements as prospective elementary teachers, except the students may take either mathematics or a foreign language, although both are strongly recommended.

2. Professional Education Core (12 credits)

Elementary and secondary teacher candidates are required to take only 12 credit hours in the professional education core. In addition, the teacher candidate is required to take the senior seminar in education and supervised teaching. It is recommended that teacher candidates consider electing other professional education courses. It is not recommended that these courses be taken in lieu of liberal arts offerings. Some of the areas in which they might profitably elect courses are: Guidance, Special Education, Tests and Measurements, Principles of Learning, and Philosophy of Education.

The required courses in professional education, senior seminar, and supervised teaching for teacher candidates are ED 305, 307, 401, 491, and 499. Elementary education majors must also take ED 440 (methods); secondary education majors are required to take one methods course in their subject area.

3. Teaching Specialization Preparation (up to 52 credits)

Course requirements in the area of teaching specialization vary according to subject. The different specialization requirements are listed on the following pages.

A. Elementary Education

Students who are elementary teacher candidates for the bachelor’s degree must have ED 305 as a prerequisite to work in this concentration. The major consists of 27 hours of elementary specialization courses taught in three areas of nine credit hours each. These areas are: (1) Esthetic and Recreation Learnings (art, music and health, physical education – EE 321, 323, and 325), (2) Communication Arts (reading, language and literature – EE 309, 311, and 313), (3) Environmental Concepts and Understandings (arithmetic, science, and social studies – EE 315, 317, and 319). Students register for these courses in nine-trimester units, thereby avoiding unnecessary duplication and approaching the subject both as separate entities and as interrelated disciplines.

No student may intern without a 2.0 grade point ratio in course work taken in the separate areas of professional education and teaching specialization.

Each elementary education major must also choose, with the assistance of his adviser, a teaching specialization in depth. This should include a minimum of 18 credit hours in a subject taught in the elementary school. With careful planning, the student may receive dual certification in elementary education and in a kindergarten through twelve, or a secondary education field.

Students interested in certification in early childhood education may add this area to a major in elementary education by taking EE 410, 411, 412, 413, and by enrolling in an internship providing teaching experience in nursery-kindergarten and elementary education upon completion of the required course work.

Information on course work leading to dual certification in elementary and library science-audio visual education is given in Section B-3, below. Elementary education majors wishing concommitant certification in special education must fulfill requirements listed in Section B-4, below (Mental Retardation).

B. Kindergarten Through Twelfth Grade

Candidates meet certification requirements for teaching at any grade level from kindergarten through the senior year of high school.
(1) ART EDUCATION. Required courses are AR 101-102, 201-202, 271, 311, 321, 331, 341, 373, and 401; AE 379 and 498; FA 301-302 and 491; and three hours of electives in art history, for a total of 47 hours.

(2) HEALTH, PHYSICAL EDUCATION AND RECREATION. All professional major students are expected to participate in intramural sports, sports clubs, and the physical education professional majors club. Professional major students must meet the same four-trimester requirement in basic physical education as other regular students, namely: functional physical education (PE 101), aquatic sports (PE 130 or 132 or 134 or 136), individual and dual sports (selection from PE 150-179), and an activity elected from any area (PE 102-179).

Proficiency examination or evidence of adequate prior experience may meet the requirements above if approved by the Division of Physical Education.

Professional major men students must take the following non-credit basic physical education courses: PE 101, 119, 160, 168, 169, 170, and either 132, 134 or 136. Professional major women students must take the following non-credit basic physical education courses: PE 101, 119, 120, 160, 166, 168, 170, and either 132, 134 or 136.

Professional major students, with the exception of the four-trimester requirement, may waive PE courses upon recommendation of the chairman of the professional program. Professional physical education requirements are as follows for all majors: EP 301 and EE 325; ZO 271; and EP 217, 321, 353, 354, 361, 431, 451, 455, and either EP 229 or 329, for a total of 31 hours. In addition, men students must take EP 322, 331, 332, and 357, for a total of ten hours. Women students must take EP 337, 333, 334, and 359, for a total of 11 hours.

Elective courses are EP 235 for men and EP 236 for women. EP 460 is an elective course for teachers in the field who must have approval of the county school superintendent and the county health department.

(3) LIBRARY AND AUDIO-VISUAL EDUCATION (LEARNING RESOURCES). This program is designed for both in-service teachers and undergraduate teacher candidates earning a major in another field. The required courses meet state certification in library and audio-visual service. The courses are: EE 313, LE 411, 412, 413, 415, 417, 419, 421 or 423.

(4) MENTAL RETARDATION (INTELLECTUAL DISABILITIES). With the assistance of an adviser, students elect 27 credit hours from the major area—SE 321, 322, 323 or 324, 498; SH 493; ED 483 or PC 231, 341, 343; or an appropriate substitute. Half of ED 499, the teaching internship, involves supervised teaching in the special class setting; the other half, in the elementary classroom. Students register for three credit hours of SE 498 concurrently with ED 499. In addition, 24 hours are required in the area of Special Preparation for Elementary Teachers—Esthetic and Recreational Learnings (nine hours), Communication Arts (six hours), and Environmental Concepts and Understandings (nine hours).

(5) MUSIC EDUCATION. Programs in both instrumental and vocal music are offered. It is strongly advised that students elect a core in other relevant areas such as humanities, theatre arts, and art.

Instrumental music students must take MU 101-102, 121, 201-202, and 307-308; FA 301-302 and 491; ME 431, 432, 433; ensemble; and 12 credits of study with the major instrument, for a total of 49 credits.

Vocal music students must take MU 101-102, 121, 201-202, 231-431, and 307-308; FA 301-302 and 491; ME 435, 437, 439; and ensemble, for a total of 49 credits.

Before enrolling in ED 499, Internship, each vocal and instrumental music student is required to pass the piano proficiency examination defined by the music faculty. Excluding only the internship trimester, music education candidates are required to participate in ensemble.
C. Secondary Education

Candidates are required to meet specialization requirements in broad subject fields or in subject combinations. It is also possible for prospective secondary school teachers to add elementary school certification by following an approved program. The secondary school specialization requirements can be satisfied in any one of seven areas —

(1) BUSINESS EDUCATION. To qualify to teach business education, students must take the Business Core of 33 credit hours as listed in the graduation requirements of the College of Business Administration. They must also take OA 141, 143, 251, 253, 351, 361, and 461, and GA 371, for a total of 21 hours. OA 251 and 253 may be replaced with special permission by electives in general education or liberal arts (e.g., Speech, Introduction to Teaching).

(2) DISTRIBUTIVE EDUCATION. To qualify to teach in the area of Distributive Education, students must take 33 credit hours of business courses. They must also take EC 331, MK 411, DE 406 and 407, plus six credit hours in a prescribed special interest area and six hours of general electives. In addition, they must fulfill the state requirement of two years on-the-job experience or completion of 2,100 hours of training under the supervision of the teacher educator.


English — Students must take any three of EN 201, 203, 205, and 206. In addition, they take EN 207, 331, 411 or 412, 417; one course in writing above the freshman level; one English elective at the 300 level, and one English elective at the 400 level; SH 201 and 321; EN 341 and either EN 343 or 349; and TA 101.

English-Humanities — Students must complete 24 hours in prescribed English/Speech courses beyond Functional English to receive certification. In addition, they will complete 21 hours in Humanities beyond CB 203-204 and at least three hours in studio work in Fine Arts, with an additional three hours strongly recommended. Thus, students will complete a required total of 48 hours for the joint major. The specific program is listed below.

Required: EN 203, 206, 207, 221, 331, 411, and 417; SH 201; HU 321-322 or 323-324, HU 315-316 or 317-318, HU 311-312 or 313-314 or 435-436; and one additional 400 level Humanities course. One course in studio work in art, music or theatre arts. Recommended Electives: a second course in studio work and SH 321.

English-Journalism — Students must take any three of EN 201, 203, 205, and 206. In addition, they take EN 207, 331, 335 or 336, 341, 343 or 349, 347, 411 or 412, 417; ED 463; SH 201 and 321. In addition to ED 463, these majors must also take ED 477, Methods of Teaching English.

English-Library Audio-Visual — Students must take any three of EN 201, 203, 205, and 206. In addition, they take EN 207, 221, 411 or 413, 417; SH 201; EE 313; LE 411, 413, 415, 417, 419, and 421 or 423.

English-Speech — Students must take any three of EN 201, 203, 205, and 206. In addition, they take EN 207, 221, 441 or 412, 417; TA 101; SH 201, 203, 321, 361 or 365, 491; and two electives in Speech.

English-Latin — Students must complete programs of 21 credit hours in English and 24 in Latin. Requirements in English are any three of EN 201, 203, 205, and 206. In addition, EN 211, 411 or 412; SH 201 and 321 are required. Requirements in Latin are LA 221, 222, and any six of the following seven courses: LA 311, 313, 411, 413, and 417; LI 301 and 303. Recommended electives are EN 335,
English-Modern Foreign Language — Students must take 24 hours in English and speech and 24 hours in one foreign language above the basic courses, for a total of 48 hours. The required courses in English are any three of EN 201, 203, 205, and 206. In addition, EN 207, 221, 411 or 412; SH 201 and 321 are required. The requirements in language (Spanish, French, Russian, Italian or German, whichever is chosen) are the six hours of survey literature in the language, 12 hours of advanced courses in the language as selected by a language adviser, and three hours of advanced composition and three hours of advanced conversation in the language. Native speakers should substitute a literature course in the language for the course in advanced conversation and pronunciation. Recommended electives in this curriculum are EN 417, LI 301 and 303, GN 413, RN 415, and SH 203. In order to be certified to teach both English and a foreign language, the student must take both ED 447 and 449.

FOREIGN LANGUAGES.

Two Languages — Students must complete the basic studies language requirements or their equivalent. In the major language (French, German, Italian, Russian or Spanish), the student must earn an additional 24 credit hours, and in the minor language, the student must earn an additional 18 credit hours. The major language requirements are courses numbered 301, 303, 305, 306, and six hours of advanced work in a course selected by the language adviser. Native speakers must substitute an additional literature course for 303. Recommended electives include EN 335, 336, and 337; HU 323, 324, and courses in history, literature, and social sciences applicable to the language concerned.

Foreign Language-Humanities — The student will complete 24 hours in prescribed courses in one foreign language beyond Functional Foreign Language to receive certification. In addition, he will complete 21 hours in Humanities beyond CB 203-204 and at least three hours in studio work in Fine Arts, with an additional three hours strongly recommended. Thus, the student will complete a required total of 48 hours for the joint major. The specific program is listed below.

The requirements in language (French, German, Italian, Russian or Spanish, whichever is chosen) are the six hours of survey literature, 12 hours of advanced courses in the language as selected by a language adviser and three hours of advanced composition and three hours of advanced conversation. Native speakers must substitute a foreign language literature course for the course in advanced conversation and pronunciation. Eighteen of the 21 hours required in Humanities must be chosen from the following courses: HU 311-312, 313-314, 315-316, 317-318, 321-322, 323-324, and 415. The three remaining hours must be earned in HU 491. It is recommended that the student of this program do research in HU 491 on a problem related to his language study. In addition, one trimester of studio work is required in one of the following disciplines: art, music, theatre arts. Completion of a second trimester of studio work in the same discipline is strongly recommended.

Latin-Modern Language — Students who have had the first year of college Latin or two years of high school Latin must complete 27 credit hours in Latin and 18 in the modern language of their choice. The Latin requirements are LA 221, 222, 311, 313, 411, 413, and 417; LI 301 and 303. The modern language requirements are courses numbered 301, 303, 305, 306, and six hours of work in advanced courses selected by an adviser in the language. In order to be certified to teach both Latin and a modern language, the student must take both ED 465 and 499.

MATHEMATICS OR SCIENCE. Students desiring to teach mathematics or science at the secondary level must meet the minimum requirements of the divisional major. Major requirements in the Division of Natural Sciences are a minimum
of 24 credit hours in the discipline of major concentration and a minimum of 16 credit hours in the division outside that discipline. These latter 16 hours must be approved by the student’s adviser and must include a minimum of three credit hours at the 300 level or above. (Total program: 40 hours.) Concentrations are possible in biology, chemistry, mathematics, or physics. A major in biology, chemistry, mathematics, or physics will be accepted in lieu of the divisional major. MA 323 is required of all prospective mathematics teachers. Ed 425 is recommended for all prospective physical science teachers, and ED 427 is recommended for prospective biology teachers.

(6) SOCIAL SCIENCE. Prospective social studies teachers meet the minimum requirements of the social science divisional major outlined below. The requirements for a major in a single discipline such as history or geography can be met through careful planning of electives. The social science divisional major consists of 46 hours which must include HI 111-112, 121-122; PS 201 and 203; EC 201 and 202; GE 251 and 301 or 327; SO 341 or 261 or 331 or 443 or PC 331; SS 411, 361; and at least six hours of electives in 300 or 400 level courses in the Division of Social Science.

(7) INDIVIDUAL MAJORS. With special permission of the dean of the College of Education, individual teaching majors may be planned in one or more teaching subjects to satisfy the specialization requirements. When this permission has been granted, the student must meet the subject-area requirements of the major in the College of Liberal Arts in addition to the Florida Teacher Certification requirements.

Master of Arts Degree Program for Teachers

The master of arts degree program for teachers has as its purpose to build a high level of competency in professional knowledge, teaching specialization, and general education.

In addition to general, University-wide admission requirements, admission to candidacy for the master of arts degree in teacher education requires certification in an appropriate teaching field. Except where expressly stated otherwise, no course may apply both to initial certification and to master of arts degree requirements. In order to be eligible for the degree, the candidate must satisfactorily complete an approved program and pass a final comprehensive examination in the specialization area and the process core.

All master of arts degree programs for teachers consist of 36 credit hours, at least 18 of which must be at the 500 level. Most specialization areas include the option of a thesis of three to six credit hours. The four principal components of the degree programs are:

1. The Process Core (3-12 credit hours)
   
   ED 501, Foundations of Educational Research
   ED 505, Psychological Foundations of Education
   ED 507, Historical and Philosophical Foundations of Education
   ED 483, Foundations of Measurement

   All students in the teacher education graduate program will take ED 501. Enrollment in one or more of the other courses in the Process Core will be determined by undergraduate background and level of competency as determined by proficiency examinations after admission to graduate study.
2. Study of Current Developments in Curriculum and Teaching (3 credit hours)
A. ELEMENTARY
   EE 503, Seminar in Curriculum Research
B. SECONDARY
   ED 532-537, Current Trends in Teaching Specialization.
C. K-12 CERTIFICATION AREAS AND DISTRIBUTIVE EDUCATION
   Included in courses within the specialization.

3. Liberal Studies (0-6 credit hours)
   For the purpose of broadening and enriching the total educational experience
   of the teacher, selected courses should be taken outside the process core and the
   specialization area.

4. Specialization (18 credit hours minimum)
   A. ELEMENTARY EDUCATION.
      All students pursuing the master's degree in elementary education are required
      to present credit in the following courses: EE 503, 509, and 513. ED 501 should
      be completed in the first nine hours of graduate work taken by the degree-seeking
      student.
      
      (1) ELEMENTARY CURRICULUM EMPHASIS: Course work should be elected
      from EE 511, 515, 517, 519, and 521. Additional course work is available through
      consent of the adviser as part of a planned program.
      (2) READING EMPHASIS: EE 531 and 532 are required. Possible electives
      include EE 511 and 413.
      (3) SUPERVISION EMPHASIS: ED 479, 511 and EE 541 are required.
   B. SECONDARY TEACHING FIELDS
      (1) DISTRIBUTIVE EDUCATION
         a. Appropriate College of Business Administration courses in Accounting,
            Economics, Finance, Management, Marketing, and Office Administration. (15 credit
            hours maximum)
         b. Distributive Education: minimum of six credit hours from DE 406 or
            506, DE 407 or 507, DE 521, 531, and 551.
         c. DE 561, Seminar in Distributive Education Research.
         d. Selected courses in a related area such as Guidance or Special Educa-
            tion (3-9 credit hours).
      A teaching certificate in an appropriate vocational education area is required
      for admission to candidacy. Since certain courses needed for such certification are
      not offered at the undergraduate level, limited certification credit may be applied
      to the master of arts degree requirements. This provision applies only to courses in
      the specialization area.
      (2) ENGLISH
         EN 415 and 431 if equivalent courses were not taken at the undergraduate
         level; EN 523; six to twelve credit hours from EN 501, 503, 505, 507, 511, and
         515; three to nine credit hours from EN 559, 567, 595. EN 411, 481, and 491 may
         not be applied to master's degree requirements. The English education program
         does not offer a thesis option.
      (3) MATHEMATICS
         Before admission to the program, the student must demonstrate to the chair-
         man of the Mathematics Department that he has the competence in mathematics to
         undertake the program.
A maximum of six credit hours may be taken from MA 305, 306, 309, and 321. At least six credit hours must be selected from MA 515-516, 525-526, or 533-534. Any 400 level MA courses and any other 500 level MA courses may be included in the planned program.

(4) SCIENCE

Biology — Before being admitted to the degree program, the student must have had the equivalent of the following undergraduate courses: BZ 201, BO 202; ZO 202; BZ 331; eight additional credit hours in biology; and CH 211, 212, 303, and 321. A minimum of 18 credit hours will be taken from the following: ZO 313 or 415; BO 311; BO 321 or ZO 321; ZO 311 or 312; BZ 315 or 351, and BZ 345 or 465. CH 451 may be substituted for any of the above. Appropriate 500 level courses may be substituted in any of these areas.

Chemistry — Eligibility for the master of arts degree in Chemistry Education requires passing competence examinations given by the chemistry staff in inorganic, organic, analytical and physical chemistry.

Specialization in chemistry shall consist of at least 18 credit hours selected from CH 301, 303, 305, 321, 331-332, 341-342, 411, 421, 451. Appropriate 400 and 500 level courses may be substituted for any of the preceding.
**Physics** – Before admission to the program, the student must satisfy the chairman of the Physics Department that he has the competence in physics to undertake the proposed program. He will take 18 or more credits approved by his adviser from the following courses, not more than nine credits of which may be from courses numbered below 400. Students who can satisfy the chairman by transcript or examination that they have had 28 or more credits from the courses listed below may take a minimum of 12 credits in physics and devote the remaining six or more to other fields.

PH 301, 305, 307, 311, 331, 341, 342, 401, 407, 421, 423, 437, 441, 442, 443, 481, and 483. Any 500 level courses in physics may be substituted for any course above.

(5) **Social Science**

A program will be designed in consultation with the adviser. Not more than one-half of the specialization (exclusive of thesis credit) may be in any one social science discipline or program.

**C. K-12 Certification Areas**

(1) **Art Education**

a. Art Education: a minimum of six credit hours from AE 580, 581, and 582.
b. Art Studio: a minimum of nine credit hours.
c. Art History: a minimum of three credit hours.

(2) **Guidance**

The guidance program requires three to nine credits from the Process and Liberal Studies Cores. (Because the guidance program includes a more specialized treatment of psychological foundations and measurement than the process core courses are designed to give, these two courses are not included in the minimum program.)

Specialization in guidance shall include a minimum of 27 credits, including ED 482, ED 477 or PC 451; PC 330; ED 520, 424, 525, 526, and 527. Additional courses from ED 521, 522, and 523; SE 520 and 521; and others.

(3) **Music Education**

Programs in both instrumental and vocal music are offered. At least 18 hours are taken in one of these areas. Each candidate must meet the undergraduate piano proficiency before the trimester in which he expects to graduate. Participation in ensembles is required for at least two trimesters.

Three plans are available to the candidate: 30 hours plus thesis, 33 hours plus recital, or 36 hours without thesis or recital. A comprehensive examination in music education must be passed the trimester in which the student expects to graduate.

**Vocal Majors:** five to nine credits in music education, including ME 501 and 535; three to six credits in music literature, including MU 502; at least three credits in music theory from among the following: MU 507, 508, and 509, 515, and at least four hours of applied music.

**Instrumental Majors:** five to nine credits in music education, including ME 501 and 533; three to six credits in music literature, including MU 501; at least three credits in music theory from among the following: MU 507, 508, and 509, 516, and at least four hours of applied music.

(4) **Special Education: Mental Retardation**

Students majoring in Mental Retardation select a minimum of 18 hours from Special Education courses with an emphasis in Mental Retardation: SE 498, 511, 512, 513, 520, 521, 522, 531, 541, 599; ED 583; DE 406 and 407. SE 520 and 521 are required of all students majoring in Mental Retardation.
College of ENGINEERING

The College of Engineering is the newest of the University of South Florida's professional colleges. Students entering the University as freshmen will be eligible to enter this college when they attain junior standing. Students transferring to the University as juniors will be eligible to enter directly into the College of Engineering. A full junior level course program will be available in September 1965, and initial planning also provides for advanced degree programs for industrial personnel in September 1965. A separate brochure will be prepared as plans develop for this program.

The first engineering building is planned for completion in July 1966. In the interim, the College of Engineering will be housed and course work will be offered in the Physics Building.

Program Information

Those who are concerned with the education of this country's engineers are currently in the process of critical self-evaluation in an attempt to develop academic programs which will meet the broad spectrum of demands to be placed on tomorrow's engineers. As our society has become more complex, so has the array of problems to be solved by the engineer. Even now, research engineers are working on such projects as nuclear spin gyroscopes to provide guidance for spacecraft, or on the development of instrumentation for exploration deep in the oceans. Others are engaged in developing artificial body organs such as hearts and kidneys, while some are designing bridges and highways. Still others have become manufacturers and sales engineers.

The University, in the planning of its initial programs in engineering, has a unique opportunity for developing a fresh approach to the challenge of educating tomorrow's engineers. As the program at the University of South Florida departs somewhat from the more traditional programs, some explanation to the prospective engineering student is in order.

Today's engineering effort can be placed in three broad groupings of activity—design, research, and the operation of complex engineering systems. It has become increasingly obvious that it requires longer than four years to provide an education for engineers who will participate in the advanced design and research activities of the engineering profession; however, a large segment of engineering graduates do not enter the design and research activities, but are utilized as the operators of engineering systems, or because of their technical backgrounds, are employed in engineering-related activities.

Because of the broad range of today's engineering activity and the increase in scientific knowledge with its many interrelationships, it is becoming increasingly difficult to maintain the traditional identification of engineering effort such as civil,
electrical, mechanical, and so forth. Many users of engineers have abandoned such descriptions of engineering work in favor of more functional descriptions of their activities.

The University of South Florida has approval to plan the development of its professional program in engineering as a ten trimester (five year) plan leading to the degree of Master of Science in Engineering. Under this program, students would be identified upon completion of their sixth trimester (junior year). Some would pursue an additional four-trimester (two-year) plan leading to the professional master's degree with an emphasis on one of three general areas of engineering activity—design, research, or the operation of complex engineering systems. Others would terminate after the completion of two additional trimesters of work (one year), being awarded a Bachelor of Science in Engineering, which is operations oriented. The bachelor's degree would also prepare the student to engage in a limited amount of design activity. In the terminal baccalaureate program, 27 credit hours of approved technical electives in addition to a broad-based engineering core of course work will permit the student a limited degree of specialization with a major in one of four functional areas:

1) Electrical phenomena,
2) Structures, materials and fluids,
3) Heat and energy conversion, and
4) Analysis and operation of engineering systems.

In the professional program, 45 credit hours of major specialization are provided in addition to 12 credit hours of design, research, or special course work which the student begins in his fourth year of study.

The engineering program at the University has been designed in a highly flexible manner which, under a unified engineering degree, will permit the student to explore his individual interests with professional assistance. At the same time, students wishing to pursue course work commonly associated with such traditional degree programs as electrical engineering, civil engineering, industrial engineering, materials engineering, mechanical engineering, and so forth, can do so within the framework of the program.

**General Requirements**

The College of Engineering is organized as a professional college within the University. Students will normally be admitted to the college upon successful completion of two years of college level work, and following the completion of their third year (junior level) requirements will elect, with the advice and approval of an engineering faculty committee, to pursue either a professional program in engineering leading to the master's degree or to terminate their programs with an engineering operation-oriented baccalaureate degree. Students entering the University as freshmen who plan to pursue either engineering program should come well prepared from high school in order to complete their work in a minimum time.

The high school student anticipating a career in engineering should elect the strongest academic program that is available to him while in high school. Four years each of English, mathematics and science, as well as full programs in the social sciences and humanities, are most important to success in any engineering college. A foreign language, while not a necessity, provides a desirable background for students, many of whom will continue for advanced study.

Junior college students planning to transfer to the University of South Florida's engineering program at the junior level should plan to graduate from their respective junior colleges, thus completing their general education requirements and as much
of the mathematics, science and engineering core course work as is available to them. The University's College of Engineering is available to assist junior colleges in the development of course material and in the training of staff for their offering of applicable core pre-engineering course work.

Some prospective students who are considering pre-engineering at the University of South Florida may lack certain preparation in high school and may elect to follow several programs which will assist them in overcoming their deficiencies. One alternative might be that such a student would select a summer program at the University of South Florida to update himself in mathematics and the physical sciences. Another alternative might be for the prospective engineering student to take some remedial work and a less accelerated program at the University of South Florida. For financial or other reasons, students may wish to avail themselves of the state's system of junior colleges which offer a wide range of course work, many of which offer full programs in pre-engineering (first two years' course work).

**Upper Level Requirements**

Students may be admitted to the College of Engineering upon completion of a minimum of 60 credit hours of college level course work with an average of 2.0 on a 4.0 system ("C" average). All admissions are subject to the regulations of the University and the approval of the academic committee of the college. It is expected that students seeking upper level college admission will have completed their basic studies core requirements (general education requirements for transfer students) and will have made substantial progress in fulfilling their lower division mathematics, science and pre-engineering course work requirements in order to complete their professional programs or baccalaureate in minimum time.

**Engineering Core and Specialization**

Both the professional and undergraduate curricula of the College of Engineering are founded on a common core of course work which is required of all students and provides for a broad education as well as a foundation for the work in the several areas of specialization. Course work identified as 100 and 200 will normally be taken in the lower level (freshman and sophomore years). However, students who meet the general requirements for upper level admission but who have a deficit in the lower level material may complete this work while registered in the college and will be assigned to a special adviser who will assist them in problems that may exist in arranging their programs and courses. Course work identified as 300 or higher is considered as professional level work and students enrolling for this work must have either been admitted to the upper level or have received permission from the Office of the Dean to attempt this work.

The core and specialization requirements for both the professional master's degree and the terminal baccalaureate program are as follows:

**Basic Studies Core Requirements (24 credit hours)**

Prospective engineering majors must take CB 101-102, 201-202, 203-204, and either 103-104 or two trimesters of a foreign language. Freshmen and sophomores will normally fulfill the additional basic studies requirements in Physical Science and Functional Mathematics by completing CH 211-212, PH 221-224, and MA 203-205 with a grade of "C" or higher in each. Those not meeting these conditions will be expected to complete CB 107-108 and 109-110 either by examination or by enrolling in those courses.
Mathematics and Science Core Requirements (34 credit hours)

The student must take MA 203, 204, 205; CH 211, 212; PH 221, 222, 223, 224; PH 323; and either MA 301 or an approved elective in advanced mathematics.

Engineering Core Requirements (37 credit hours)

The prospective engineering major must take EG 141, 143, 201, 202, 203, 204, 205, 206, 207, 301, 302, 303, 304, and 305.

Humanities or Social Science Core Requirements (12 credit hours)

The student must take nine credit hours of approved electives at the 200 level or above from these areas, and he must also take the Senior Seminar (CB 401) required of all degree candidates.

The 107 credit hours in these four major areas represent the total undergraduate core course requirement for the prospective engineering major. The student must then complete either the Terminal Baccalaureate program or the Professional Master's program.

TERMINAL BACCALAUREATE REQUIREMENTS (27 credit hours)

The engineering major must elect, with the approval of his program adviser, 27 credit hours of technical electives in one of the four major areas of specialization:

- Electrical Phenomena
- Heat and Energy Conversion
- Structures, Materials and Fluids
- Analysis and Operation of Engineering Systems

The total minimum number of credit hours required for the Terminal Baccalaureate degree is 134 (core requirements and technical electives combined).

PROFESSIONAL MASTER'S PROGRAM REQUIREMENTS (57 credit hours)

Present planning is for the master's degree candidate to elect, with the approval of a program adviser, 45 credit hours of technical electives in one of the four major areas of specialization:

- Electrical Phenomena
- Heat and Energy Conversion
- Structures, Materials and Fluids
- Analysis and Operation of Engineering Systems

In addition, the candidate would either complete an approved design/research project or take 12 additional hours of course work (also approved by his adviser).

The total minimum number of credit hours required for the Professional Master's degree would be 164.

Students who have been awarded baccalaureate degrees from other institutions in engineering, mathematics, or the physical sciences would, upon the approval of the academic committee of the college, be eligible for direct admission into the professional master's degree program of the college. The planning of their program and requirements for degree completion would be a matter for individual consideration by the advisory committee of the college.
Other Requirements

HUMANITIES AND SOCIAL SCIENCE REQUIREMENTS

While the engineering student is expected to complete certain requirements during his first two years of study which are directed toward the humanities and social sciences, and which are fulfilled by the completion of his basic studies requirements at the University (or general education requirements at other institutions), the University of South Florida expects more of its prospective engineering graduates than this minimum. The engineer must not only be a technically competent individual, he must also be a person who can understand, adjust and contribute to his social environment. The undergraduate core engineering program at the University is designed to provide 12 credit hours of advanced study in the humanities and social sciences during the engineering student's junior and senior year. Students should plan to complete one course in this subject material area each trimester of his upper level program.

ENGLISH REQUIREMENT

Students who have been admitted to the College of Engineering are expected to take an examination during their first trimester of residency in order to evaluate their preparedness in the use and understanding of the English language. This examination will be administered by the faculty of the University's English program and students evidencing a deficiency will be required to initiate the necessary corrective programs, with the assistance of their advisers. Correction of any deficiency must be effected prior to recommendation of the student for graduation by the faculty of the college.

CONTINUATION REQUIREMENTS

All students registered in the College of Engineering are expected to maintain the minimum of 2.0 average ("C" average) for all work attempted while registered in the college. Students who do not maintain this requirement will be declared ineligible for further registration for course work and degree programs in the college unless individually designed continuation programs have been prepared by the student's adviser and approved by the academic committee of the college.

Requirements for Graduation

In addition to the completion of the course work and/or project requirements of the respective programs of the college, students must be recommended for their degrees by the faculty of the college. It is expected that students completing their professional master's program would have completed their professional work with a minimum average of 3.0 or "B". The awarding of a baccalaureate degree requires a minimum average of 2.0 or "C" for all work attempted while registered in the college. Students attempting but not completing their professional master's requirements may elect to request the bachelor degree.
The College of Liberal Arts, as one of the five colleges of the University, continues the general and liberal education begun in the College of Basic Studies. Here the student may explore further his vocational interests and develop a breadth of knowledge and precision of intellect so necessary for responsible leadership in our society.

More specifically, the college seeks:

1. To help students to continue the exploration of new subjects affording fresh ideas and talents enriching to life.
2. To enable students to try out several subjects as a means of determining the wisest vocational choice.
3. To give sufficient development within the chosen vocational field that the student will be prepared to obtain a job upon graduation or move successfully into a graduate or professional school.
4. To collaborate with the other colleges of the University in providing liberal courses to reinforce required training in those professional schools.
5. To cultivate independent thinking, creative imagination and value commitment in order that students may become constructive leaders in their chosen activities.

Admission to the College

Students may enter the College of Liberal Arts after two years (at least 54 credits) in the College of Basic Studies or by transfer from another institution. The general education and physical education requirements should have been completed and the student should have at least a "C" average on all previous college work. However, students may be admitted provisionally upon completion of five of the six basic studies courses (or equivalents) and three of the four trimesters of physical education. Occasional students admitted without this "C" average will automatically be on warning status.

Upon admission, the student is expected to declare his major and will be counseled in his selection of courses by an adviser from that field. He will then plan the remainder of his college program to fulfill his educational needs and satisfy requirements for the bachelor of arts degree. He will be enrolled in one of the divisions of the college, and the director of that division will generally supervise his progress.

Any student of the University may take courses in the College of Liberal Arts even though not officially admitted. Freshmen and sophomores may wish to take liberal arts courses in addition to their basic studies program. Similarly, students in other colleges or adults in the community will elect liberal arts courses of particular interest.
Graduation Requirements

The University currently offers one undergraduate degree: Bachelor of Arts. These requirements are referred to on page 21 of this catalog but are briefly summarized here:

1. 120 credits with at least a "C" average (2.0) in work done at the University of South Florida, or other universities in the Florida state system. At least 40 of the 120 credits must be in courses numbered above 300.

2. General education requirements of at least 39 credits fulfilled in the College of Basic Studies, including CB 401 (the Basic Studies Senior Seminar), or transferred equivalents. Proficiency must also be shown in four physical education areas.

3. Completion of a major in a subject or an integrated major involving several subjects. There must be at least a 2.0 average in this major. To insure breadth of experience and to preclude undue specialization, a student must earn (or show competence in) a minimum of 80 credits outside his discipline of concentration, 60 of which must be outside the division of his major.

4. Work transferred from schools other than Florida state universities, which is applied to meet our requirements, will not be included in the grade point averages computed for graduation, but will be computed when determining graduation with honors.

5. Completion of the Graduate Record Examination Aptitude Test.

6. A student must earn the last 30 credits in residence at the University of South Florida.

Organization and Special Features

The College of Liberal Arts is organized into four divisions for the administration of staff and courses: Fine Arts, Language-Literature, Natural Sciences and Mathematics, and Social Sciences.

The college, like the total University, is concerned with the broad development of students' knowledge. Thus, it offers several integrated courses and limits work in any one field. At the same time, the student must learn to work independently. The college emphasizes individual projects in many courses, laboratories, field studies, and the opportunity to earn credit through independent study and examination.

It is important that the student develop basic skills for research and creative scholarship; hence the provision of senior seminars and special courses on research methodology. These skills are important for the critical appraisal of scholarly work even though the student might not go on to graduate study. There is opportunity from time to time for students to collaborate with their professors on research projects and to render essential intellectual services to the community.

CURRICULA AND PROGRAMS
Division of Fine Arts

The Division of Fine Arts serves a three-fold purpose of providing courses of study, theatres of practice, and programs of events for the University family, the surrounding community and the citizens of the state of Florida.

Its prime objectives are: (1) to provide a broad but thorough training for those highly talented in the fine arts, (2) to offer guidance and training for those preparing for teaching, and (3) to provide curricular studies and extracurricular activities for general University students.
The division offers broad courses in art, music and theatre arts with specific curricular offerings in (1) visual arts, (2) dramatic arts, and (3) music arts. Special programs designed for the preparation of public school teachers include (1) art, grades 1-12; (2) general vocal music, grades 1-12; and (3) general-instrumental, grades 1-12. Allied courses are listed under the humanities major.

**VISUAL ARTS**

The Visual Arts curriculum is designed for students interested in continuing their art education in graduate or technical schools with the objective of college teaching, gallery of museum work, fine or commercial studio work. The University reserves the right to retain selected student work.

The Visual Arts student may elect to emphasize painting, sculpture, graphics, ceramics, or art history by selecting the appropriate art area sequence of courses. The painting sequence is typical and is: AR 101, 102, 201, 202, 311, 321, 331, 341, nine credits in art history selected from AR 301, 303, 401, and 403, FA 301, 302, and 491, for a total of 49 credit hours. A minimum of 24 credits outside the Division of Fine Arts must be part of the total program.

The Art Education curricula for both the bachelor’s and master’s degrees are listed under the College of Education.

**MUSIC ARTS**

The Music Arts curriculum is designed for those gifted in performance on some instrument or in voice, whose ultimate goal may be that of artist or studio teacher. Requirements for a major in piano are listed here; those seeking majors in other instruments or voice should substitute the appropriately numbered music courses. Piano students; MU 101, 102, 201, 202, 221 (8 credits), 301, 302, 307, 308, 421 (8 credits), 471, FA 301, 302, and 491, for a total of 49 credits. A minimum of 24 credits outside the Division of Fine Arts must be part of the total program.

Placement examinations are required of all new registrants in music courses. Scheduling of these examinations is made through the Music Office of the Division of Fine Arts.

All music majors are required to pass a piano proficiency examination prior to entrance into upper level. Music majors are required to play in an ensemble each trimester.

The Music Education curricula for both the bachelor and master’s degrees are listed under the College of Education.

**THEATRE ARTS**

Students desiring to concentrate in performance or technical theatre must take TA 101, 111, 221, 331, 333, 335, 337, 401, FA 301, 302, 491, and at least four of the following, depending upon their choice of major concentration: TA 311, 312, 313, 321, 322, 323, 329, and 351, for a total of 45 credits.

**Division of Language and Literature**

**ENGLISH**

A major in English requires a sequence of 200 level courses within four periods of English and American literature. Advanced courses focus on the works of particular authors, genres, or groups of related authors. All English courses attempt to teach students how to think critically about literature and to fit the works studied into the economic, social, political, scientific, and religious contexts.
To accumulate the required 33 credits, all English majors must take four courses from EN 201, 203, 205, 206, and 207. In addition, they must take EN 331, 411 or 412, two electives at the 300 level, and three at the 400 level. Not more than two courses in writing may be counted as part of the 33-hour requirement, although students may elect an additional six credits of writing within the 40-hour limit. Recommended electives for English majors include courses in philosophy, history, foreign language, speech, and linguistics.

FOREIGN LANGUAGES

Language studies in the College of Liberal Arts fall into three general groupings: (1) linguistics, providing instruction in language structure and development; (2) classical languages and literature, providing instruction in Latin; and (3) modern foreign languages and literature, providing instruction in French, German, Italian, Portuguese, Russian, and Spanish.

These programs are designed to meet the needs of students who desire competency in a language and an expanded understanding of foreign culture and literature. They are of particular interest to students who wish to teach languages, those who plan to further their studies in graduate school and those who seek careers in various types of foreign employment.

Major Requirements

Major programs are offered in French, German, Italian, Latin, Russian, and Spanish, and in combinations of any two of these.

Modern language majors must complete at least 30 credits in the chosen language beyond the functional language courses. Among these 30 credits must be the following:

**French:** FR 301, 303, 305, 306, 421, 422, 441, 442, and 491.

**German:** GN 301, 303, 305, 306, 413, 421, 431, 432, 441, and 451.

**Italian:** IT 301, 303, 305, 306, 411, 412, and 491.

**Latin:** LA 221, 222, 311, 313, 411, 413, and 417; LI 301, 303; and HI 321.

EN 335, 336; LA 481; AR 301; and HU 323, 324 are recommended electives.

**Russian:** RN 301, 303, 305, 306, 451, and 452.

**Spanish:** SP 301, 303, 305, 306, 423, 424, 441, 442, and 491.

A native speaker specializing in a modern language must substitute a literature course for the Advanced Conversation Course (303). Moreover, in cases where a native speaker has received advanced education abroad, he will not be allowed to take the Advanced Composition Course (301) to fulfill his major requirements.

Combined Majors

Combined majors are offered in any two modern languages or in Latin and a modern language. For a major in two modern languages, a student must take the courses numbered 301, 303, 305, and 306 in each of two languages and an additional 12 credits in his first language and an additional six credits in his second language. Students majoring in Latin and a modern language must take LA 311, 313, 411, 413, and 417; LI 301 and 303; and courses numbered 301, 303, 305, and 306 in the modern language, plus six additional hours in the modern language.

A student majoring in any one of the Romance languages may count RL 417 toward his major requirements.

PHILOSOPHY

The philosophy program includes five areas of study: logic and scientific method, history of philosophy, theory of knowledge, theory of reality, and theory
of values. Majors in philosophy must complete at least 30 credit hours in the program, including PY 203, 303 and 304, and at least six credits at the 400 level.

SPEECH

The Speech curriculum provides courses for all students interested in increasing their understanding and skills of oral communication, and offers major programs in general speech, rhetoric and public address, and broadcasting. In addition, two combination major programs are available: an English-Speech program, designed primarily, though not exclusively, for those preparing to teach in the secondary schools; and a Speech-Theatre Arts program offered jointly by the Language-Literature and Fine Arts Divisions.

A major in Speech requires a minimum of 27 credits; the combination English-Speech program requires 42 credits in English and Speech, and three credits in Theatre Arts; and the joint Speech-Theatre Arts program requires 36 credits, divided equally between Speech and Theatre Arts courses.

Speech 201, 203, and 491 are required of all majors.

General Speech sequence: SH 201, 203, 321, 363, 491, and 12 credits of Speech electives.

Rhetoric and Public Address sequence: SH 201, 203, 363, 465, 491, and 12 credits of Speech electives, nine of which must be in rhetoric and public address or discussion.

Broadcasting sequence: SH 201, 203, 241, 321, 491, and 12 credits of Speech electives, nine of which must be in broadcasting.

English-Speech sequence: SH 201, 203, 321, either 361 or 365, and six credits of Speech electives: EN 201, 203, 205, 207, 221, 411, 417; SH 491; and TA 101.

Speech-Theatre Arts sequence: SH 201, 203, 321, 421, 491, and one 300 or 400-level elective in Speech; TA 101, 111, 221, 312, and any two courses chosen from 331, 333, 335, 337.

Division of Social Sciences

The social sciences are concerned with man, his development, problems and institutions. They help the student to understand the world around him and to become a more informed citizen. In addition, the social sciences can prepare a student for employment in business, government and social service professions, either upon graduation or upon completion of additional graduate study.

For convenience, the social sciences are divided into a number of disciplines or fields, each approaching the subject in a particular way. The major requirements of each discipline are indicated below.

Since most modern social problems are complex, requiring analysis from several vantage points, a number of interdisciplinary courses (prefix "SS") are provided to afford the student a rounded view of the problem and alternative solutions. These social science division courses are offered primarily for juniors and seniors.

MAJOR REQUIREMENTS

Students may major in the total Division of Social Sciences or in any of the several fields.

ANTHROPOLOGY

Majors must have at least 27 credits, including AN 101, 205, 321, 331, 491, and LI 301 or 303. (Note: LI 301 and 303 may count as part of the 27-credit major.) In addition, SS 201 or MA 145 is required.
ECONOMICS

The economics program is offered in conjunction with the College of Business Administration. The liberal arts major in economics requires 27 credits in economics, including EC 201-202, 301, 323, 331, 401, 423, and two additional upper-level economics courses; and, in addition, AC 201-202.

GEOGRAPHY

Majors must have at least 28 credits, including GE '103, 251, 351, 461, 491, and GY 333 or 381. (Note: GY 333, 371, and 381 may count as part of the 28-credit major.) In addition, SS 201 or MA 145 or EC 331 is required.

METEOROLOGY. Students preparing for a professional career in meteorology may (1) transfer to the Department of Meteorology, Florida State University, at the beginning of their junior year, or (2) receive their bachelor of arts degree in geography at the University of South Florida, and then begin work toward the master of science degree in meteorology at Florida State University, or elsewhere. In either case, the student is advised to consult with the geography staff at the earliest possible time so that the program may be planned.

HISTORY

A minimum of 30 credits is required for a major. From Part I, requirements are HI 111-112 and either HI 121-122 or HI 231-232; from Part II, at least 12 credits, including HI 321 or 323; from Part III HI 487 and 491, taken during the senior year.

Majors intending to pursue graduate work should take a minimum of two years of a modern foreign language (French, German, Russian, Spanish), HI 341-342, GE 251, SS 201, SH 201, and at least 18 credits drawn from the following areas: geography, political science, philosophy, and literature or humanities.

History majors, whether intending graduate or professional work, should have at least two courses drawn from the Interdisciplinary Social Science program.

POLITICAL SCIENCE

Majors must have at least 30 credits in the field, including PS 201, 205, 323, 491, and SS 201.

PSYCHOLOGY

Majors must complete at least 30 credits in the field, including PC 101, 211, 212, 231, 331, 401, 491, two other psychology courses, and SS 201. Functional Mathematics and Biological Science in the College of Basic Studies are recommended. Otherwise, students majoring in psychology are encouraged to complete a varied undergraduate program.

SOCIOLOGY

Sociology majors may pursue either of two concentrations:

(1) General Sociology – 30 credits, including SO 201, 321, 415, 491, and SS 201. Other courses may be selected from the Sociology Program, and students may choose to include as many as two of the following: SS 321, 325, and 411.

(2) Social Welfare concentration – 33 credits, including SO 201, 261, 301, 321, 351, 401, 405, 407, 443, and either 461 or 463.

SOCIAL SCIENCE DIVISIONAL MAJOR

This major is designed to provide broad training for the more able student. It requires 45 credits in the division, with a minimum of 15 credits in one discipline, plus the senior seminar (491) in this or some other social science discipline. At
least nine credits are required in Interdisciplinary Social Sciences courses (prefix “SS”) and the rest of the 45 credits should be broadly distributed among the other social science disciplines. Most of the work must be chosen from the 300 and 400 level courses. Specific courses will be advised depending upon the career intentions of the student.

A different kind of divisional major for prospective social studies teachers is described under the College of Education requirements on page 62.

PRE-LAW

The University of South Florida also offers an interdisciplinary program of pre-legal study designed to meet the needs of undergraduate students who are planning to pursue a career in the law. A broad liberal education of high quality is the foremost goal of this program. The American Association of Law Schools suggests that each student preparing for law school should acquire the following basic skills: (1) effective expression, both written and oral, in English language; (2) critical understanding of the political, economic and social institutions of society; (3) practice in the use of creative and analytical reasoning in a variety of problem solving situations.

All students wishing to major in pre-legal studies should consult the coordinator of student advising for assignment to a pre-law adviser.

INTERNATIONAL AND AREA STUDIES

Three programs are currently offered in International Studies, Afro-Asian Studies, and Latin American Studies. The core curriculum common to the three includes 23 credits: AN 101, EC 201-202, GE 251, either HI 311 or PS 331, and two of the following: HI 351, PS 461, SS 449, 311 and 361. Twelve credits of an appropriate foreign language above the 100 level (or equivalent proficiency) are required.

Each student’s program must be planned with the international studies adviser, who is empowered to make appropriate substitutions when educationally justified.

Additional special requirements in the three programs follow. Up to six credits may be substituted for these requirements by successfully passing CB 395, Overseas Study.

AFRO-ASIAN STUDIES

Afro-Asian Studies majors must satisfy the language requirement in either French or Russian and must also take AN 303, HI 371, HU 431 or 432 or 433 or AR 403, and one of the following: SS 343, 345, 347.

INTERNATIONAL STUDIES

International Studies majors must have 12 additional credits to include PS 333, two courses chosen from among SS 341, 343, 345, and 347; and one of the following: AN 303, 305, 309. The language credit may be in any modern language.

LATIN AMERICAN STUDIES

Latin American Studies majors must satisfy the language requirement in Spanish or Portuguese and must take 12 additional hours, including SS 341, AN 309, HI 351, and one of the following: AN 481, GE 481, HI 485, PS 481 or SP 481.

Division of Natural Sciences

The Division of Natural Sciences offers courses in astronomy (AS), botany (BO), chemistry (CH), geology (CY), mathematics (MA), physics (PH), zoology (ZO), interdisciplinary courses in botany and zoology (BZ), and oceanography (OG).
They are designed for students planning scientific careers or those technical careers having a considerable component of science, such as engineering or medicine. These students will typically major in one of the sciences or in a combination of sciences as preparation for employment, transfer to professional schools or admission to graduate school. Those seeking to transfer to another university to complete a course in agriculture, home economics, pharmacy, or one of the medical professions may begin their science work here before transferring.

Students seeking a general understanding of science but not technical competence will normally wish to take the basic studies courses in biological science, physical science, and functional mathematics, and augment their understanding by adding upper level courses designed for non-scientists.

THE B.A. DEGREE PROGRAMS

The division offers the bachelor of arts degree in the following departments: Astronomy, Botany and Bacteriology, Chemistry, Geology, Mathematics, Physics, and Zoology.

Candidates for the bachelor’s degree must be admitted to the upper level as early as possible upon completion of their basic studies requirements and before the end of their junior year.

Even before admission to the division, students preparing for a science or mathematics career must plan their courses from their freshman year because of the sequential nature of the science curriculum.

Before enrolling in a science sequence, students must take the proficiency examination in science and mathematics. If students enter the University well-prepared from high school, they may qualify for waiver in the basic sciences and/or mathematics courses as described in the section on the College of Basic Studies. To qualify for the basic studies Natural Science or Mathematics waiver, students must have a grade of 425 or higher on the Twelfth Grade Placement Test and three years in high school science or mathematics respectively with a grade of “C” or higher.

Students who do not qualify for a waiver but have good preparation in science and/or mathematics on the basis of the proficiency test and other evidence, are advised to begin their liberal arts science and mathematics courses early and postpone basic studies science and mathematics to be waived later either by examination or as provided below.

A student passing liberal arts mathematics courses through MA 205 with a grade of “C” or higher in each course can receive an automatic waiver of CB 109-110.

A student passing two 8-hour liberal arts sequences in separate physical science disciplines with a grade of “C” or higher in each course can receive an automatic waiver of CB 107-108.

A student passing BZ 201, BO 202, and ZO 202 with a grade of “C” or higher in each course can receive an automatic waiver of CB 105-106.

A student admitted to the upper level will be assigned an adviser in his field who will guide the student in planning his program and meeting the requirements for the degree.

THE M.A. DEGREE PROGRAMS

In 1965 the division plans to initiate master of arts degree programs in Botany, Bacteriology, Chemistry, Mathematics, Physics, and Zoology. The general admission requirements for graduate work and for the master’s degree are given on pages 85-86. The specific requirements are listed under the separate departments below.
TEACHER EDUCATION PROGRAMS

In cooperation with the College of Education, the Division of Natural Sciences and Mathematics offers departmental majors and the Divisional Major leading to certification for teaching in the state of Florida in Biology, Chemistry, Physics, and Mathematics. See page 61.

Similarly, the division offers master's degree programs in teaching for secondary schools and junior colleges in Biology, Chemistry, Physics, and Mathematics. See pages 63-64.

MAJOR REQUIREMENTS

ASTRONOMY

Requirements for the B.A. Degree: A major in astronomy will normally consist of a minimum of 24 credits in the discipline, including AS 201, 202 and 313; a selection of three courses from AS 343, 421, 431, 433, and at least two trimesters of AS 361. In addition, the student will take PH 221-223, 222-224 or 215, and 305, 331. He will also take MA 203, 204, 205, 305 and 306. The student is expected to familiarize himself with the technique of programming electronic computers before the end of the fourth trimester. Additional courses will be selected in consultation with the adviser. Selection of at least one foreign language (German, French, or Russian) is strongly recommended, especially for those students who intend to enter graduate school.

BOTANY AND BACTERIOLOGY

The Department of Botany and Bacteriology offers a bachelor of arts degree and plans to initiate master's degrees in Botany and in Bacteriology during 1965-66.

Requirements for the B.A. Degree: Required courses are BO 202, 311 (or Botany elective), 321, 491, and BZ 201, 331, and 351. Four elective credits must be selected from BO 317, 319, 445, 451, 481, and BZ 315. Students must take an additional 20 or 24 credits in the Division of Natural Science, including ZO 202, CH 211-212, and 331-332. (CH 303 may be taken with the consent of the adviser in lieu of 331-332.) Mathematics background must include MA 101 or equivalent. Selection of a foreign language, preferably French, German, or Russian, is also strongly recommended.

Students are advised to enroll in BZ 201 and CH 211 during the freshman year and to seek completion of basic studies science requirements by waiver or credit by examination. Prospective majors must seek early curriculum counseling from the Botany Department chairmen.

Students planning to enter graduate school may elect additional courses in plant science or bacteriology, depending on their interest. The two sequences in addition to the required courses designed to prepare students for graduate or professional school are:

Emphasis in Plant Science: BO 311, 319, 445, and 481; BZ 315 and 345; CY 201; PH 205-207, 206-208; and MA 145.

Emphasis in Bacteriology: BO 317, 451, 481; and BZ 315; PH 205-207, 206-208; MA 203, 204, 205; and CH 341-342-343.

Requirements for the M.A. Degree: General requirements for graduate work are given on pages 85-86.

Students are admitted for graduate work in Botany or in Bacteriology if they present the requisite background in the biological sciences. The bachelor of arts or bachelor of science degree with major in botany, zoology or biology is recommended in addition to a satisfactory grade on the Graduate Record Examination.
For a master's degree in Botany or in Bacteriology, the following are required:
(1) a minimum of ten credits in graduate level courses, excluding research and master's thesis (BO 581, 599); (2) at least four credits of cognate science, exclusive of botany and zoology; (3) either a written thesis in a special field approved by the advisory committee (3-6 credits) and an examination based on the results of an original study, or 12 credits of graduate level courses in botany or zoology; (4) additional credits in either botany or zoology from the upper level may be scheduled to make a minimum of 30 credits (or 36 credits without thesis) at the University of South Florida beyond the bachelor's degree and exclusive of prerequisites. At least one-half of the credits must be in courses numbered 500 or above.

Programs for Teacher Education: For bachelor of arts degree secondary school teachers in biology see page 61. For master of arts degree for teachers in biology see page 64.

Chemistry

The Chemistry Department offers a bachelor of arts degree and plans to initiate the master of arts degree in chemistry in 1965-66.

Requirements for the B.A. Degree: A chemistry major must include the following chemistry courses: CH 211, 212, 321, 331, 332, 341, 342, 343, and 491. Other required courses include MA 203, 204, 205, and either PH 221-223, 222-224, or PH 205-207, 206-208, and 215. Two years of college level German, French, or Russian is strongly recommended. The above courses constitute a minimum curriculum for a major in chemistry. It is recommended that this program be strengthened with additional courses to be selected by the student in consultation with his chemistry faculty adviser. To qualify for admission to graduate schools, a student should take additional courses which will emphasize his major interest. Two programs for this purpose are as follows:


Emphasis in Physical Chemistry: CH 411, 421, MA 301, and advanced physics elective.

Requirements for the M.A. Degree: General requirements for graduate work are given on pages 85-86.

Graduate students admitted to work for the master's degree will be required to take written diagnostic examinations in the fields of analytical, inorganic, organic, and physical chemistry. (These examinations will be at the level recommended by the latest A.C.S. accreditation committee report and cover the respective subjects to the extent that they are covered in the undergraduate chemistry courses CH 332, 343, 411, and 421. In the event that a student fails to show satisfactory performance in any of the diagnostic examinations he may be required to register for prescribed courses.

The curriculum for a chemistry major will vary with the area of his thesis. The thesis will carry not less than three nor more than six credits. A minimum of 30 credits including the thesis is required, and one-half of these credits must be in chemistry courses numbered 500. The specific course requirements will be determined by his advisory committee on the basis of his diagnostic examination results and his proposed research.

In addition to the course requirement, each student will present an oral defense of his thesis for the approval of his advisory committee.

Programs for Teacher Education: For bachelor of arts degree secondary school teachers in chemistry see page 61. For master of arts degree for teachers in chemistry see page 64.
GEOLGY

Requirements for the B.A. Degree: A major in geology will normally include GY 201, 202, 301, 311, 312, 331, 333, 403, and eight elective credits in geology. In addition, the program must include CH 211, 212, PH 205-207, 206-208, and MA 101. The student will choose, in consultation with his geology adviser, such additional courses in the Division of Natural Sciences and Mathematics that support his major interest within the field of geology. Selection of a foreign language, preferably French, German, or Russian, is also strongly recommended.

A student anticipating a major in geology should seek curriculum counseling early in his college career.

MATHEMATICS

The Mathematics Department offers a bachelor of arts degree and plans to initiate the master of arts degree in mathematics in 1965-66.

Requirements for the B.A. Degree: Majors must have 32 credits in mathematics, including MA 101, 203, 204, 205, 309, and 321 (MA 101 is not required of those who begin with MA 203.) Suggested upper level courses for a major in mathematics and for a major in mathematics for teaching in secondary school are as follows:


Variations in course selection for special needs is to be done in consultation with the appointed adviser.

The following is a suggested course program for the first four trimesters:

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Requirements for the M.A. Degree: General requirements for graduate work are given on pages 85-86.

A thesis is optional. The thesis program requires a minimum of 30 credits of course work, plus the thesis carrying three to six credits. The non-thesis program requires 36 credits of course work. In either case, one-half of the course work must be taken in courses numbered 500 or above.

Programs for Teacher Education: For bachelor of arts degree secondary teachers in mathematics see page 61. For master of arts degree for teachers in mathematics see page 63.

PHYSICS

The Physics Department offers a bachelor of arts degree and plans to initiate the master of arts degree in physics in 1965-66.

Requirements for the B.A. Degree: Majors must have one year of general physics (consisting of either PH 205-207, 206-208, and 215; or PH 221-223 and 222-224), PH 307, 311, 341, 407, plus one advanced laboratory. Additional physics courses sufficient to total 28 credits are required; 20 of these credits must be in courses numbered 300 or above. The student will also take MA 301 and CH 212. (Credit will not be given for both PH 301 and 323.)
Students registering for a physics course which has an associated laboratory must also register for the laboratory or obtain written permission from the chairman of the physics Department to register for the course only. A student may present for graduation no more than ten credits in physics courses numbered below 300. Selection of a foreign language, preferably French, German, or Russian, is also strongly recommended.

**Requirements for the M.A. Degree:** General requirements for graduate work are given on pages 85-86.

A minimum of 30 credits, not more than six of which may be for thesis research and writing. Of these 30 credits, 15 must be in physics courses numbered 500 or above. The mathematics proficiency test is also required.

When a student is admitted to the graduate program in physics, an advisory committee will be appointed by the chairman for each student. This committee will serve in the capacity of an adviser and will also keep close check on the progress of the student in his work. The committee will have the right to add any special requirement to meet any deficiency in background and will administer a comprehensive examination to the student before recommending that a degree be granted.

**Programs for Teacher Education:** For bachelor of arts degree secondary school teachers in physics see page 61. For master of arts degree for teachers in physics see page 65.

**Zoology**

The Zoology Department offers a bachelor of arts degree and plans to initiate the master of arts degree in zoology in 1965-66.

**Requirements for the B.A. Degree:** A zoology major must include the following courses: BZ 201, ZO 202, 311 or 312, BZ 331 or ZO 321, and ZO 491. In addition, five elective courses in biology (BZ, BO or ZO prefixes) are required excluding BO 481 and ZO 481. Other required courses include CH 211, 212, 331, and 332 (CH 303 may be taken with the consent of the zoology adviser in lieu of CH 331-332). The required courses should be strengthened by electives in mathematics and physics. Selection of a foreign language, preferably German, French, or Russian, is also strongly recommended. Students are advised to enroll in BZ 201 and CH 211 during the freshman year and to seek early curriculum counseling from the zoology adviser.

**Requirements for the M.A. Degree:** General requirements for graduate work are given on pages 85-86.

Graduate students must demonstrate ability to translate into English the pertinent scientific literature in one foreign language, preferably German, French, or Russian.

A minimum of 30 credits must include 15 in zoology courses numbered 500 or above, not more than six of which may be for the thesis.

**Programs for Teacher Education:** For bachelor of arts degree secondary school teachers in biology see page 61. For master of arts degree for teachers in biology see page 64.

**Pre-Medicine**

All entering freshmen and other lower level students planning to attend medical school should register their names with the coordinator of student advising as soon as possible. All pre-medical students who have been admitted to the upper level should register their names with the chairman of the Pre-Medical Advising Committee in the Division of Natural Sciences at their earliest convenience. The Pre-Medical Advising Committee will counsel the pre-medical students relative to their pre-professional planning. Information and advice on general and special require-
ments of specific medical schools may be obtained by either the student or his adviser from this committee.

Good academic performance and strong recommendations favor admission into medical schools. Accordingly, quality of college work and liaison with the pre-medical adviser are of great importance. The general curriculum which pre-medical students should complete includes English, Mathematics, Zoology, Chemistry, Physics, and courses in the Humanities and related areas.

DIVISIONAL MAJOR

The bachelor of arts divisional major is designed to serve students desiring a broad background, such as science teachers, pre-medical students and other pre-professional students. Major requirements in the Division of Natural Sciences are a minimum of 24 credits in the discipline of major concentration and a minimum of 16 credits in the division outside that discipline. These 16 credits must be approved by the student's adviser and must include a minimum of three at the 300 level or above. Prospective teachers should also consult the College of Education section of this catalog for information about certification requirements in the science field. Pre-medical students should contact the chairman of the Pre-Medical Advisory Committee.

The divisional major is not necessarily an adequate preparation for entrance into a graduate program in the natural sciences. To strengthen the preparation, additional science and mathematics electives beyond the minimum requirements may be recommended by the faculty adviser. By the proper addition of science and mathematics electives beyond the minimum requirement, the divisional major can serve as a preparation for graduate work in a wide range of interdisciplinary fields such as biochemistry, microbiology, biophysics, bacteriology, space sciences, oceanography, geochemistry, and geophysics.
GRADUATE STUDY

Degree Programs Offered

COLLEGE OF BUSINESS ADMINISTRATION

A program leading to the Master of Business Administration degree will begin in September 1965 (Trimester I). See page 54 for a description.

COLLEGE OF EDUCATION

In June 1964, a program was initiated leading to the Master of Arts degree in Elementary Education. In June 1965 (Trimester III-B), the University will begin Master of Arts degree programs in—

Secondary Teaching Fields:
- Distributive Education
- English Education
- Mathematics Education
- Science Education (biology, chemistry, or physics)
- Social Science Education

K-12 Certification Areas:
- Art Education
- Guidance
- Music Education
- Special Education: Mental Retardation

See page 62 to 65 for descriptions of these programs.

COLLEGE OF ENGINEERING

Plans are being made for an upward extension of the present undergraduate program to the master's degree level. A professionally oriented graduate program for employed engineers is anticipated for September 1965. A brochure on this program will be issued as plans are completed.

COLLEGE OF LIBERAL ARTS

Master of Arts degree programs will begin in September 1965 (Trimester I) in Bacteriology, Botany, Chemistry, Mathematics, Physics, and Zoology. For descriptions of these programs see pages 79 to 82.

Requirements for Admission to Graduate Study

Admission to a master's degree program requires—
1. A baccalaureate degree from an approved college or university, with evidence of good standing.
2. A "B" grade average in the second one-half of undergraduate work.
3. Satisfactory scores on the verbal and quantitative aptitude tests of the Graduate Record Examination. Provisional admission may be granted on the basis of scores on professional examinations such as the National Teacher Examination, but the GRE must be taken no later than during the first term of enrollment.
4. Approval of the program of the University in which the student desires to do graduate work, which entails additional requirements specified in the descriptions of the respective graduate programs.

Admission to graduate study does not constitute admission to candidacy for the degree. (See Admission to Candidacy, below.)

Regulations Governing Graduate Study

MAJOR PROFESSOR

A major professor or adviser will be named for the student in his first term of work. The major professor is named by the division of the University concerned with the consent of both student and professor.

PROGRAM OF STUDY AND COURSE REQUIREMENTS

During the first term of study in consultation with his major professor or adviser, the student should plan a program of work to be completed for satisfaction of degree requirements.

Unless otherwise specified, 400 level courses are acceptable for credit toward the master's degree when taken as a part of a previously planned degree program. Graduate credit may be earned in only such 300 level courses as have been specifically approved by the Graduate Council. Students enrolled in such courses as part of their planned degree program will be expected to demonstrate a superior level of performance.

At least one-half of all credits applied to the master's degree requirements must be in courses which are for graduate students only (500 level), and at least two-thirds of the degree program must be in structured course work.

QUALITY OF WORK

Graduate students must maintain "B" quality work (an overall average of 3.0) in all courses taken for graduate credit. When a student's cumulative grade point average drops below 3.0, his case will be reviewed.

LOAD

A normal full load is 12 credit hours per trimester and six credit hours per summer session. Maximum load is one credit hour per week of summer session and 13 credit hours per trimester.

RESIDENCY

A minimum of 21 credit hours of graduate work must be completed on the campus. The student must take at least one trimester of work carrying a full load of 12 credit hours or two summer sessions of 6 credit hours each.

TRANSFER AND EXTENSION CREDIT

Transfer of credit from another recognized graduate school is limited to six hours. All transfer credit must (1) be evaluated as graduate credit by the Registrar, (2) be approved by the program or college concerned, and (3) have been completed with grades of "B" or better.
Extension credit up to a maximum of six hours of graduate credit is acceptable. The total of extension and transfer work together may not exceed nine hours and neither is finally accepted until the student is admitted to candidacy for a degree. Neither carries residence credit.

Students who have earned credits through the Florida Institute for Continuing University Studies at the University of South Florida Graduate Residence Center may transfer up to 15 credit hours of work taken prior to the beginning of an appropriate graduate degree program at the University.

**REGENCY**

All work applicable to the master's degree requirements must be completed within the seven years immediately preceding the awarding of the degree.

**ADMISSION TO CANDIDACY**

After completing 12 hours of graduate work at the University of South Florida, the student should apply for admission to candidacy for a degree. At this time a committee will review the student's record to date, guidance test scores, and other pertinent data, and will make a recommendation as to whether the student should be (1) admitted to candidacy, or (2) denied further work toward a degree.

**CLEARANCE FOR DEGREE**

Upon completion of all requirements for the master's degree, the candidate will execute a clearance form, secured from the Registrar's Office, and will submit it to the Registrar upon completion.
COURSE DESCRIPTIONS

All courses offered for credit by the University of South Florida are listed here in alphabetical order according to subject area.

The first line of each course description includes the prefix and course number, title, and number of credits. Credits separated by a colon indicate lecture and laboratory courses taught as a unit:

**PH 205-207. GENERAL PHYSICS (3:1)**

Credits separated by a comma indicate two unified courses offered in different trimesters:

**HI 111-112. AMERICAN HISTORY (3,3)**

Credits separated by a hyphen indicate variable credit:

**SO 481. INDIVIDUAL RESEARCH (1-3)**

The following abbreviations are utilized in various course descriptions:

- **PR** Prerequisite
- **CI** With the consent of the instructor
- **CR** Corequisite
- **lec-lab** Lecture and laboratory

Course descriptions are listed under the following headings (prefix in parentheses):

- Accounting (AC)
- Anthropology (AN)
- Art (AR)
- Astronomy (AS)
- Basic Studies (CB)
- Botany and Bacteriology (BO)
- Interdisciplinary Botany-Zoology (BZ)
- Chemistry (CH)
- Cooperative Education (CE)
- Developmental Mathematics (DM)
- Developmental Reading (DR)
- Economics (EC)
- Education Core (ED)
- Art Education (AE)
- Distributive Education (DE)
- Elementary Education (EE)
- Library-Audio Visual Education (LE)
- Music Education (ME)
- Physical Education for Teachers (EP)
- Special Education (SE)
- Engineering (EG)
- English (EN)
- Finance (FI)
- Intradivisional Fine Arts (FA)
- French (FR)
- General Administration (GA)
- Geography (GE)
- Geology (GY)
- German (CN)
- History (HI)
- Humanities (HU)
- Italian (IT)
- Latin (LA)
- Linguistics (LI)
- Management (MM)
- Marketing (MK)
- Mathematics (MA)
- Music (MU)
- Interdisciplinary Oceanography (OG)
- Office Administration (OA)
- Philosophy (PY)
- Physical Education (Basic) (PE)
- Physics (PH)
- Political Science (PS)
- Psychology (PC)
- Romance Languages (RL)
- Russian (RN)
- Interdisciplinary Social Sciences (SS)
- Sociology (SO)
- Spanish (SP)
- Speech (SH)
- Theatre Arts (TA)
- Zoology (ZO)
ACCOUNTING

Faculty: Jurgensen, chairman; Danco, Deyo, Dickerson, W. R. Garrett, McClung, McMullan, O'Neal, West.

AC 201. ELEMENTARY ACCOUNTING (3)
Basic theory and procedures of recording and reporting financial activities.

AC 202. ELEMENTARY ACCOUNTING (3)
PR: AC 201. Accounting theory and practices for various equity structures. Special problems of payrolls, taxes, departments and branches.

AC 301. INTERMEDIATE ACCOUNTING (3)
PR: AC 202. Advanced theory and procedures of recording and reporting activities affecting working capital and non-current assets.

AC 302. INTERMEDIATE ACCOUNTING (3)
Continuation of AC 301 with concentrated study of activities in fixed assets, long-term debt and corporate capital. Intensive treatment of analytical processes.

AC 305. MANAGERIAL ACCOUNTING (3)
PR: AC 202. The utilization of accounting information by management in costs, budgeting, tax reporting, research, auditing and other analyses.

AC 323. GOVERNMENTAL AND INSTITUTIONAL ACCOUNTING (3)

AC 401. ADVANCED ACCOUNTING (3)
PR: AC 302. Special problems of accounting in partnerships, sales procedures, and fiduciaries.

AC 402. ADVANCED ACCOUNTING (3)
PR: AC 302. Continued study of special problems, including consolidations, foreign branches and subsidiaries, and actuarial science.

AC 411. FEDERAL TAXES (3)

AC 412. FEDERAL TAXES (3)

AC 421. COST ACCOUNTING (3)

AC 423. AUDITING (3)
PR: AC 302 and 421. Principles and procedures of internal and public auditing. The ethics, responsibilities, standards and reports of professional auditing.

AC 425. BUDGETING (3)
PR: AC 421. The development of budgets and their relation to expense and cost control, including the use of standard cost as a budgetary tool.
AC 431. CONTROLLERSHIP (3)
PR: CI. The theory and practice of the functions, techniques and problems of the financial officers of business organizations.

AC 433. C.P.A. REVIEW (3)
PR: CI. A review of the various areas of accounting including concepts; cost, governmental, asset, liability, and equity accounting; consolidations; financial statements; and budgeting.

AC 501. MANAGERIAL ACCOUNTING AND CONTROL (3)
The interpretation and use of accounting data in planning and controlling business activity.

ANTHROPOLOGY

Faculty: Grange, chairman.

AN 101. INTRODUCTION TO ANTHROPOLOGY (3)
The study of man as a biological, social, and cultural being. (formerly AN 201)

AN 205. PHYSICAL ANTHROPOLOGY (3)
PR: AN 101 or CI. Methods and aims of physical anthropology; survey of the field.

AN 301. PERSONALITY AND CULTURE (3)
PR: AN 101 or CI. The effect of cultural institutions on the formation of personality and the way in which personality is expressed in cultural institutions.

AN 303. CULTURES OF AFRICA (3)
PR: AN 101 or CI. The ethnology of the native peoples south of the Sahara. (formerly "Afro-Asia")

AN 305. CULTURES OF THE PACIFIC (3)
PR: AN 101 or CI. The ethnology of the native peoples of the Pacific basin. (formerly "Oceania")

AN 307. INDIANS OF NORTH AMERICA (3)
PR: AN 101 or CI. The ethnology of the Indians north of the Río Grande.

AN 309. INDIANS OF LATIN AMERICA (3)
PR: AN 101 or CI. The ethnology of the Indians south of the Río Grande, with emphasis on the Maya, Aztec, and Inca. (formerly "Middle and South America")

AN 321. OLD WORLD ARCHAEOLOGY (3)
PR: AN 101 or CI. The methods and aims of archaeology and a survey of pre-history in Europe, Africa, and Asia. (formerly "Archaeology")

AN 323. NEW WORLD ARCHAEOLOGY (3)
PR: AN 101 or CI. A survey of the prehistory of North and South America.

AN 331. ETHNOLOGY (3)
PR: AN 101 or CI. The methods and aims of ethnology; survey of the world's folk cultures.

AN 361. THE LITTLE COMMUNITY (3)
PR: AN 101 or CI. A general consideration of the little community in various societies, emphasizing the several conceptual frameworks through which it may be viewed.
AN 411. ARCHAEOLOGICAL FIELD METHODS (3-6)
PR: AN 101, 321 or 323, and CI. Class size and credit will vary with project; arrangement must be made with instructor prior to registration. May be repeated once for credit up to a total of 6 hours.

AN 481. INDIVIDUAL RESEARCH (1-3)
PR: 15 hours of AN and arrangement with instructor prior to registration. Topics vary; may be repeated once for credit.

AN 485. DIRECTED READING (1-3)
PR: 15 hours of AN and arrangement with instructor prior to registration. Topics vary; may be repeated once for credit.

AN 491. SENIOR SEMINAR (3)
PR: CI. The history, philosophy, literature, theory, and application of the discipline.

ART

Faculty: Covington, chairman; Cox, Houk, Fager, Gelinas, Kronsoble, McCracken.

AR 101. VISUAL FUNDAMENTALS (3)
Introduction to problems in drawing techniques and media.

AR 102. VISUAL FUNDAMENTALS (3)
Introduction to problems primarily in two-dimensional design.

AR 110. STUDIO TECHNIQUES (2)
An introductory studio course for the student who does not intend to major in art.

AR 201. VISUAL FUNDAMENTALS (2)
PR: AR 101 and AR 102. Further exploration of drawing techniques and media.

AR 202. VISUAL FUNDAMENTALS (2)
PR: AR 101 and AR 102. Further exploration of two and three-dimensional design.

AR 271. LETTERING (3)
Basic problems in the design and execution of lettering in the fundamental Roman and sans-serif letter forms.

AR 301. ANCIENT AND CLASSICAL ART (3)
The art of Egypt, Mesopotamian Valley, Greece and Rome, early Christian.

AR 303. MEDIEVAL AND RENAISSANCE ART (3)
Romanesque and Gothic art in Europe, Byzantine and Italian, Northern Renaissance and Baroque.

The following four courses are introductions to specialized problems in the various media. Special stress placed upon techniques and materials.

AR 311. PAINTING TECHNIQUES (3)
PR: AR 202 or CI.

AR 321. SCULPTURE TECHNIQUES (3)
PR: AR 202 or CI.

AR 331. CERAMIC TECHNIQUES (3)
PR: AR 202 or CI.

AR 341. GRAPHIC TECHNIQUES (3)
PR: AR 202 or CI.
AR 373. JEWELRY AND CRAFTS (3)
Introductory course in the design and execution of jewelry and craft objects.

AR 401. 19th AND 20th CENTURY ART (3)
European art from neo-classicism to contemporary, and art of the United States.

AR 403. ORIENTAL ART (3)
The art of India, China, and Japan.

AR 411. PAINTING (3)
PR: AR 311. May be repeated. Advanced problems in the various painting techniques. Emphasis on individual creative expression.

AR 421. SCULPTURE (3)

AR 431. CERAMICS (3)
PR: AR 331. May be repeated. Advanced problems in the various ceramic techniques, including throwing and glaze calculation.

AR 441. GRAPHICS (3)
PR: AR 341. May be repeated. Advanced problems in the various graphic techniques. Emphasis on individual creative expression.

AR 481. DIRECTED STUDY (1-6)
PR: CI.

AR 501. ART HISTORY (1-6)
PR: CI.

AR 511. PAINTING (3)
PR: AR 411 or CI. May be repeated for a maximum of 9 credits.

AR 521. SCULPTURE (3)
PR: AR 421 or CI. May be repeated for a maximum of 9 credits.

AR 531. CERAMICS (3)
PR: AR 431 or CI. May be repeated for a maximum of 9 credits.

AR 541. GRAPHICS (3)
PR: AR 441 or CI. May be repeated for a maximum of 9 credits.

AR 581. RESEARCH (1-6)
PR: CI.

ASTRONOMY

Faculty: Eichhorn-von Wurmb, chairman; Carr, Robinson, Rose.

AS 201. INTRODUCTORY ASTRONOMY (4)
PR: Proficiency tests in mathematics and science. Aspects of the sky, the earth's motion and time-keeping, the moon, eclipses, astronomical instruments, motions and physical features of planets, comets and satellites. lec-lab.

AS 202. INTRODUCTORY ASTRONOMY (4)
PR: AS 201. The stars, stellar atmospheres and interiors, interstellar matter, the local and exterior galaxies, cosmology. lec-lab.
AS 313. GEOMETRY AND KINEMATICS OF THE UNIVERSE (3)

AS 343. STELLAR ASTRONOMY (3)
PR: AS 202, MA 204. The physical characteristics of stars and their distribution. The constitution, kinematics and dynamics of star groups; double stars, associations, clusters, galaxies.

AS 361. ASTRONOMICAL OBSERVING AND MEASURING (1)
PR: AS 201, 202. Actual measurements at the telescope and in the laboratory; evaluation of the data. May be repeated up to three times.

AS 371. CONTEMPORARY THINKING IN ASTRONOMY (for non-specialists) (3)
PR: Junior or senior standing or CI. Current concepts of astronomy and space science of general interest; background facts; artificial satellites, space probes; surface conditions of planets and evolution of the stars; cosmology.

AS 421. INTRODUCTION TO ASTRODYNAMICS (3)
CR: MA 305. The two-body problem, artificial satellites, elements of perturbation theory.

AS 431. STELLAR RADIATION (3)
CR: PH 305, 331, MA 306. The formation of the stellar spectrum; stellar atmospheres, interstellar matter; radio frequency radiation.

AS 433. STELLAR CONSTITUTION AND EVOLUTION (3)

AS 435. PHYSICS OF THE PLANETS (3)
PR: AS 201, 202, PH 221-223, 222-224. Planetary atmospheres, comets and meteors, evolution of the planetary system.

AS 481. UNDERGRADUATE RESEARCH (1-3)
PR: Senior or advanced junior standing and CI. Participation in professional research with a view to publication of results.

AS 483. SELECTED TOPICS IN ASTRONOMY (1-3)
PR: Senior or advanced junior standing and CI. Intensive coverage of spacial topics to suit needs of advanced students.

AS 491. ASTRONOMY SEMINAR (1)
PR: Senior or advanced junior standing and CI. May be repeated once.

AS 511. POSITIONAL ASTRONOMY (4)
PR: AS 313. The accurate determination of relative and absolute star positions and related problems.

AS 521. ASTRODYNAMICS (4)
PR: AS 421. Dynamics of the planetary system, space flight, theory of artificial satellites.

AS 563. STATISTICAL REDUCTION OF OBSERVATIONS (4)
PR: MA 321, 345 or equivalents. The theory of statistical adjustment (least squares) and applications.
AS 581. GRADUATE RESEARCH (1-3)
PR: CI.

AS 583. SELECTED TOPICS IN ASTRONOMY (1-3)
PR: CI.

BASIC STUDIES


CB-101-102. FUNCTIONAL ENGLISH (3,3)
Instruction and practice in the skills of writing, reading, and listening. Reading of books concerning man's relationship to society and to the natural world. CB 101 is prerequisite to CB 102.

CB 103-104. BEHAVIORAL SCIENCE (3,3)
Draws on information from behavioral sciences (human biology, psychology, anthropology, sociology, and philosophy) to demonstrate how human behavior develops and means by which personal, social and ethical problems are dealt with.

CB 105-106. PROBLEMS IN BIOLOGICAL SCIENCE (3,3)
The use of information and principles from botany, zoology and physiology to teach students the basic operations of biological systems and the application of critical thinking to scientific problems.

CB 107-108. PROBLEMS IN PHYSICAL SCIENCE (3,3)
Study of selected topics from astronomy, chemistry, geology, physics. Designed to provide an understanding of some basic principles and their application to contemporary life, and to develop the ability to use methods of scientific inquiry in investigating problems.

CB 109-110. FUNCTIONAL MATHEMATICS (3,3)
Designed as a terminal course for general cultural purposes, as a foundation for further study of mathematics and science and as a preparatory course for prospective elementary school teachers.

CB 111-122, CB 211-220. FUNCTIONAL FOREIGN LANGUAGES (3 each)

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94 BASIC STUDIES

CB 111 to 122 FUNCTIONAL FOREIGN LANGUAGES I (3 each) initiate development of language skills at the elementary level, combining basic patterns of language and grammar with an introduction to the foreign culture.

CB 211 to 220 FUNCTIONAL FOREIGN LANGUAGES II (3 each) continue development of language skills at the intermediate level, including grammatical framework of the language and beginning study of foreign literature in the original.

CB 201-202. THE AMERICAN IDEA (3,3)

Uses history, political science, sociology and economics to focus on major ideas characterizing American society and on our relations with other nations and international problems of today.

CB 203-204. THE HUMANITIES (3,3)

PR: CB 101-102. Analysis of works of visual arts, music, literature and philosophy. Interrelationships between arts and literatures and cultural conditions in significant periods. Workshops for creative experience.

CB 301-302. THE UNIVERSE OF MAN (3,3)

A search for the universals of human life today; the nature of man, the world community, human needs and values, available instruments of science and technology, and the limiting facts and forces.

CB 303-304. THE SCIENCE OF BEHAVIOR (3,3)

A comprehensive analysis and evaluation of man’s behavior. Emphasis on understanding of mechanisms involved in individual and social behavior, along with consideration of social and ethical problems related to means for controlling behavior.

CB 305-306. SCIENCE AND HUMAN LIFE (3,3)

PR: CB 106, 108 or CI. An investigation of the nature of science and its impact on the world.

CB 395. OVERSEAS STUDY (1-6)

A program of individual or group research in a foreign country. Selection of the student, his preparation for the study, and subsequent evaluation to be supervised by a faculty committee.

CB 401. SENIOR SEMINAR: FREEDOM AND RESPONSIBILITY (3)

Required of all seniors. Contemporary issues affecting social and personal values. Visiting lecturers, readings and discussions interrelating the behavioral, natural and social sciences and the humanities. Designed to focus the university education upon contemporary problems.

CB 471. COOPERATIVE EDUCATION RESEARCH REPORT (1-4)

PR: CE 171. A course designed specifically for Cooperative Education students in which the student pursues for a minimum of two training trimesters a research subject dealing with his Cooperative Education assignment and his major area of professional interest. The Cooperative Education student is assigned to a professor in his major field and will confer regularly with his major professor on the subject, structure and content of the written research project. The findings of this project would be embodied in an intensive written report.
BOTANY AND BACTERIOLOGY

Faculty: Norstog, chairman; Betz, Dawes, Lakela, Latina, R. Long.

BO 202. PLANT KINGDOM (4)
  PR: BZ 201. The plant divisions, their morphology, physiology and interrelationships, with emphasis upon evolutionary development. lec-lab.

BO 311. SYSTEMATIC BOTANY (4)
  PR: BZ 201 or CI. Identification and classification of the more interesting vascular plants of Florida; angiosperm evolution; principles of taxonomy. Conducted largely in the field. (formerly BO 312)

BO 317. MYCOLOGY (4)
  PR: BO 202. Taxonomy, morphology and physiology of fungi with special emphasis on yeasts and molds; antibiosis; industrial fermentations. lec-lab. (formerly BO 318)

BO 319. PLANT ANATOMY (4)
  PR: BO 202. Comparative studies of tissue and organ systems of fossil and present-day vascular plants. Functional and phylogenetic aspects stressed. lec-lab.

BO 321. PLANT PHYSIOLOGY (4)
  PR: BO 202, CH 331-332 or 303. Fundamental activities of plants; absorption, translocation, transpiration, metabolism, growth and related phenomena. lec-lab.

BO 443. MARINE BOTANY (4)
  PR: BO 202 or CI. An introduction to the ecology, physiology, morphology and taxonomy of marine plant life. Recommended to students interested in marine biology and oceanography. Field work is stressed. lec-lab.

BO 445. PLANT ECOLOGY (3)
  PR: BO 202 or 311. Distribution and nature of vegetation in relation to climatic, physiographic, edaphic and biotic factors; field investigations of subtropical Florida plant communities. lec-lab. (formerly BO 346)

BO 451. BACTERIAL PHYSIOLOGY (4)
  PR: BZ 351, CH 331-332, or CI. Bacterial structure, growth, death, metabolism and genetic systems. Laboratory emphasis on quantitative and chemical methods for study of bacteria. lec-lab.

BO 481. UNDERGRADUATE RESEARCH (1-3)
  PR: Senior standing and CI. Individual investigations with faculty supervision.

BO 483. SELECTED TOPICS IN BOTANY AND BACTERIOLOGY (1-3)
  PR: CI. Each topic is a course in directed study under supervision of a faculty member.

BO 491 SEMINAR IN BOTANY (1)
  PR: Senior or advanced junior standing and CI. May be repeated once.

BO 511. ADVANCED PLANT SYSTEMATICS (4)
  PR: BO 311 or equivalent. Phylogeny of angiosperm plants, relationships of the principal orders and families; application of cytology, ecology, genetics, biochemistry, and morphological analyses to the study of evolution in species of higher plants. lec-lab.
BO 515. ULTRASTRUCTURE TECHNIQUES IN ELECTRON MICROSCOPY (4)
PR: BO 202 or ZO 202, BZ 315 or equivalent, and CI. Discussion of classical problems in cytology and the attempts at their solution using the electron microscope. Emphasis on preparation techniques, optics and use of the electron microscope. lec-lab.

BO 521. DEVELOPMENTAL BOTANY AND TISSUE CULTURE (4)
PR: BO 321 or CI. Morphogenesis and embryogenesis of higher plants. Emphasis on experimental approach to investigations of plant development. Tissue culture techniques stressed. lec-lab.

BO 543. PHYCOLOGY (4)
PR: BO 443 or equivalent. A detailed survey of the algae emphasizing both taxonomy and morphology of fresh and marine water forms; field and laboratory investigations including individual projects. lec-lab.

BO 551. VIROLOGY (4)
PR: BO 451 or equivalent. The biology of viruses associated with plants, animals, and bacteria will be considered; the nature of viruses, mechanisms of viral pathogenesis, and interactions with host cells. lec-lab.

BO 553. DETERMINATIVE BACTERIOLOGY (4)
PR: BZ 351 or equivalent, CH 331-332 or equivalent. Survey of bacterial classification; detailed examination of bacteria important to man as pathogens, in agriculture and in industry. lec-lab.

BO 555. IMMUNOLOGY (4)
PR: BZ 351 or equivalent, CH 331-332 or equivalent. Discussion of the basic immune reaction, nature of antigenicity; basic immunological techniques and their use in biological research and the medical sciences.

BO 581. GRADUATE RESEARCH (1-3)
PR: CI.

BO 583. SELECTED TOPICS IN BOTANY AND IN BACTERIOLOGY (1-3)
PR: CI.

BO 599. MASTER'S THESIS (3-6)
PR: CI.

INTERDISCIPLINARY BOTANY-ZOOLOGY

Faculty: Betz, Briggs, Dawes, Friedl, Gratzner, Krivanek, Latina, Linton, R. Long, Meyerriecks, Norstog, Simon, Woolfenden.

BZ 201. FUNDAMENTALS OF BIOLOGY (4)
PR: Proficiency tests in mathematics and science. Emphasis on fundamental properties of plant and animal life. lec-lab.

BZ 315. CYTOLOGY AND MICROTECHNIQUE (4)
PR: BO 202 or ZO 202. Structure and function of cytoplasmic and nuclear components of cells; fixation, imbedding, sectioning and staining techniques. lec-lab. (formerly BZ 316)
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<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>BZ 331</td>
<td>GENETICS (4)</td>
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<td>PR: BO 202 or ZO 202. Principles of Mendelian, biochemical and evolutionary</td>
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<td>genetics. lec-lab.</td>
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<tr>
<td>BZ 345</td>
<td>PRINCIPLES OF ECOLOGY (3)</td>
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<td>PR: BO 202 or ZO 202. Organisms and their relationships to the environment,</td>
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<td>biogeography.</td>
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<tr>
<td>BZ 351</td>
<td>INTRODUCTION TO MICROBIOLOGY (4)</td>
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<td>PR: BZ 201. Introduction to the biology of microorganisms; structure and</td>
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<td>physiology of bacteria, algae, viruses, rickettsiae and protozoa; basic lab;</td>
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<td>methods in bacteriology. lec-lab.</td>
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<tr>
<td>BZ 465</td>
<td>ORGANIC EVOLUTION (3)</td>
<td></td>
<td>PR: BZ 331 or CI. An introduction to modern evolutionary theory. Lectures on</td>
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<td>population genetics, adaptations, speciation theory, phylogeny, human evolution,</td>
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<td>and related areas.</td>
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<tr>
<td>BZ 485</td>
<td>RESEARCH METHODS IN BIOLOGY I. (2)</td>
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<td>PR: CI. A laboratory course for advanced students to become acquainted with</td>
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<td>contemporary biological research instrumentation and techniques.</td>
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<tr>
<td>BZ 486</td>
<td>RESEARCH METHODS IN BIOLOGY II. (2)</td>
<td></td>
<td>PR: CI. See BZ 485.</td>
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**CHEMISTRY**

Faculty: Maybury, chairman; Ashford, M. Barfield, Binford, J. Fernandez, D. Martin, Monley, Olsen, Olszewski, T. Owen, Ramaiah, Solomons, Wenzinger, Whitaker.

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>CH 211</td>
<td>GENERAL CHEMISTRY * (4)</td>
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<td>PR: Proficiency in mathematics and science. Fundamentals of chemistry; gas</td>
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<td>laws, mass and energy relationships in chemical changes, chemical equilibrium,</td>
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<td>atomic and molecular structure, lec-lab and discussion.</td>
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<td>CH 212</td>
<td>GENERAL CHEMISTRY * (4)</td>
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<td>PR: CH 211 or equivalent, Second half of General Chemistry. lec-lab and disc</td>
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<td>CH 301</td>
<td>CHEMICAL STOICHIOMETRY (3)</td>
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<td>PR: CH 212 or equivalent. Course on the mutual relationship of chemical prin</td>
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<td>ciples and mathematical operations. One-trimester course for non-chemistry ma</td>
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<td>jors. Lecture.</td>
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<tr>
<td>CH 303</td>
<td>ORGANIC CHEMISTRY * (4)</td>
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<td>PR: CH 212. Fundamental organic chemistry principles. One-trimester course for</td>
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<td>non-chemistry majors. lec-lab.</td>
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<tr>
<td>CH 305</td>
<td>PHYSICAL CHEMISTRY (4)</td>
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<td>PR: CH 212, 321. Fundamental physical chemistry principles. One-trimester cou</td>
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<td>rse for non-chemistry majors. lec-lab. (formerly CH 304)</td>
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<tr>
<td>CH 321</td>
<td>QUANTITATIVE ANALYSIS * (5)</td>
<td></td>
<td>PR: CH 212. Laboratory procedures and theoretical consideration of factors pe</td>
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<td>riment to quantitative determinations. lec-lab.</td>
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CH 331. ORGANIC CHEMISTRY * (4)
PR: CH 212. Fundamental principles of organic chemistry. lec-lab and discussion.

CH 332. ORGANIC CHEMISTRY * (4)
PR: CH 331 or equivalent. Second half of Organic Chemistry. lec-lab and discussion.

CH 341. PHYSICAL CHEMISTRY (4)
PR: CH 321 and MA 204. CR: MA 205, PH 222 or 206. Introduction to quantum theory, atomic and molecular structure, kinetic theory of gases, chemical kinetics. lec-lab.

CH 342. PHYSICAL CHEMISTRY (4)
PR: CH 321 and MA 204. CR: MA 205, PH 222 or 206. The states of matter, thermodynamics, solutions, colloids, electrochemistry. lec-lab.

CH 343. PHYSICAL CHEMISTRY (3)
PR: CH 341, 342. Introduction to statistical thermodynamics, solid state and surface and nuclear chemistry. Lecture.

CH 411. ADVANCED INORGANIC CHEMISTRY (3)

CH 421. INSTRUMENTAL ANALYSIS (3)
PR: CH 321, one trimester of physical chemistry. Theory and practice of instrumental methods. lec-lab.

CH 431. ADVANCED ORGANIC SYNTHESIS (3)
PR: CH 332. A study of synthetic organic techniques from both the practical and the theoretical points of view. lec-lab.

CH 433. QUALITATIVE ORGANIC ANALYSIS * (3)
PR: CH 332. Identification of organic compounds by functional group reactions and physical properties. lec-lab.

CH 451. BIOCHEMISTRY (3)
PR: CH 303 or 332. The chemistry of biologically important substances including carbohydrates, proteins, colloids, enzymes, vitamins, and metabolic intermediates.

CH 473. CHEMICAL LITERATURE (1)
PR: 18 hours of chemistry, junior standing. Principles of the literature search — major source materials in analytical, biochemistry, inorganic, physical, and organic chemistry. Lecture.

CH 481. UNDERGRADUATE RESEARCH (1-3)
PR: CI.

CH 483. SELECTED TOPICS IN CHEMISTRY (1-3)
PR: CH 341, 342. Each topic is a course in directed study under the supervision of a faculty member expert in the field.

CH 491. CHEMISTRY SEMINAR (1)
PR: Senior standing.

*The purchase of a coupon book to cover breakage is required for courses marked with an asterisk.
CH 511. STRUCTURAL INORGANIC CHEMISTRY (3)
PR: CH 411. Modern theories of bonding and structure of inorganic compounds including coordination theory, stereochemistry, solution equilibria, kinetics, mechanisms of reactions, and use of physical and chemical methods. Lecture.

CH 513. CHEMISTRY OF THE LESS FAMILIAR ELEMENTS (3)
PR: CH 411. An integrated treatment of the conceptual and factual aspects of the traditionally less familiar elements including noble-gas elements, unfamiliar non-metals, alkali and alkaline-earth metals, and the transition elements. Lecture.

CH 521. ADVANCED ANALYTICAL CHEMISTRY (3)
PR: CH 421. A study of complete analytical process including sample handling, separations, the analysis step, and statistical interpretation of data. Emphasis placed on separations and statistics. Lecture.

CH 523. ELECTROCHEMISTRY (3)
PR: CH 421. Theory and applications of modern electrochemical techniques including polarography, amperometry, potentiometry, coulometry, and conductometry. Lecture.

CH 525. ADVANCED ANALYTICAL TOPICS (3)
PR: CH 421. Selected topics in analytical chemistry. Offerings include radiochemistry (emphasizing radiotracers in research and analysis), chemical spectroscopy (including both emission and absorption), and quantitative organic analysis. Lecture. Some topics may have laboratory.

CH 531. STRUCTURAL ORGANIC CHEMISTRY (3)
A survey of theoretical and synthetic organic chemistry with an emphasis on stereochemistry. Problems of structure and reactivity will be considered. Lecture.

CH 533. ORGANIC REACTION MECHANISMS (3)
A study of organic reaction mechanisms emphasizing the interpretation of experimental data. Lecture.

CH 535. ORGANIC REACTIONS (3)
A study of organic reactions as exemplified in synthesis, degradation and structure proof. The emphasis will vary from year to year. Lecture.

CH 541. STATISTICAL THERMODYNAMICS (3)
Application of statistical mechanics to thermodynamics, the relation of molecular structure to thermodynamic properties. Lecture.

CH 543. MOLECULAR SPECTROSCOPY (3)
Application of elementary quantum mechanics to the analysis and interpretation of molecular and magnetic resonance spectra. Lecture.

CH 545. QUANTUM CHEMISTRY (3)
Applications and development of wave mechanics to problems in chemistry; valence and the chemical bond. Lecture.

CH 551. GRADUATE RESEARCH (1-6)
PR: CI. Directed study along lines of the student's research, including participation in regular seminars. May be repeated.

CH 553. SELECTED TOPICS IN CHEMISTRY (1-3)
PR: CI.

CH 599. THESIS (1-6)
COOPERATIVE EDUCATION

Coordinating staff: G. Miller, director; B. Neel, A. Stubblebine Jr.

CE 171. COOPERATIVE EDUCATION, 1ST TRAINING PERIOD (0)
PR: 24 hours of academic credit, acceptance in Cooperative Education Program.

CE 172. COOPERATIVE EDUCATION, 2ND TRAINING PERIOD (0)
PR: CE 171.

CE 271. COOPERATIVE EDUCATION, 3RD TRAINING PERIOD (0)
PR: CE 172.

CE 272. COOPERATIVE EDUCATION, 4TH TRAINING PERIOD (0)
PR: CE 271.

CE 371. COOPERATIVE EDUCATION, 5TH TRAINING PERIOD (0)
PR: CE 272.

CE 372. COOPERATIVE EDUCATION, 6TH TRAINING PERIOD (0)
PR: CE 371.

CE 471. COOPERATIVE EDUCATION, 7TH TRAINING PERIOD (0)
PR: CE 372.

CE 472. COOPERATIVE EDUCATION, 8TH TRAINING PERIOD (0)
PR: CE 471.

CE 571. COOPERATIVE EDUCATION, TRAINING PERIOD (0)
CE 572. COOPERATIVE EDUCATION, TRAINING PERIOD (0)

DEVELOPMENTAL MATHEMATICS

DM 001. BASIC CONCEPTS OF ALGEBRA (0)
The content of this course is high school algebra. It is for the convenience of persons who have not had adequate preparation to handle applications involving simple algebraic manipulations and for people inadequately prepared to enter MA 101.

DM 002. ANALYTICAL TRIGONOMETRY (0)
A programmed learning course. The study of the trigonometric functions as functions of real numbers and their application to triangles.

DEVELOPMENTAL READING

DR 001. DEVELOPMENTAL READING (0)
Instruction involving extensive practice in word attack, comprehension, and in different ways and purposes of reading. Various mechanical aids are used. Some sections, so designated at registration time, give major emphasis to speed and accuracy.
ECONOMICS

Faculty: R. Neel, chairman; Brunhild, R. H. Burton, Herman, Modrow, Pasternak, Shows, West.

EC 201. ECONOMIC PRINCIPLES I (3)
Economics as a social science; accounting, analytical and policy aspects of national income; and analysis of money and banking system.

EC 202. ECONOMIC PRINCIPLES II (3)
The operation of the market system, international trade policies and theory and an introduction to labor history, unions and the theory of distribution.

EC 301. INTERMEDIATE PRICE THEORY (3)
PR: EC 201-202. Advanced analysis of supply and demand as related to competition and monopoly; application of economic theory to management policies.

EC 311. LABOR ECONOMICS (3)
PR: EC 201-202 or CI. History of the trade union movement; economic analysis of trade union philosophies and practices; examination of basic influences affecting labor force, real wages and employment; collective bargaining and labor law.

EC 313. COLLECTIVE BARGAINING (3)
PR: EC 311. The administration of labor-management arguments, mediation and arbitration of industrial disputes and governmental role in collective bargaining.

EC 323. INTERMEDIATE INCOME AND MONETARY ANALYSIS (3)

EC 331. BUSINESS AND ECONOMIC STATISTICS I (3)
The collection, presentation, analysis and interpretation of quantitative data as they pertain to business problems and decisions.

EC 341. ECONOMICS OF TRANSPORTATION (3)
PR: EC 201-202. Functions of transportation agencies, rate structure of transportation companies, problems of state and federal regulations and coordination of transportation facilities.

EC 343. ECONOMICS OF PUBLIC UTILITIES (3)

EC 351. INTERNATIONAL ECONOMICS (3)
PR: EC 201-202. The principles and mechanisms of trade, exchange, balance of payments, comparative costs, effects of trade restrictions and economic growth of underdeveloped areas.

EC 361. INTRODUCTION TO MATHEMATICAL ECONOMICS (3)
PR: CB 109-110, EC 201-202 and 331. The principal mathematical tools and techniques used in economic analysis and economic research.

EC 371. AMERICAN ECONOMIC HISTORY (3)
PR: EC 201-202. The growth and evolution of American economic institutions from Colonial times to the present.
EC 401. HISTORY OF ECONOMIC THOUGHT (3)
PR: EC 201-202. A historical survey of the development of economic theory and the main streams of economic thought, including philosophical and value aspects of economic thought.

EC 405. COMPARATIVE ECONOMIC SYSTEMS (3)
PR: EC 201-202. An emphasis on the theoretical and practical differences between economic systems such as capitalism, socialism and communism.

EC 411. LABOR RELATIONS AND PUBLIC POLICY (3)
PR: EC 311. Problems resulting from legislative and judicial interpretation of the rights, duties and responsibilities of labor unions and employers; public policy in labor-management negotiations; survey of legislation designed to protect workers.

EC 423. PUBLIC FINANCE (3)

EC 431. BUSINESS AND ECONOMIC STATISTICS II (3)
PR: EC 331. Basic probability distributions, theory of statistical estimation, tests of hypotheses, design of experiments. Introduction to non-parametric statistics.

EC 437. BUSINESS-GOVERNMENT RELATIONSHIPS (3)
PR: EC 201-202. Patterns of regulations such as control of competitive enterprise, cartels and monopolies by the government. Government regulations and economic planning applied to politically determined economic goals.

EC 451. INTERNATIONAL COMMERCIAL POLICIES (3)
PR: EC 351. Geographic, social, political and related factors influencing commercial trade policies. Special emphasis on economic consequences of alternative courses of action.

EC 461. THEORY OF ECONOMIC DEVELOPMENT (3)
PR: EC 323. Problems, dynamics, and policies of economic change and growth in both emerging and developed countries. Emphasis is placed on economic theory as an explanation of the process of economic development.

EC 479. SEMINAR IN INTERNATIONAL ECONOMICS (3)
PR: EC 451. Patterns of economic relationships among countries, with particular emphasis on Latin America.

EC 501. RESEARCH METHODOLOGY (3)
An investigation and use of research concepts, objectives and methods. This course should be taken at an early stage of the program.

EC 503. MANAGERIAL STATISTICS (3)
A systematic development of statistical methods with reference to their application in economic and business decision-making. This course should be taken at an early stage of the program.

EC 505. MANAGERIAL ECONOMICS (3)
The application of the concepts, tools and methods of micro economic analysis to the solution of problems of the business firm.

EC 507. AGGREGATE ECONOMICS (3)
An analysis of economic trends and fluctuations, of monetary and fiscal policy designed to moderate economic fluctuations, and the forecasting of their impact upon the business firm.
EDUCATION


Required Undergraduate Professional Education Core (12 hours)

ED 305. HUMAN DEVELOPMENT AND LEARNING (3)
PR: CB 103-104. Physiological and psychological growth patterns; learning theories, personality adjustment, and appraisal of the various forces affecting learning and personality.

ED 307. SOCIAL FOUNDATIONS OF EDUCATION (3)
The social, economic and political context within which schools function and the values which provide direction for our schools; the culture as a motivating influence in instruction.

ED 401. CURRICULUM AND INSTRUCTION (3)
PR: ED 305 and 307, and admission to a teacher education program. Structure and purposes of curriculum organization with special emphasis on the quality of curriculum.

ED 440. TEACHING METHODS IN THE ELEMENTARY SCHOOL (3)
Process of teaching elementary school subjects. This is the only required methods course for prospective elementary teachers.

ED 441-465. TEACHING METHODS IN THE SECONDARY SCHOOL (3)
PR: ED 401 or concurrent registration in ED 401. Techniques and materials of instruction in one of the following secondary school subjects of the teaching specialization. One of the following is the only required methods course for prospective secondary teachers.

441. ART
443. BUSINESS EDUCATION
445. DISTRIBUTIVE EDUCATION
447. ENGLISH
449. FOREIGN LANGUAGE
451. MATHEMATICS
453. MUSIC-INSTRUMENTAL (K-12)
455. MUSIC-VOCAL (K-12)
457. PHYSICAL EDUCATION
459. SCIENCES
461. SOCIAL STUDIES
463. JOURNALISM
465. LATIN

Required Seminar in Teaching (3 hours) and Student Teaching (9 hours)

ED 498. SENIOR SEMINAR IN EDUCATION (3)
PR: Senior standing. Synthesis of teacher candidate’s courses in his complete college program. Taught concurrently with student teaching.

ED 499. SUPERVISED TEACHING (9)
One full trimester of student teaching in a public or private school. Student teacher takes Senior Seminar in Education concurrently.
Required Process Core for All Master of Arts Programs (3-12 hours)

ED 483. FOUNDATIONS OF MEASUREMENT (3)
Fundamental descriptive statistics, basic measurement concepts, role of measurement in education, construction of teacher-made tests and interpretation of standardized tests.

ED 501. FOUNDATIONS OF EDUCATIONAL RESEARCH (3)
Intellectual inquiry into the major methods of problem solving and evaluation. Critical analysis of examples of educational research.

ED 505. PSYCHOLOGICAL FOUNDATIONS OF EDUCATION (3)
Selected topics in psychology of human development and learning.

ED 507. HISTORICAL AND PHILOSOPHICAL FOUNDATIONS OF EDUCATION (3)
Major philosophies of education in historical and cultural context. Special consideration given to sources which are relevant to modern education.

Professional Education—Electives

ED 101. INTRODUCTION TO TEACHING (3)
The people with whom teachers work, the types of tasks they perform and the challenges they can anticipate. Observation of teaching at several grade levels.

ED 207. EDUCATIONAL PSYCHOLOGY (3)
The nature of learning and the application of learning principles to educational procedures.

ED 402. CURRICULUM AND INSTRUCTION (3)
PR: ED 401 and admission to internship program. Improvement of instructional practices and problems of evaluation in education.

ED 425. NEW TRENDS IN TEACHING THE PHYSICAL SCIENCES (3)
Physical Science Study Committee Physics, Chemical Education Materials Study and other new approaches to the teaching of the physical sciences. Directed individual study. Recommended to be taken prior to ED 459.

ED 427. NEW TRENDS IN TEACHING BIOLOGY (3)
Cellular version of Biological Science Curriculum Study. For secondary school teachers. Recommended to be taken prior to ED 459.

ED 467. READING IN THE SECONDARY SCHOOL (3)
Departmental reading for the upper grade level junior high school pupils and all grade level senior high school pupils.

ED 475. AMERICAN DEMOCRACY AND PUBLIC EDUCATION (3)
Interdependence of the public school and democracy in the United States and the responsibility of the school in fostering and strengthening basic democratic principles.

ED 477. PRINCIPLES OF LEARNING (3)
Research studies selected on basis of relevance to classroom situation.

ED 479. PRINCIPLES OF EDUCATIONAL ADMINISTRATION (3)
Nature of school administration with an emphasis upon the role of the classroom teacher.
ED 480. INDIVIDUAL RESEARCH (1-3)
PR: Senior standing and consent of program coordinator.

ED 481. DIRECTED INDEPENDENT STUDY: (Subject) (3)
Individually planned course in elementary or secondary school subject.

ED 486. DIRECTED READINGS (1-3)
PR: Senior standing and consent of program coordinator.

ED 511. SUPERVISION AND CURRICULUM IMPROVEMENT (3)
PR: Prior course in general curriculum. Instructional leadership, relation of supervision and curriculum improvement, evaluation of teaching and supervision, organization of supervisory program.

ED 532. CURRENT TRENDS IN SECONDARY ENGLISH EDUCATION (3)
An analysis of recent developments in curricular patterns and instructional practices in secondary English.

ED 534. CURRENT TRENDS IN SECONDARY MATHEMATICS EDUCATION (3)
An analysis of recent developments in curricular patterns and instructional practices in secondary mathematics.

ED 535. CURRENT TRENDS IN SECONDARY SCIENCE EDUCATION (3)
PR: ED 425 or 427. An analysis of recent developments in curricular patterns and instructional practices in secondary science.

ED 536. CASE STUDIES IN SCIENCE (3)
Selected case studies from the Natural Sciences with implications for science teaching.

ED 537. CURRENT TRENDS IN SECONDARY SOCIAL STUDIES (3)
An analysis of recent developments in curricular patterns and instructional practices in secondary social studies.

ED 581. DIRECTED INDEPENDENT STUDY: (Subject) (3)
Extending competencies in the teaching field.

ED 585. PROGRAMMED INSTRUCTION AND TEACHING MACHINES (3)
Principles for programming in the several academic subjects.

ED 587. HISTORY OF EDUCATION IN THE UNITED STATES (3)
Historical background of the present elementary, secondary and higher educational programs in the United States.

ED 599. PHILOSOPHY OF EDUCATION (3)
Fundamental issues in education as interpreted by the eminent philosophers.

ED 591. SCHOOL CURRICULUM DEVELOPMENT (3)
Workshop for the improvement of the curriculum of an elementary or secondary school. Each participant works on his teaching specialization area as well as on the total school program. Open only to teachers in service. Complete faculty participation required.

ED 593. SUBJECT SPECIALIZATION PLANNING FOR THE ELEMENTARY TEACHER (3)
Individually planned course in an elementary school subject. Open only to teachers in service. Offered as independent study.
ED 595. SUBJECT SPECIALIZATION PLANNING FOR THE SECONDARY TEACHER (3)
Individually planned course in a secondary school subject. Open only to teachers in service. Offered as independent study.

Art Education

AE 379. ART IN THE ELEMENTARY SCHOOL (3)
PR: AR 202. Art expressions appropriate for elementary school pupils at each grade level.

AE 498. FIELD WORK IN ART EDUCATION (Credits to be announced)
PR: CI. Supervised participation in activities related to art education in community centers, adult education programs, non-school youth programs, planned workshops and research. Undergraduate students will enroll in AE 498 for 2 credit hours concurrently with ED 499.

AE 580. HISTORICAL AND PHILOSOPHICAL FOUNDATIONS OF ART EDUCATION (3)
Consideration of past and contemporary philosophies and practices in art education.

AE 581. ADMINISTRATION AND SUPERVISION OF ART EDUCATION (3)
Consideration of principles of supervision and administration as they relate to the program of art in the public schools.

AE 582. RESEARCH SEMINAR IN ART PROGRAM (3)
PR: AE 580 or CI. Literature and research in art education. Exploration of the various approaches to problem solving and evaluation in art education with emphasis on individual research.

Distributive Education

DE 311. RETAILING EDUCATION (3)
The retail functions and related content needed to develop a training plan for students seeking careers in such areas as advertising, salesmanship or merchandising.

DE 331. SUPERVISED FIELD EXPERIENCE (3)
PR: DE 311. Planned supervised participation in activities related to training procedures in retail, wholesale and service occupations in selected industries.

DE 406. MANAGEMENT OF COORDINATED VOCATIONAL EDUCATION (3)
The study of the organization and coordination of cooperative and specialized programs.

DE 407. PRINCIPLES OF VOCATIONAL EDUCATION (3)
A review of the development of vocational programs and the basis for occupational emphasis to other aspects of education.

DE 506. MANAGEMENT OF VOCATIONAL EDUCATION PROGRAMS (3)
The study of the organization and coordination of cooperative and specialized programs.
DE 507. PRINCIPLES OF VOCATIONAL EDUCATION (3)
A review of the development of vocational programs and an examination of their relationship to other curricular areas.

DE 521. IMPROVING COORDINATION INSTRUCTION (3)
PR: In-service experience or CI. An examination of the cooperating agencies and their functions; materials, methods and content of junior college mid-management programs.

DE 531. ORGANIZATION AND SUPERVISION OF ADULT DISTRIBUTIVE EDUCATION (3)
PR: CI. For supervisors of adult distributive education in county-wide programs and community junior colleges. Curriculum structure, advisory committees, teacher recruitment and training including the construction of course outlines and promotion of enrollment.

DE 551. DISTRIBUTIVE EDUCATION PRACTICUM (3-6)
PR: DE 506-507 or their equivalent. Field work in the local business community.

DE 561. SEMINAR IN DISTRIBUTIVE EDUCATION RESEARCH (3)
PR: ED 501. Analysis of applied research techniques and investigation of an important current problem in distributive education.

Elementary Education

EE 309. READING FOR THE CHILD (3)
PR: CB 101-102 and ED 305. Readiness, word recognition (phonic, visual and contextual analysis) development of word meanings, basic study skills, comprehension abilities and reading interests.

EE 311. LANGUAGE ARTS FOR THE CHILD (3)
PR: CB 101-102 and ED 305. Speaking, writing, reading and listening experiences of children and ways these skills are developed for individual creative expression.

EE 313. LITERATURE FOR THE CHILD (3)
PR: CB 101-102 and ED 305. History and development of children's literature, study of bibliographic sources, criteria and techniques for selection and use.

EE 315. ARITHMETIC FOR THE CHILD (3)
PR: CB 109-110. Basic structure of arithmetic, principles underlying number concepts.

EE 317. SCIENCE FOR THE CHILD (3)
PR: CB 105-106 or 107-108. Science as inquiry.

EE 319. SOCIAL STUDIES FOR THE CHILD (3)
PR: CB 201-202. Significant concepts in the subjects concerned with human relationships. Emphasis upon teaching pupils to solve rather than be engulfed by social problems.

EE 321. ART FOR THE CHILD (3)
PR: CB 203-204. Art and the intellectual, creative, emotional and esthetic growth of children.

EE 323. MUSIC FOR THE CHILD (3)
PR: CB 203-204. Music fundamentals and music literature.
EE 325. HEALTH, PHYSICAL EDUCATION FOR THE CHILD (3)
Motivating factors of play; knowledge and skill in basic rhythmic activities, games and stunts; health instruction for the child.

EE 410. DEVELOPMENTAL PROCESSES IN EARLY CHILDHOOD (5)
Developmental processes among nursery-kindergarten children, their relation to curriculum development and learning; extensive child study through observation required.

EE 411-412. PROGRAMS IN NURSERY SCHOOLS AND KINDERGARTENS (3,3)
Evaluation of curriculum as it contributes to the development of individual and group living in nursery schools, day care centers and kindergartens. 411: Esthetic concepts; 412: Environmental concepts.

EE 413. LANGUAGE AND COGNITION IN EARLY CHILDHOOD (3)
Language in the learning, thinking and perceiving of young children; contrasting theories of language and symbolic experience, verbal and non-verbal behavior.

EE 503. CURRICULUM RESEARCH (1-3)
PR: ED 501 and admission to candidacy. Critical evaluation of current research and curriculum literature, design and analysis of individual research topics leading to satisfaction of research requirement.

EE 509. NEW TRENDS IN READING INSTRUCTION (3)
PR: ED 309 or teaching experience. Extensive study of recent trends in materials, approaches and procedures in teaching reading in the elementary school.

EE 511. NEW TRENDS IN LANGUAGE ARTS INSTRUCTION (3)
PR: ED 311 and 313. Advanced materials and processes of instruction in elementary school language arts programs.

EE 513. CREATIVE ARTS INSTRUCTION (3)
Creative processes in the teaching of painting, music, dance and drama to elementary school pupils.

EE 515. NEW TRENDS IN MATHEMATICS INSTRUCTION (3)
PR: ED 315 or equivalent. Philosophy, content and process of qualitative instruction in modern mathematics in elementary school programs.

EE 517. NEW TRENDS IN SCIENCE INSTRUCTION (3)
PR: ED 317. Selected topics in the biological and physical sciences appropriate for teaching in excellent elementary school programs. Analysis of modern curriculum materials used in presenting science as a process of inquiry.

EE 519. NEW TRENDS IN SOCIAL STUDIES INSTRUCTION (3)
Crucial concepts drawn from the social sciences. Analysis of the problems approach in social studies. Students will select an area of independent study on an advanced level.

EE 521. ART FOR THE ELEMENTARY SCHOOL TEACHER (3)
Exploration of various materials and techniques in relationship to current theories about art and the intellectual, creative, emotional and aesthetic growth of children.

EE 531. DIAGNOSIS OF READING DISABILITIES (3)
PR: ED 513. Review of the research concerning causes of reading disability; diagnostic procedures; techniques and materials in diagnosis of reading problems.
EE 532. TECHNIQUES OF CORRECTIVE AND REMEDIAL READING (3)
PR: EE 509 and 531. Materials and methods in remediation of moderate to severe reading disability cases.

EE 541. PROBLEMS IN SUPERVISION AND CURRICULUM IMPROVEMENT (3)
Selected problems in a program of curriculum improvement within a school system.

EE 599. THESIS (1-6)

Guidance

ED 482. PRINCIPLES OF GUIDANCE (3)
Guidance as a profession; philosophic framework of the guidance program, its scope and place in the total educational context.

ED 520. THE INFORMATIONAL SERVICE IN GUIDANCE (3)
PR: ED 482. Occupational structure in the United States; sources and uses of educational and occupational information; collecting, classifying and filing such information.

ED 521. THE INDIVIDUAL INVENTORY SERVICE IN GUIDANCE (3)
PR: ED 482. Analysis of the individual with emphasis on collecting information and using such information for purposes of better understanding individuals.

ED 522. ORGANIZATION AND ADMINISTRATION OF GUIDANCE SERVICES (3)
PR: ED 482. Organization of a guidance program and its place in the total educational program; responsibilities of various staff members and their relationships to each other.

ED 523. GROUP PROCEDURES IN GUIDANCE (3)
PR: ED 482. Group interaction and values of group activity for guidance purposes. Methods and techniques for working with groups.

ED 524. THE COUNSELING SERVICE IN GUIDANCE (3)
PR: ED 482 and recommendation of adviser. Nature of the counseling process with emphasis on some theoretical approaches and practical techniques.

ED 525. PRACTICUM IN GUIDANCE COUNSELING (3)
PR: ED 524 (can be taken concurrently). Supervised practice in working with individuals in counseling relationship.

ED 526. SEMINAR IN GUIDANCE (3)
Significant issues in the field of guidance; topics for discussion will vary according to needs and interests of students.

ED 527. TESTS AND MEASUREMENTS (3)
Measurement and statistical theory. Appropriate instruments, procedures and sources of information.

Library-Audio Visual Education

LE 327. SCHOOL LIBRARY ORGANIZATION AND ADMINISTRATION (3)
Ordering, accessioning, budgeting, accounting, binding, care of books and circulation.
LE 411. SCHOOL LIBRARY ADMINISTRATION AND SERVICE (3)
Development, philosophy, objectives, standards and current trends in school libraries; study and evaluation of library processes, programs and services in the school.

LE 412. ORGANIZATION OF THE SCHOOL LIBRARY AS A MATERIALS CENTER (3)
Library quarters, facilities and equipment; acquisition, maintenance and circulation of book and non-book library materials; and the over-all organization of library programs in the schools.

LE 413. GENERAL REFERENCE SOURCES (3)
Basic reference tools; dictionaries, hand books, serials and bibliographic sources in subject fields; problems and techniques in building and maintaining reference collections in the school.

LE 415. TECHNICAL SERVICES IN LIBRARIES (3)
Principles and practice in the classification, cataloging and processing of books and other informational materials in the school library.

LE 417. BOOKS AND RELATED MATERIALS FOR YOUNG PEOPLE (3)
Literature for adolescents; bibliographic sources, aids and tools for the selection and utilization of books and related multi-sensory materials.

LE 419. AUDIO-VISUAL MATERIALS OF INSTRUCTION (3)
Theory and practice in the operation of multi-sensory aids and equipment.

LE 421. READING GUIDANCE PROGRAMS IN LIBRARIES AND CLASSROOMS (3)
Reading interests of youth; programs for teaching the library and learning skills. Theory and practice in reading guidance techniques.

LE 423. PREPARATION AND PRODUCTION OF INSTRUCTIONAL MATERIALS (3)
Preparation of a variety of instructional materials using varying techniques, with special emphasis placed on transparencies, films, tapes and other materials of the newer media.

LE 424. EDUCATIONAL BROADCASTING (3)
Potentialities, uses and current developments in educational television; observation of and participating in, local radio and television broadcasts.

Music Education

*ME 431. INSTRUMENTAL MUSIC IN THE ELEMENTARY SCHOOL (3)
*ME 432. INSTRUMENTAL MUSIC IN THE JUNIOR HIGH SCHOOL (3)
*ME 433. INSTRUMENTAL MUSIC IN THE SENIOR HIGH SCHOOL (3)
*ME 435. VOCAL MUSIC IN THE ELEMENTARY SCHOOL (3)
*ME 437. VOCAL MUSIC IN THE JUNIOR HIGH SCHOOL (3)
*ME 439. VOCAL MUSIC IN THE SENIOR HIGH SCHOOL (3)

*Each class meets as a performing group. Score reading, conducting, organizational procedures, historical relationships and methods at the appropriate grade levels. Teaching techniques concerning the presentation of elements of theory, general music and literature.
ME 501. TECHNIQUES OF RESEARCH IN MUSIC EDUCATION (3)
Professional bibliography and individual research projects.

ME 503. MUSIC SUPERVISION AND ADMINISTRATION (2)
The music curriculum in relation to the total school program; staff and budgetary needs.

ME 533. CURRENT TRENDS IN SCHOOL INSTRUMENTAL MUSIC (2)
New materials, equipment, techniques of teaching and recent historical trends in instrumental music.

ME 535. CURRENT TRENDS IN SCHOOL VOCAL MUSIC (2)
New materials, equipment, techniques of teaching and recent historical trends in vocal music.

Physical Education for Teachers

Abbreviations: (C) coeducational; (M) men; (W) women.

EP 203. PRINCIPLES OF PHYSICAL EDUCATION (2)
General principles, procedures, historical development and contemporary theories and practices in physical education. (C)

EP 217. FIRST AID (2)
Meets American Red Cross certification requirements in standard and advanced first aid. (C)

EP 301. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION (3)
Policies, standards and procedures pertaining to facility planning, maintenance, purchase of equipment, class organization, evaluation of pupil progress and general supervisory problems. (C)

EP 321. KINESIOLOGY AND ADAPTED PHYSICAL EDUCATION (3)
PR: ZO 271. Mechanical and anatomical principles of human movement for motor learning and analysis. Adapting physical educational activities to meet the needs and interests of students with special problems. (C)

EP 322. ATHLETIC TRAINING (2)
PR: EP 321. Principles and techniques of conditioning athletes for competition; prevention and care of injuries in physical education and athletic activities. (M)

EP 331. COACHING AND OFFICIATING FOOTBALL AND BASKETBALL (3)
Theory and practice of the fundamental techniques, organizational problems and strategy involved in coaching football and basketball. (M)

EP 332. COACHING AND OFFICIATING BASEBALL AND TRACK (3)
Theory and practice of the fundamental techniques, organizational problems and strategy involved in coaching baseball and track. (M)

EP 333. TEACHING AND OFFICIATING TEAM SPORTS (3)
Skills, strategy and application of rules; methods of teaching and officiating soccer, track and field, speed ball and field hockey. (W)
112 EDUCATION

EP 334. TEACHING AND OFFICIATING TEAM SPORTS (3)
Skills, strategy and application of rules; methods of teaching and officiating basketball, volleyball and softball; the application of practices in physical conditioning. (W)

EP 341. DANCE COMPOSITION (1)
PR: PE 120-166 or CI. Workshop in construction of modern dance compositions. Development of experimental movement of studies based upon dynamic, spacial, rhythmic and dramatic aspects of composition. (C)

EP 342. THEORY AND TEACHING OF MODERN DANCE (2)
PR: PE 120-166 or CI. Designed to acquaint students with methods and resources for use in teaching dance. Practical experience in presentation of dance techniques and composition work to classes. (C)

EP 353. TEACHING AND OFFICIATING SWIMMING (2)
PR: PE 132, 134 or 136. Methods of teaching swimming, diving and life saving. (C)

EP 354. TEACHING FOLK, SOCIAL AND SQUARE DANCE (2)
PR: PE 119. Study and analysis of folk, social and square dances with emphasis on teaching. (C)

EP 357. PHYSICAL EDUCATION ACTIVITIES (2)
PR: 170 and 180. Methods of teaching soccer, speedball, gatorball, volleyball, softball, touch football, wrestling, gymnastics, weight training and special conditioning. (M)

EP 359. PHYSICAL EDUCATION ACTIVITIES (2)
PR: PE 170. Methods of teaching tumbling apparatus and special conditioning. (W)

EP 361. COMMUNITY RECREATION (3)
Introduction to recreational outlets in the community and the administrative problems confronting recreational playground leaders and directors of community recreational programs. (C)

EP 430. SCHOOL HEALTH EDUCATION (3)
Healthful school living, health services and health instruction through direct and incidental teaching. Recommended for elementary education majors.

EP 451. TEACHING INDIVIDUAL AND DUAL ACTIVITIES (2)
PR: PE 150, 152, 160 and 168. Methods of teaching tennis, golf, badminton, bowling, handball, archery and recreational activities. (C)

EP 455. TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION (2)
Practical application and study of administrative techniques and data analysis of tests used to evaluate students, activities and programs. (C)

EP 460. HEALTH EDUCATION PROJECT (3)
A practicum in health education through field experiences with official and voluntary health agencies. (C)
Special Education

SE 321. PSYCHOLOGICALLY AND PHYSICALLY EXCEPTIONAL CHILDREN IN THE SCHOOLS (3)
PR: ED 301, PC 101, or CI. Characteristics and educational needs of the exceptional child.

SE 322. INTRODUCTION TO MENTAL RETARDATION (3)
PR: ED 301, PC 101, or CI. Exploration of the classification, diagnosis, characteristics, and treatment of the mentally retarded.

SE 323. EDUCATIONAL PROCEDURES FOR THE EDUCABLE MENTALLY RETARDED (3)
PR: SE 322 or CI. Special class organization, curriculum adjustments, methods and techniques of teaching the educable retarded.

SE 324. EDUCATIONAL PROCEDURES FOR THE TRAINABLE MENTALLY RETARDED (3)
PR: SE 322 or CI. Special class organization, curriculum adjustments, methods and techniques of teaching the trainable retarded.

SE 325. EDUCATION OF GIFTED CHILDREN (3)
Nature and needs of academically talented students with emphasis on curriculum and research findings.

SE 498. FIELD WORK IN SPECIAL EDUCATION (1-9)
PR: CI. Undergraduate students will enroll in SE 498 for 3 credit hours concurrently with ED 499. Participation in case staffings, research projects, secondary work-study programs, and sheltered workshops.

SE 511. PSYCHO-EDUCATIONAL APPRAISAL OF EXCEPTIONAL CHILDREN (3)
PR: ED 483 or 509 or CI. Special diagnostic procedures for exceptional children.

SE 512. SUPERVISION OF SPECIAL EDUCATION PROGRAMS (3)
Principles of supervision and their application to exceptional child education.

SE 513. ADMINISTRATION OF EXCEPTIONAL CHILD PROGRAMS (3)
Examination of administrative procedures which our local and state school systems may use to provide services for exceptional children.

SE 520. BIOLOGICAL AND PSYCHOLOGICAL ASPECTS OF MENTAL RETARDATION (3)
PR: SE 322 and ED 501, or CI. Evaluation of relevant literature.

SE 521. SOCIOLOGICAL AND EDUCATIONAL ASPECTS OF MENTAL RETARDATION (3)
PR: SE 322 and ED 501, or CI. Evaluation of relevant literature.

SE 522. ADVANCED EDUCATIONAL PROCEDURES FOR THE MENTALLY RETARDED (3-6)
PR: SE 323, experience teaching the retarded, identification of a problem prior to registration, or CI. Specific curriculum and methodological problems in teaching the retarded.

SE 531. BEHAVIOR DISORDERS AND THE SCHOOLS (3)
Emotional and social disorders in children and the implications for educational programming.
Characteristics and needs of the culturally disadvantaged and their implications for educational programming.

SE 599. THESIS (3-6)

**Engineering**

Faculty: Cowell, Donaldson, Griffith, Kopp, Scott, Twigg, Wimmert.

The following course listing will permit a student to progress through his junior year during 1965-66.

**EG 141. ENGINEERING GRAPHICS (4)**
Theory of orthographic projection, auxiliary views, isometric and oblique projections, fasteners, dimensions and applicatory problems in descriptive geometry. lec-lab.

**EG 143. ENGINEERING MEASUREMENTS (3)**
An introduction to the concepts of the systems approach and various techniques of measurement in engineering systems, both of discrete and continuous variables. lec-lab.

**EG 201. DIGITAL COMPUTERS (1)**

**EG 202. SOLID MECHANICS I (3)**
CR: PH 221. Principles of statics, resultants and equilibrium of force systems, introduction to structural mechanics, frictional forces, centroids and moments of inertia.

**EG 203. SOLID MECHANICS II (3)**
PR: EG 202, MA 204. CR: MA 205. Dynamics of bodies for rectilinear and curvilinear translation, plane motion and rotational motion, mass moments of inertia, impulse and momentum, work and energy.

**EG 204. MATERIALS OF ENGINEERING I (3)**

**EG 205. MATERIALS OF ENGINEERING LABORATORY I (1)**
CR: EG 204. Experimental determination of physical properties of solids: stiffness, hardness, thermal conductivity, electrical resistivity, matrix and laminated composite materials.

**EG 206. ELECTRIC CIRCUITS I (3)**
CR: MA 301 or EG 304, PH 222. The study of R, R-C, R-L, and R-L-C electric circuits. Transient and steady state analysis of lumped resistive capacitive and inductive circuits.

**EG 207. ENGINEERING ELECTRONICS I (3)**
EG 301. THERMODYNAMICS I (3)
PR: MA 205, PH 222. Development of laws and general equations of thermodynamics; concepts of force, displacement, work and energy as applied to thermal systems.

EG 302. FLUID MECHANICS I (3)

EG 303. FLUID MECHANICS LABORATORY I (1)

EG 304. DYNAMIC RESPONSE TO ENGINEERING SYSTEMS (3)
PR: MA 203, EG 202. Linear dynamic analysis of electrical, mechanical, pneumatic, hydraulic and thermal systems. Transient and frequency response. Block design representations, modes of control and factors affecting selection of measurement transducers. Introduction to analog computers. lec-lab.

EG 305. ENGINEERING ECONOMICS AND DECISION THEORY (3)
PR: 12 hours of engineering course work. A study in analyzing and evaluating the economic limitation imposed on engineering activities.

EG 311. ENGINEERING ELECTRONICS II (3)
PR: EG 207. A continuation of EG 207. Includes a study of oscillators, modulation and detection, transistors, and transistor circuits.

EG 314. ELECTRICAL CIRCUITS II (3)
PR: EG 206, MA 301. A continuation of EG 206. Provides further study of the transient and steady state responses of RLC networks to various forcing functions, from both the time and frequency domain points of view. Includes the analysis of three-phase, resonant and coupled circuits, the introduction of Laplace transform and Fourier integrals.

EG 315. LABORATORY FOR EG 314 (1)
CR: EG 314.

EG 316. FIELDS AND WAVES I (3)
CR: MA 301, PH 222-224, EG 314 and 315. A basic introduction to electromagnetic field theory. Includes static and changing electromagnetic fields.

EG 331. MACHINE DESIGN I (4)

EG 343. HEAT TRANSFER I (3)
PR: EG 301. Conduction in one, two and three dimensions. Free and forced convection; radiation; combined effects of conduction, convection and radiation.
ENGLISH

EG 347. ENERGY CONVERSION LAB I (1)
CR: EG 343. Analysis of solid, liquid and gaseous fuels; tests of lubricants; analysis of combustion products; energy balances of thermal systems; heat transfer measurements.

EG 348. ENERGY CONVERSION LAB II (1)
PR: EG 347. Experimental evaluations and performance testing of energy conversion devices; heat balance of a boiler; A.S.M.E. test codes for fans; internal combustion engine and refrigeration system testing.

EG 351. STRUCTURAL MECHANICS I (3)
PR: EG 202. Elastic analysis of beams and columns; determination of stress and displacement fields in trusses and frames; concepts of variational energy principles including virtual work, minimum potential energy and complementary energy.

EG 371. MANUFACTURING PROCESSES (3)
PR: EG 305. Fundamentals of important manufacturing processes, engineering materials and equipment necessary for processing materials.

EG 377. HUMAN FACTORS (3)
PR: EG 385. Analysis of the role of the human in industrial and engineering systems; evaluating performances; design of man-machine systems.

EG 385. ENGINEERING STATISTICS (3)
PR: MA 205. Theory of statistical models; probability, distribution functions, tests of hypotheses.

EG 386. STATISTICAL ANALYSIS OF ENGINEERING PROBLEMS I (3)
PR: EG 385. Basic concepts and engineering applications of statistical models. Sample statistics, confidence intervals, tests of hypotheses, regression, correlation and analysis of variance.

EG 387. STATISTICAL ANALYSIS OF ENGINEERING PROBLEMS II (3)
PR: EG 386. Continuation of EG 386.

English


EN 131. READING ACCELERATION (3)
Designed to change the reading habits and patterns of students from left-to-right progression to down-the-page progression. (Also see Developmental Reading.)

EN 201. MAJOR BRITISH WRITERS TO 1750 (3)
Selections from Beowulf, The Canterbury Tales, the Faerie Queene, the plays of Elizabethean and Jacobson dramatists in the context of social, religious, economic, political and artistic impulses of the time.

EN 203. MAJOR BRITISH WRITERS FROM 1750 TO 1912 (3)
Intellectual and aesthetic trends of the period and their influence on such figures as Wordsworth, Coleridge, Byron, Keats, Tennyson, Browning, Hardy, and others.
EN 205. MAJOR AMERICAN WRITERS TO 1865 (3)
A study of the major writers of the colonial, Federal, and romantic periods. These include, among others, Edwards, Taylor, Franklin, Hawthorne, Poe, Melville, Emerson, Thoreau, and Whitman.

EN 206. MAJOR AMERICAN WRITERS 1865-1912 (3)
A study of the major realists and early naturalists. These include, among others, Twain, James, Crane, Dreiser, Norris, London, Wharton, Dickinson, and Robinson.

EN 207. TWENTIETH CENTURY LITERATURE:
1912 TO THE PRESENT (3)
The impact of modern intellectual currents on such American and British writers as Eliot, Pound, Yeats, Thomas, Shaw, O'Neill, Hemingway, Faulkner, Huxley, Woolf, Joyce, Lawrence, and others.

EN 221. ADVANCED WRITING (3)
PR: CB 101-2. Emphasis upon excellence in the techniques of description and narration. Practice in the personal essay, critical review and narrative sketch. At least one paper of article length is required.

EN 315. THE BRITISH NOVEL OF THE EIGHTEENTH CENTURY (3)
The historical development of the British novel; precursors of the novel; critical studies of representative works of such British novelists as Richardson, Fielding, Smollett, Sterne, and the Gothic novelists.

EN 317. THE BRITISH NOVEL OF THE NINETEENTH CENTURY (3)
A continuation of the development of the British novel; detailed examination of major works of such British novelists as Austen, Scott, Thackeray, Dickens, Trollope, the Brontes, Eliot, Meredith, Hardy, and Butler.

EN 319. THE BIBLE AS LITERATURE (3)
Major emphasis on literary types; literary personalities of the Old and New Testaments; and Biblical archetypes of British and American literary classics.

EN 321. IMAGINATIVE WRITING — POETRY (3)
Studies and exercises in prosody and imagery; written assignments in traditional and contemporary forms; evaluation of student work in individual conferences; selected reading. May be taken twice for credit.

EN 323. IMAGINATIVE WRITING — PROSE (3)
PR: EN 221 or CI. Study and writing of the short story, essays, and sections of novel. Evaluation of student work in conferences, selected readings. May be taken twice for credit.

EN 325. ADVANCED EXPOSITORY WRITING (3)
Composition techniques in exposition, methods and styles of writing the article and the report.

EN 331. LITERARY FORMS (3)
Serves as an introduction to the disciplines of literary study. To attain competence in the field of English studies, students must master the fundamentals of interpretation, analysis, and historical documentation.

EN 335-336. WORLD LITERATURE (3,3)
Classic literature of Eastern and Western cultures, exclusive of English works, and modern masterpieces of French, German, and Scandinavian writers.
EN 337. CONTINENTAL NOVEL IN TRANSLATION (3)
Critical reading, in English translation, of major European novels from the 18th century to the present. Emphasis upon French and Russian novels of the 19th century. Relationships between these novels and English literature.

EN 341. BASIC JOURNALISTIC WRITING (3)
PR: CI. Introduction to basic journalistic practice, including evaluation of news organization of stories for mass media, writing styles, and readability formulas.

EN 343. WRITING FOR MASS COMMUNICATIONS (3)
PR for Speech majors: SH 241. A preprofessional course in writing for newspapers, magazines, radio, and television. Laboratory experience on campus publications.

EN 347. NEWSWRITING AND NEWS EDITING (3)
Study and practice in gathering, writing, and displaying news for the mass media. Includes layout, make-up, editing techniques, ethical problems, and communication law. Laboratory experience.

EN 349. MAGAZINE AND FEATURE WRITING (3)
Upper level course in preparation of articles for newspapers and magazines and a study of magazine editing techniques. Laboratory experience on campus publications:

EN 401. CHAUCER AND HIS CONTEMPORARIES (3)
PR: EN 201 or CI. An introduction to the language through the "Prologue" to The Canterbury Tales. Study of the Book of the Duchess, a selected number of Tales, the House of Fame, and Troilus and Criseyde.

EN 403. ENGLISH DRAMATIC LITERATURE TO 1642 (3)
(exclusive of Shakespeare)
PR: EN 201 or CI. A study of English drama from the liturgical plays to the closing of the theatres in 1642. Representative plays of Lyly, Kyd, Dekker, Beaumont and Fletcher, Ford, Marlowe, and Jonson.

EN 405. THE PROSE AND POETRY OF THE ENGLISH RENAISSANCE (3)
PR: EN 201 or CI. Emphasis upon leading metaphysical and Cavalier poets and upon prose writers from 1588-1660, with a brief study of major influences and figures from 1500-1588.

EN 407. MILTON: PROSE AND POETRY (3)
PR: EN 201 or CI. A thorough examination of Paradise Lost, Paradise Regained, Comus, and the shorter poems. Milton's prose works will also be read.

EN 411. PLAYS OF SHAKESPEARE (3)
PR: EN 201 or CI. Twelve comedies, chronic plays, and tragedies, with attention to the influences of Shakespeare on classical drama, Renaissance ideas, and other Elizabethan playwrights.

EN 412. PLAYS OF SHAKESPEARE (3)
PR: EN 201 or CI. Close reading of plays, with detailed consideration of Shakespeare's language, his dramaturgical development, textual and editorial problems, and secondary criticism.

EN 413. THE ROMANTIC WRITERS (3)
EN 415. HISTORY OF THE ENGLISH LANGUAGE (3)
The evolution of the language from Anglo-Saxon through Middle English to Modern English. Changes in pronunciation and syntax, discussion of the forces which influenced them.

EN 417. STRUCTURE OF AMERICAN ENGLISH (3)
PR for Speech majors: SH 203. The phonetics, phonology and morphology of American English. Structural grammar; the application of linguistics to the teaching of English.

EN 421. BRITISH LITERATURE OF THE AUGUSTAN AGE (3)
PR: EN 201 or CI. This course covers primarily works of Dryden, Pope, Swift, Hume, Gray, Walpole, Johnson, Boswell, and Gibbon, excluding the novel.

EN 423. BRITISH VICTORIAN LITERATURE (3)
PR: EN 203 or CI. The literary renaissance in the Victorian Age, 1837-1901, of the comic spirit, the critical essay, personal history, scientific discovery, aesthetics, work of Pre-Raphaelite Brotherhood, and the decadents.

EN 425. THE AMERICAN NOVEL (3)
A study of representative novels, selected from the works of such writers as Charles Brockden, Brown, Cooper, Hawthorne, Melville, Twain, Stephen Crane, Frank Norris, Edith Wharton, Henry James, and Theodore Dreiser.

EN 427. MODERN BRITISH AND AMERICAN POETRY (3)
PR: EN 207 or CI. An intensive study of selected modern poets, from Hopkins to the present. Considerable individual research and analysis will be required of the student.

EN 428. MODERN BRITISH AND AMERICAN FICTION (3)
PR: EN 207 or CI. A critical study of British and American fiction from naturalism to surrealism. The relationship of the novel to thought and culture of the time. Works by Conrad, Lawrence, Joyce, Hemingway, Faulkner, and others.

EN 431. LITERARY CRITICISM (3)
PR: EN 331 and 9 hours of other courses in literature, or CI. Survey of the principles of literary criticism, with intensive practice in applied criticism. Explication and evaluation of fiction, drama, and poetry.

EN 481. INDIVIDUAL RESEARCH (credits vary)
PR: CI. Directed study in special projects. Recommended only when material cannot be studied in scheduled courses.

EN 483. SELECTED TOPICS IN ENGLISH STUDIES (3)
PR: CI. The content of the occasional course to be offered under this number will be governed by student demand and instructor interest. It will examine in depth a recurring literary theme or the work of a small group of writers.

EN 501. THE NATURE OF TRAGEDY (3)
The Greek, Renaissance and Modern idea of tragedy; representative plays and fiction; the outstanding theorists.

EN 503. THE NATURE OF COMEDY AND SATIRE (3)
Research into the history and theory of the related literary modes of comedy and satire; studies of typical works as well as studies of the psychological, anthropological, and rhetorical backgrounds of these genres.
EN 505. THE NATURE OF ROMANTICISM, CLASSICISM, AND NATURALISM (3)
Three important ways of looking at man, as expressed in representative works of literature and in theory.

EN 507. THE NATURE OF MYTH, ALLEGORY, AND SYMBOLISM (3)
Research into the theory of literary symbolism and its relationship to myth and ritual, applications of theory to specific works from different periods and cultures.

EN 511. EXISTENTIAL AND RELIGIOUS THEMES IN MODERN LITERATURE (3)
An examination of philosophic and theological idea, imagery, allusion, symbol, question, and conviction in representative works of such modern writers as: Dostoevskii, Freud, Jung, Mann, Joyce, Eliot, Camus, Sartre, Faulkner, Styron, Pasternak.

EN 515. MAJOR TRENDS IN AMERICAN LITERATURE (3)
An intensive study of selected ideas and movements affecting American letters; for example, Puritanism, Transcendentalism, Regionalism, Pragmatism, Imagism.

EN 523. LITERARY SCHOLARSHIP AND METHODS OF RESEARCH (3)
Introduction to aims and methods of literary scholarship through study of books and articles showing various critical approaches. Detailed studies of bibliographies of cultural milieus, genres, periods, and authors. Brief attention to thesis style and form.

EN 559. STUDIES IN RESTORATION AND EIGHTEENTH CENTURY DRAMA (3)
Congreve, Wycherley, Sheridan, and others.

EN 567. STUDIES IN THE LATER ENGLISH NOVEL (3)
Dickens, Thackeray, Eliot, and others.

EN 595. STUDIES IN MODERN DRAMA (3)
Ibsen, Shaw, Chekhov, Strindberg, and others.

Finance

Faculty: R. Neel, chairman; Modrow, Monath, Power.

FI 201. PERSONAL FINANCE (3)
Closed to upper-level students in the College of Business Administration. Personal finance with special emphasis on budgeting, borrowing, insurance, investments, taxes, home ownership, and family financial planning.

FI 301. PRINCIPLES OF FINANCE (3)

FI 303. PRINCIPLES OF INSURANCE (3)
Principles of risk insurance and applications to business management and personal affairs, concepts and methods of handling risks, insurance carriers, contracts and underwriting, loss prevention and settlement, government insurance programs.
FI 305. PRINCIPLES OF REAL ESTATE (3)
The nature of real property, principles of urban land utilization, classification of property rights, urban development, real property valuation, the real estate market and its functions, and government regulation of real estate practices.

FI 321. MONEY AND BANKING (3)
PR: EC 201-202. A theoretical, institutional, and historical discussion of the functioning of the monetary system and its interrelationship to the economy as a whole. Commercial banks are given special and integrated attention because of their money creating role.

FI 351. INTERNATIONAL FINANCE AND MARKETING (3)
PR: EC 351 and FI 301. Principles of foreign exchange and the methods of developing and financing trade in foreign markets.

FI 411. ADVANCED CORPORATION FINANCE (3)
PR: FI 301. The problems in financing business enterprise from the viewpoint of business management and the economic system.

FI 421. PRINCIPLES OF INVESTMENT (3)
PR: FI 301. Characteristics of government and corporate securities, operations of investment companies and investing institutions, relation of investment policy to money markets and business fluctuations, security, price-making forces, preparation of personal investment programs.

FI 431. FINANCIAL INSTITUTIONS (3)
PR: FI 301. Private and governmental financial units, their place in the national economy, relationships to other business and financial institutions and influence upon the supply of and demand for funds.

FI 489. SPECIAL STUDIES IN FINANCE (3)
PR: CI. Additional study of a specialized or non-specialized nature for majors. Materials for the course selected and studied in conjunction with the major professor.

FI 501. FINANCIAL MANAGEMENT (3)
The formulation of corporate financial policies and an analysis of the means of achieving these policy objectives under conditions of changing corporate circumstances.

Intradivisonal Fine Arts

Faculty: Beecher, Clay, Hoffman, Houk.

FA 301. HISTORY OF FINE ARTS (3)
PR: Two courses in art history, theatre arts history, or music history, or CI. An integrated study of cultural periods reflected in works influenced by social, political, economic and philosophic conditions.

FA 302. HISTORY OF FINE ARTS (3)
PR: FA 301 or CI. Continuation of FA 301.

FA 491. SENIOR SEMINAR (3)
PR: FA 301-302. To aid majors to understand, appraise and perfect their own art and technique through critical and aesthetic judgements of colleagues in other arts. Discussion and critical evaluation.
French

Faculty: Artzybushev, Cherry, Corriere, Crant, de la Menardiere.

Basic courses listed under Basic Studies.
Also see Romance Languages (RL).

FR 221. TECHNICAL FRENCH (3)
Primarily for students majoring in science or those desiring help in learning to read texts and research material in a specialized field.

FR 301. ADVANCED COMPOSITION (3)
To develop the student's ease in and command of written French and to increase his vocabulary and familiarity with the idiom in free and fixed composition.

FR 303. ADVANCED CONVERSATION AND PRONUNCIATION (3)
Designed to develop ease in speaking correct French with attention given to aural comprehension, pronunciation and intonation.

FR 305. SURVEY OF FRENCH LITERATURE (3)
Middle Ages, Renaissance and Seventeenth Century.

FR 306. SURVEY OF FRENCH LITERATURE (3)
Eighteenth, Nineteenth and Twentieth Centuries.

FR 401. RENAISSANCE (3)
A study of French literature during the Renaissance with emphasis on Rabelais, Montaigne and the Pleiad.

FR 421-422. LITERATURE OF THE SEVENTEENTH CENTURY (3,3)
Literary trends in French classicism. Descartes, Pascal, Corneille, Racine, Moliere, La Fontaine.

FR 431-432. LITERATURE OF THE EIGHTEENTH CENTURY (3,3)
The Age of Enlightenment. The growth of modern thought and criticism. Montesquieu, Diderot, Voltaire, Rousseau, the novel and the theatre.

FR 441-442. LITERATURE OF THE NINETEENTH CENTURY (3,3)
Romanticism, Realism, Naturalism, the Parnassian and Symbolist schools. Poetry, drama and the novel.

FR 451-452. LITERATURE OF THE TWENTIETH CENTURY (3,3)
Proust, Gide, Claudel, Valery, Giraudoux, Sartre, Camus, and others. Poetry, drama and the novel.

FR 481. DIRECTED STUDY (3)
Specialized individual work in an area not covered by a regular course.

FR 491. SENIOR SEMINAR (3)
Study in depth of a specific writer or literary movement as chosen by the instructor. Individual research required of students.

General Administration

Faculty: Boggs, Hodges, Lusk. W. Shannon, Wharton.

GA 351. AUTOMATIC DATA PROCESSING (3)
PR: AC 201 or CI. Automatic data processing machines; theory of wiring and use in business; types of business applications and case problems; basic computer concepts.
GA 361. BUSINESS LAW I (3)
The nature of legal institutions, essentials of a binding contract, remedies granted in event of breach of contract and rights acquired by assignment of contracts.

GA 362. BUSINESS LAW II (3)
PR: GA 361. Legal problems in marketing of goods, nature of property, sales of personal property, securing of credit granted, nature and use of negotiable instruments.

GA 371. BUSINESS COMMUNICATIONS (3)
Analysis and application of the principles of persuasion in business communication; composition and evaluation of functional business letters; examination of effective text, tabular and graphic presentation in formal business reports.

GA 451. ELECTRONIC DATA PROCESSING (3)
PR: GA 351. Systems, procedures, and analysis; computer problem solving, utilizing a business programming language as a management tool in business.

GA 499. SENIOR SEMINAR IN BUSINESS ADMINISTRATION (3)
PR: Senior standing. Students draw upon materials from their complete college program and apply them to case studies, research projects and class discussion. Topics include business policy, operations, and the environment of business.

Geography
Faculty: Gonzalez, chairman; Fuson.

GE 103. INTRODUCTION TO GEOGRAPHY (5)
The principles of geography; form and representation of the earth, climate, landforms, water bodies, biotic regions.

GE 251. WORLD CULTURAL GEOGRAPHY (5)
The human geography of the earth's primary cultural regions.

GE 301. CONSERVATION OF RESOURCES (3)
The distribution, exploitation and conservation of physical and human resources.

GE 311. POLITICAL GEOGRAPHY (3)
Geographical foundations of national power; the state viewed from the standpoint of space; the relationship of geographical factors to political development.

GE 315. ECONOMIC GEOGRAPHY (5)
The geography of production and distribution; geographical factors underlying the diverse economic activities of man.

GE 325. GEOGRAPHY OF FLORIDA AND THE CARIBBEAN (2)
Natural and cultural landscapes of Florida, the Antilles, and the circum-Caribbean region.

GE 327. GEOGRAPHY OF THE UNITED STATES (3)
Natural and cultural landscapes and regions of the United States: geographical bases underlying the United States as a world power.

GE 329. GEOGRAPHY OF EUROPE (3)
Natural and cultural landscapes of Europe (excluding the USSR); special attention given to the geographical bases of regional groupings (Common Market, NATO, COMECON, and similar structures).
GE 331. GEOGRAPHY OF THE USSR (3)
Natural and cultural landscapes and regions of the Soviet Union; geographical bases underlying the USSR as a world power.

GE 333. GEOGRAPHY OF THE HUMID TROPICS (3)
Natural and cultural landscapes in the rainforests, monsoon forests, and savannas of the world; human ecology and human occupancy in these areas are emphasized.

GE 351. WEATHER AND CLIMATE (3)
PR: GE 103. The principles of meteorology and climatology.

GE 421. GEOGRAPHY OF POPULATION AND SETTLEMENT (3)
Demography and settlement types; interrelationships of human settlements and natural habitats.

GE 431. URBAN GEOGRAPHY (3)
Geographic principles of the growth, development and problems of modern cities; field reconnaissance in local urban areas.

GE 461. CARTOGRAPHY AND GRAPHICS (3)
PR: GE 103 and 251. Theoretical and applied cartography; other techniques for portraying geographic information.

GE 481. INDIVIDUAL RESEARCH (1-3)
PR: GE 103, 251, and arrangement with instructor prior to registration. Topics vary; may be repeated once for credit.

GE 485. DIRECTED READING (1-3)
PR: GE 103, 251, and arrangement with instructor prior to registration. Topics vary; may be repeated once for credit.

GE 491. SENIOR SEMINAR (3)
PR: CI. The history, philosophy, literature and methodology of geography.

GE 501. GEOGRAPHY IN WORLD SOCIETY (3)
A conceptual approach that examines the geographic framework in which our social, economic, and political systems have evolved; an areal interpretation and evaluation of earth realities.

Geology
Faculty: Ragan, chairman; Boulware, Taft.

GY 201. INTRODUCTION TO GEOLOGY (4)
Study of earth materials and the processes responsible for changing the face of the earth. Examination of minerals and rock specimens, topographic and geologic maps and aerial photographs. Historical geology continues the study. Occasional field trip studies. lec-lab.

GY 202. INTRODUCTION TO HISTORICAL GEOLOGY (4)
Study of the record of past life and interpretation of the major physical events in the history of the earth. Occasional field trip studies. lec-lab.

GY 301. INTRODUCTION TO PALEONTOLOGY (4)
Paleontology and stratigraphic occurrence of most important invertebrate fossils of the geologic record. lec-lab.
GY 311. MINERALOGY (3)
PR: GY 201 and CH 211-212 or equivalent. Introduction to Crystallography. Systematic study of mineral groups and their identification by chemical, physical, and microscope methods. lec-lab.

GY 312. PETROLOGY (3)
Systematic study of rock groups, including composition, structure and classification using hand lens method of rock identification. lec-lab.

GY 331. PRINCIPLES OF STRATIGRAPHY (3)

GY 333. GEOMORPHOLOGY (3)
PR: CI. Origin, evolution and distribution of land forms.

GY 341. ECONOMIC MINERAL DEPOSITS (3)
PR or CR: GY 311. Principles involved in the origin, occurrence, recovery and use of mineral resources with emphasis on factors related to Florida deposits. lec-lab.

GY 351. GROUND WATER GEOLOGY (3)
PR or CR: GY 201. Geologic factors involved in the occurrence, chemical composition, distribution, recovery and use of surface and subsurface water. Study of Florida factors.

GY 361 STRUCTURAL GEOLOGY (3)
PR: GY 201 or equivalent. Application of basic principles of geology, mathematics and physics in solving relationships of strata and interpreting structural features in the earth's crust.

GY 371. INTRODUCTION TO SOILS (4)
PR: General Chemistry or equivalent. The origin, geologic development, formation, and nature of soils. Fundamentals of soil science including the physical, chemical and biological factors affecting soil fertility with special application to the soils and ecology of Florida. lec-lab.

GY 381. EARTH SCIENCE (4)
A selected study of the earth's composition, geologic processes, and earth history, stressing the influence of the geology of Florida upon its economic and cultural resources. lec-lab.

GY 401. FIELD METHODS (3)
PR: 10 hours of geology courses. Fundamentals of geology in the field laboratory; compass and plane table mapping, mapping of aerial photos, reconnaissance surveys, interpretation of geologic structures. lec-lab.

GY 403. SEDIMENTATION (4)
PR: GY 311 and 331. Geologic factors governing chemical, physical and biological interactions and deposition of marine sediments. Experimental carbonate sedimentation and diagenesis, X-ray identification of minerals. lec-lab. (formerly GY 402)

GY 411. MARINE GEOLOGY I (4)
PR: GY 301 and 403, CH 211 and 212, and CI. Fundamentals of marine geology involving the collection, analysis and geologic interpretation of marine waters and sediments. Occasional marine trips required. lec-lab.
GY 412. MARINE GEOLOGY II (4)
Continuation of GY 411, but requires written investigative reports and submarine mapping. Occasional marine trips required. lec-lab.

GY 481. UNDERGRADUATE RESEARCH (1-3)
PR: Senior or advanced junior standing and CI. Individual experimental investigations with faculty supervision. Limit of 3 credits.

GY 483. SELECTED TOPICS IN GEOLOGY (1-3)
PR: Senior or advanced junior standing and CI. Each topic is a course in directed study under supervision of a faculty member. Courses: Introductory Geological Oceanography, Marine Carbonates, Micropalenontology, Advanced Stratigraphic Paleontology, and Sedimentary Petrology.

GY 491. GEOLOGY SEMINAR (1)
PR: Senior or advanced junior standing and CI. Every student majoring in geology is expected to attend these seminars. May be repeated once.

German

Faculty: Karklins, Price, Stelzmann.

Basic courses listed under Basic Studies.

GN 221. TECHNICAL GERMAN (3)
Primarily for students majoring in science or those desiring help in learning to read texts and research material in a specialized field.

GN 301-303. ADVANCED COMPOSITION AND CONVERSATION (3,3)
Intensive study of writing and conversation skills based on readings in German cultural history and drama. Descriptive grammar and syntax.

GN 305. SURVEY OF GERMAN LITERATURE (3)
Old High German and Middle High German literature in modern German translation; the literature of Humanism and Barock; the Classical Period.

GN 306. SURVEY OF GERMAN LITERATURE (3)
The Romantic Period, Nineteenth and Twentieth centuries.

GN 413. HISTORY OF GERMAN LANGUAGE (3)
Development of the language from the Indo-European family: Gothic, Old High German to Middle High German, and East-Middle German.

GN 421. GOETHE'S FAUST (3)
Sources, form, content, and literary significance of Urfaust, Faust I and II.

GN 431. CLASSICAL PERIOD (3)
Lessing: drama and aesthetic writings. Goethe: novels, novelle, and autobiographical writings; lyrical poems and epics; dramas (except Faust). Schiller: philosophical writings, drama and poetry.

GN 432. ROMANTIC PERIOD (3)
Jenaer circle and the Heidelberger circle, the late Romantic Period, the writers between Classicism and Romanticism.
GN 441. LITERATURE OF THE 19TH CENTURY (3)

GN 451. LITERATURE OF THE 20TH CENTURY (3)

GN 481. DIRECTED STUDY (3)
Specialized individual work in an area not covered by a regular course.

History
Faculty: Goldstein, chairman; Arnade, DiBacco, Futch, George, Gessman, Heywood, Swanson, Waite.

PART I

HI 111-112. AMERICAN HISTORY (3,3)
A history of the United States with attention given to relevant developments in the Western Hemisphere. 111: European origins to 1865; 112: 1865 to present.

HI 121-122. HISTORY OF CIVILIZATION (4,4)
Chief political, social, economic and cultural developments that have shaped civilization; interrelationships with the non-Western world. 121: prehistory to 1713; 122: 1713 to present.

HI 231 232. MODERN EUROPEAN HISTORY(3,3)
Basic patterns of modern European history; the rise of the nation-state; economic, social and intellectual developments; traditions and patterns that have shaped European institutions and cultural development. 231: Renaissance to 1815; 232: 1815 to present.

PART II

HI 311. AMERICAN FOREIGN RELATIONS (3)
The development of principles and problems of American foreign policy, especially in the 20th century.

HI 315. THE CIVIL WAR AND ITS AFTERMATH (3)
The causes of the Civil War and the factors, forces and atmosphere which produced the reconstruction policy following the war, with continued emphasis on the Negro down to the present.

HI 317. HISTORY OF FLORIDA (3)
A history of Florida and the Caribbean. Florida as an area of discovery, colonization and imperial conflict; the emergence of Florida within its regional setting.

HI 321. ANCIENT CIVILIZATIONS(3)
A history of the nations and empires of the ancient Mediterranean and Near East, emphasizing their political, economic and religious institutions and their achievements in philosophy and science.

HI 323. MEDIEVAL CIVILIZATION (3)
The development of European ideas and institutions during the Middle Ages.
HI 325. THE RENAISSANCE REFORMATION 1337-1560 (4)
Renaissance Italy, early capitalism, economic expansion and overseas discovery, new monarchies, the Italian wars, the Empire of Charles V, the Protestant and Catholic Reformations.

HI 331. EUROPE IN THE TWENTIETH CENTURY (3)
The development of European international relations from the post-World War I period to the present, with concentration on the more recent period.

HI 337-338. A HISTORY OF RUSSIA (3,3)
An introductory survey of the primary political, social economic, and cultural institutions of Russia from its pre-history to the present. 337: pre-history to 1917; 338: 1917 to present.

HI 341-342. BRITISH HISTORY (3,3)
British history and the Empire from the Roman conquest to modern times. 341: will include the period to 1688; 342: 1688 to present. (formerly HI 241)

HI 351-352. LATIN AMERICAN HISTORY (3,3)
Examines the Iberian-Indian Civilization in the New World from the 15th through the 20th centuries. 351: conquests and colonization to the Independence Movements of the 19th century; 352: the Ibero-American states from the Wars of Independence to the present.

HI 361. REVOLUTION IN THE MODERN WORLD (3)
The nature of revolution in modern history, especially the American, French, Russian and more recent revolutions.

HI 371. FAR EAST (3)
A history of the Far East including China, Korea and Japan, from early to modern times.

PART III

HI 411. AMERICAN SOCIAL AND INTELLECTUAL HISTORY (3)
Major religious, scientific, political, economic and philosophical ideas of the American people and their leaders in relation to the nation's social environment.

HI 433. EUROPEAN SOCIAL AND INTELLECTUAL HISTORY (3)
The rise of modern science, the Age of the Enlightenment, and Romanticism in modern European history.

HI 465. SCIENCE AND CIVILIZATION (3)
A survey of the impact of science on western civilization from the ancient Egyptians to the present, emphasizing the relationship of science to socio-economic, political and intellectual development.

HI 485. DIRECTED READING (1-3)
PR: Arrangement with instructor prior to registration. Readings in special topics.

HI 487. HISTORIOGRAPHY (3)
PR: To be taken during senior year. The various schools of historical thought, representative historians, bibliography and an introduction to the problems of philosophy of history.

HI 491. SENIOR SEMINAR IN HISTORY (3)
Introduction to the methods of historical research and writing, bibliography, and directed research in special topics designed to meet the particular needs and interests of the individual student.
Humanities


HU 307-308. HUMANITIES AND HUMANE VALUES (3,3)
PR: CB 203-204 or Cl. Masterpieces of music, visual arts, literatures and philosophy in varying cultural and historical situations.

HU 311-312. TWENTIETH CENTURY ARTS AND LETTERS (3,3)
PR: CB 203-204 or Cl. Developments internationally in the arts, literature and philosophy since 1900. Concentration on two major creative workers in each major art form.

HU 313-314. ROMANTIC ARTS AND LETTERS (3,3)
PR: CB 203-204 or Cl. Origins of Romanticism before 1800; growth through 19th century, European and American; reactions against Romanticism.

HU 315-316. THE ENLIGHTENMENT (3,3)
PR: CB 203-204 or Cl. Analysis of chief arts, literatures and philosophies in the period from 1650 to the end of the 18th century; Rationalism, neo-Classicism and the Baroque.

HU 317-318. RENAISSANCE ARTS AND LETTERS (3,3)
PR: CB 203-204 or Cl. A careful examination, in intellectual and social context, of masterpieces and major artists of the Renaissance (about 1350 to 1650) in Europe and England.

HU 321-322. MEDIEVAL ARTS AND LETTERS (3,3)
PR: CB 203-204 or Cl. The humanities and cultural activities from the 11th to the 14th centuries. Influences from Byzantine, Arabian and early Christian sources.

HU 323-324. CLASSICAL ARTS AND LETTERS (3,3)
PR: CB 203-204 or Cl. A careful analysis, in historical context, of masterpieces selected from the arts and letters of ancient Greece and Rome.

HU 411. SELECTED NON-WESTERN HUMANITIES (3)
PR: CB 203-204 or Cl. Materials chosen from arts and literatures of Asia and Africa; varied to serve needs of Area Studies programs in Social Science.

HU 415. LATIN AMERICAN ARTS AND LETTERS (3)
PR: CB 203-204 or Cl. Analysis of selected Latin American works of art in their cultural context.

HU 431. HUMANITIES IN THE ORIENT: INDIA (3)
PR: CB 203-204 or Cl. Examples from arts and literatures of India and the relationship of these arts to the Hindu and Buddhist philosophy-religions.

HU 432. HUMANITIES IN THE ORIENT: CHINA (3)
PR: CB 203-204 or Cl. Examples from arts and literatures of China, and the relationship to Taoism, Confucianism and other Chinese philosophies; western influences in 20th century Chinese thought.

HU 433. HUMANITIES IN THE ORIENT: JAPAN (3)
PR: CB 203-204 or Cl. Examples from arts and literatures of Japan; relationship to Zen Buddhism and other Japanese philosophy-religions; western influences in 20th century Japanese society.
HU 435-436. HUMANITIES IN AMERICA (3,3)
PR: CB 203-204 or CI. Development of humane arts and values in the Americas, especially the United States; influences from Europe; stress on important individual artists and thinkers.

HU 471. PHILOSOPHY OF THE ARTS (3)
PR: Senior classification, 6 credits in 300-level HU courses, and CI. Readings in philosophical approaches to the various arts.

HU 491. SELECTED PROBLEMS IN HUMANITIES (3)
PR: Senior classification, 6 credits in 300-level HU courses, and CI. Problems in the interrelationships among the fine arts and the natural, social and behavioral sciences.

Italian

Faculty: Artzybushev, Micarelli, Milani.
Basic courses listed under Basic Studies.
History of Romance Languages listed under Romance Languages.

IT 301. ADVANCED ITALIAN COMPOSITION (3)
To improve the student's ability in writing Italian, to increase his ability in comprehension and use of the grammatical elements. Practice in both free and fixed composition.

IT 303. ADVANCED ITALIAN CONVERSATION (3)
To develop fluency and correctness in spoken Italian.

IT 305. SURVEY OF ITALIAN LITERATURE (3)
From the origins through the 18th century.

IT 306. SURVEY OF ITALIAN LITERATURE (3)
Italian literature of the 19th and 20th centuries.

IT 411-412. LIFE AND WORKS OF DANTE (3,3)
The works of Dante with special emphasis on the Divine Comedy. Special attention to the author's life and times as reflected in his works.

IT 441. NINETEENTH CENTURY ITALIAN LITERATURE (3)
Romanticism, Realism and Naturalism in Italy.

IT 443. TWENTIETH CENTURY ITALIAN LITERATURE (3)
A comprehensive study of the major writers of the century, with special emphasis on D'Annunzio and Pirandello.

IT 481. DIRECTED STUDY (3)
Specialized individual work in an area not covered by a regular course.

IT 491. SENIOR SEMINAR (3)
Study in depth of a specific writer or literary movement, as chosen by the instructor. Individual research required of students.
Latin

Faculty: Gessman, chairman.

**LA 111-112. ELEMENTARY LATIN (3,3)**
Elements of grammar, practice in translation from and into Latin, readings of selections from simple Latin texts.

**LA 221. INTERMEDIATE LATIN (3)**
Prose: selections from Cicero's speeches and from the letters of Pliny the Younger. Study of more difficult portions of Latin grammar.

**LA 222. INTERMEDIATE LATIN (3)**
Poetry: selections from the Aeneid; thematic, stylistic and formal analysis of the Roman epic; comparison with Homer.

**LA 311. LATIN POETRY (3)**
Selected passages from Catullus, Ovid and Horace read and interpreted. Study of poetic form and metre. Introduction to Graeco-Roman mythology.

**LA 313. LATIN PROSE (3)**
Selected readings from Sallust, Livy, Tacitus and Roman philosophical works. Discussion of Roman historiography and philosophy and the Greek influence on them.

**LA 411. LATIN: ADVANCED GRAMMAR (3)**
The difficult portions of Latin grammar and of the morphological and syntactic structure of Latin. Theory of literature: genres of literary works, style, figures of speech, synonyms, principles of oratory and versification.

**LA 413. LATIN LITERATURE AND Backgrounds (3)**
Fast survey of Greek literature and discussion of Roman dependence on Greek literary topics, concepts, and forms. Survey of Latin literature from Ennius to Augustine. Study of sample texts.

**LA 417. LATINO-ROMANCE LINGUISTICS (3)**
PR: Some knowledge of Latin or a Romance language. Case study of linguistic development of 4,000 years from Proto-Aryan through Latin to modern Romance languages.

**LA 481. DIRECTED STUDY (3)**
Specialized study of linguistic or literary topics depending on student's need and interest.

Linguistics

Faculty: Gessman, chairman.

**LI 301. GENERAL LINGUISTICS I (3)**
Generalities about language, speech organs, phonation process; phonology; writing systems; general morphology, syntax, semantics, and stylistics; language types; kinship groups; general dialectology.

**LI 303. GENERAL LINGUISTICS II (3)**
LI 481. DIRECTED STUDY IN LINGUISTICS (3)
Study, according to the student's needs and interest, of special areas of linguistics, including languages not regularly offered; e.g., Greek, Hebrew, or Sanskrit. Regular classes can be set up in any such area, subject to sufficient number of students.

Management

Faculty: Morell, chairman; Dutton, Heier, Sleeper.

MM 301. PRINCIPLES OF MANAGEMENT (3)
PR: EC 201-202. A course designed to present a carefully organized system of concepts by which the basic meaning and the fundamental truths of management can be grasped. This course is limited to that body of principles which underlies all management regardless of type or size of organization.

MM 341. PERSONNEL MANAGEMENT (3)
PR: MM 301. Systematic analysis of personnel problems in organizations. Emphasis is placed upon employee motivation and supervisory skills, handling personnel problems, manpower and employee selection and development, and incentives for effective performance.

MM 343. PERSONNEL PROBLEMS (3)
PR: MM 341. Application of personnel management theory and concepts to practical organization problems. Case study approach considers situations faced by line and staff executives at all levels in the firm, and provides problem-solving incidents which parallel actual company experience.

MM 371. INDUSTRIAL RELATIONS (3)
PR: MM 341. The impact of trade unionism on industrial relations. Current problems, conflicts and trends; the development of managerial approaches to achieve labor-management cooperation.

MM 421. PRODUCTION MANAGEMENT (3)
PR: MM 301. A course designed to present a framework of principles and methods of factory management, and to develop the student's ability to make sound managerial decisions, especially at the operational level.

MM 431. ORGANIZATION THEORY (3)
PR: MM 301. Study of organizations using the social system approach while at the same time retaining the lasting contributions of traditional, formal organization theory. Special attention is given to modifying existing organization systems.

MM 441. WAGE AND SALARY ADMINISTRATION (3)
PR: MM 341. Determination and administration of wage and salary programs with emphasis on managerial policies, techniques and control procedures in solving wage and salary problems.

MM 445. BEHAVIORAL FACTORS IN ORGANIZATIONS (3)
PR: MM 343. The analysis of the relationship of psychology and management. Evaluation of the writings, theories, experiments and problem-solving efforts of contemporary behavioral scientists. Special emphasis placed on research dealing with stress, attitudinal change, and creativity.
MM 489. RESEARCH STUDIES IN MANAGEMENT (3)
PR: Senior standing. Independent research studies in Management of a specialized or general nature. Materials for the research projects to be selected and studied under the direction of a major professor in the field of management.

MM 501. HUMAN RELATIONS IN ORGANIZATIONS (3)
An analytical view of the modern human relations movement with stress of development since the 1930's. Incorporates the philosophy of the behavioral sciences and relates it to the management process.

MM 503. COMMUNICATIONS THEORY IN INDUSTRY (3)
Investigation of the communication process through analysis of the available literature. Pragmatic business writing, general semantics, readability studies, cybernetic theory, and network analysis will be among the topics covered.

MM 505. SEMINAR IN ADMINISTRATIVE POLICY (3)
A course designed to present an organized and integrated approach to the managerial decision-making process. Case problems will be presented to give students practice and guidance in arriving at sound decisions and in the determination of valid administrative policies. This course should be taken in the final trimester of the program.

Marketing
Faculty: Morell, chairman; Cunningham, Sleeper.

MK 301. BASIC MARKETING (3)
PR: EC 201-202. Survey of the marketing of goods and services within the economy. The integration of functional, commodity, and institutional approaches from the consumer and management viewpoints.

MK 311. PROMOTIONAL POLICY (3)
PR: MK 301 and EC 301, which may be taken concurrently. The determination of promotion and price as marketing variables, including advertising, sales promotion, personal selling, sales force management, and pricing policies.

MK 315. MARKETING INSTITUTIONS AND CHANNELS (3)
PR: MK 301. A detailed study of retailing and wholesaling institutions, industrial marketing, channel selection, followed by problem analyses.

MK 411. MARKETING RESEARCH (3)
PR: EC 331. A study of research methods applicable to problem-solving in the field of marketing.

MK 413. CONSUMER BEHAVIOR (3)

MK 415. MARKETING MANAGEMENT (3)
PR: MK 311 and 315. Management of the marketing function of firms: objectives, planning, organization, controlling of the total marketing effort and coordination with other major functional areas.

MK 419. MARKETING PROBLEMS (3)
PR: MK 311, 315 ad 411. The integration of marketing knowledge in solving specific marketing problems. Selected readings and case analyses.
MK 501. ADVANCED MARKETING PROBLEMS (3)
A study of the marketing problems of the firm approached from a management point of view. Emphasis is placed upon the development of the student's ability to analyze marketing situations, identify problems, determine solutions, implement corrective action, and plan marketing strategy.

Mathematics

Faculty: Cleaver, chairman; Fusaro, Goodman, Y. Lin, Meiners, G. Michaelides, Reed, Roth, Schaefer, Zerla.

Basic courses listed under Basic Studies; remedial courses listed under Developmental Mathematics.

MA 101. FOUNDATIONS OF UNIVERSITY MATHEMATICS (4)
PR: Two years of secondary school algebra, one year of plane geometry. Real numbers and their properties; introduction to analytic trigonometry and geometry.

MA 145. INTRODUCTORY STATISTICS (3)
Measures of central tendency, dispersion and skewness; probability; testing hypotheses; lines of best fit; measures of correlation; applications.

MA 203. CALCULUS I (4)
PR: MA 101 with a grade of "C" or better or consent of chairman. Limits derivatives, applications, graphs, the definite integral.

MA 204. CALCULUS II (4)
PR: MA 203 with a grade of "C" or better. Basic properties of continuous and differentiable functions and the integral.

MA 205. CALCULUS III (4)
PR: MA 204 with a grade of "C" or better. Infinite series, solid analytic geometry, vectors, partial derivatives.

MA 301. DIFFERENTIAL EQUATIONS (3)
PR: MA 205 with a grade of "C" or better. Ordinary differential equations, derivative operator, series solutions, applications.

MA 305. ADVANCED CALCULUS I (3)
PR: MA 205 with a grade of "C" or better. Probability, differential geometry, line and surface integrals, differential equations, numerical analysis.

MA 306. ADVANCED CALCULUS II (3)
PR: MA 305. Continuation of MA 305.

MA 309. SET THEORY (2)
PR: MA 203 or consent of chairman. Relations, functions, order, cardinal numbers.

MA 321. LINEAR ALGEBRA (3)
PR: MA 203 or consent of chairman. Vectors and vector spaces, Euclidean n-space, determinants, linear transformations, matrices.

MA 323. SYNTHETIC GEOMETRY (3)
PR: MA 203. Emphasis on axiomatics, advanced Euclidean geometry, elements of projective geometry, non-Euclidean geometries.
MA 331. VECTOR ANALYSIS (3)
PR: MA 205. The algebra and calculus of vectors, applications, general coordinates, introduction to tensor analysis.

MA 345. PROBABILITY AND STATISTICS (3)
PR: MA 204. Theorems in probability, mathematical expectation, law of large numbers and applications, fundamental limit theorems.

MA 347. NUMERICAL ANALYSIS (3)
PR: MA 205. Interpolation and quadrature, finite differences, numerical solution of algebraic and transcendental equations, numerical solution of differential equations, computer techniques.

MA 371. THE SCOPE AND SIGNIFICANCE OF MATHEMATICS (3)
(for non-science majors)
PR: Senior or junior standing. Students having completed MA 203 are not eligible to enter this course. The development of mathematical thought and its application to the physical world, the social sciences, and the fine arts, emphasizing the importance and meaning of mathematics in contemporary culture.

MA 413. REAL ANALYSIS I (3)
PR: MA 205 and 309. Continuity, differentiation and derivates, sequences and series of functions, convergence.

MA 414. REAL ANALYSIS II (3)
PR: MA 413. Measure theory and integration.

MA 421. COMPLEX ANALYSIS I (3)
PR: MA 205. Complex numbers, analytic functions and mapping, integrals, power series.

MA 422. COMPLEX ANALYSIS II (3)
PR: MA 421. Residues and poles, conformal mapping and applications.

MA 423. ALGEBRA I (3)
PR: MA 205 and 309. Semi-groups and groups, rings and fields, modules and ideals, lattices.

MA 424. ALGEBRA II (3)
PR: MA 423. Continuation of MA 423.

MA 431. TOPOLOGY I (3)
PR: MA 205 and 309. Topological spaces, connectedness, compactness, Moore-Smith convergence.

MA 432. TOPOLOGY II (3)

MA 441. APPLIED MATHEMATICS I (3)
PR: MA 301. Linear transformations, operators, Eigenvalue problems and boundary value problems of mathematical physics, Fourier series.

MA 442. APPLIED MATHEMATICS II (3)
PR: MA 441. Continuation of MA 441.
MA 483. SELECTED TOPICS (3)
PR: Senior or junior standing. Each topic is a course of study. 01 History of Mathematics, 03 Logic and Foundations, 05 Number Theory, 07 Topics in Algebra, 09 Mathematics for Physics, 11 Topics in Probability and Statistics.

MA 515. MODERN ANALYSIS I (3)

MA 516. MODERN ANALYSIS II (3)
PR: MA 515. Continuation of MA 515.

MA 517. BANACH SPACES AND ALGEBRAS I (3)

MA 518. BANACH SPACES AND ALGEBRAS II (3)
PR: MA 517. Continuation of MA 517.

MA 525. ABSTRACT ALGEBRA I (3)
PR: Consent of chairman. Group theory, ring and module theory, commutative algebra, Galois theory.

MA 526. ABSTRACT ALGEBRA II (3)
PR: MA 525. Continuation of MA 525.

MA 527. HOMOLOGICAL ALGEBRA (3)

MA 529. LIE GROUPS (3)
PR: MA 516 or 526 or 534, and consent of chairman. Topological groups, representation of compact Lie groups, algebraic groups.

MA 533. ADVANCED TOPOLOGY I (3)
PR: Consent of chairman. Topological spaces, uniform and function spaces, homotopy theory.

MA 534. ADVANCED TOPOLOGY II (3)
PR: MA 533. Continuation of MA 533.

MA 535. ALGEBRATIC TOPOLOGY (3)
PR: MA 534 and consent of chairman. Homotopy theory, polytopes, simplicial homology theory.

MA 537. TOPOLOGICAL ALGEBRA I (3)
PR: MA 534 and consent of chairman. Topological semi-groups, topological groups, topological rings and fields, Haar measure.

MA 538. TOPOLOGICAL ALGEBRA II (3)
PR: MA 537. Continuation of MA 537.

MA 539. DIFFERENTIAL GEOMETRY (3)
PR: Consent of chairman. Local differential geometry, curvature, evolutes and involutes, calculus of variations.
MA 543. PARTIAL DIFFERENTIAL EQUATIONS I (3)
PR: MA 301 and consent of chairman. First order and second order equations, Cauchy problem, Dirichlet problem, etc. Mean value theorems.

MA 544. PARTIAL DIFFERENTIAL EQUATIONS II (3)
PR: MA 543. Continuation of MA 543.

MA 551. LOGIC AND FOUNDATIONS I (3)
PR: Consent of chairman. Propositional calculus, Post's theorem, first order and equality calculi, models, completeness and consistency theorems, Godel's theorem, recursive functions.

MA 552. LOGIC AND FOUNDATIONS II (3)
PR: MA 551. Continuation of MA 551.

MA 583. SELECTED TOPICS (3)
PR: Consent of chairman. 01 Topology, 02 Analysis, 03 Algebra, 04 Applied Mathematics.

MA 591. GRADUATE SEMINAR (1)
Direction of this seminar is by a faculty member. Students are required to present research papers from the literature.

MA 599. THESIS (1-6)
May be taken more than once, but not more than a total of 6 hours credit will be allowed.

Music


MU 101. MUSIC THEORY (3)
Required of music majors. Fundamentals of musicianship approached through aural and visual analysis of musical styles from Gregorian chant through the Renaissance, review of music rudiments, stylistic composition for voices, counterpoint, form, sight-singing and dictation, keyboard techniques.

MU 102. MUSIC THEORY (3)
PR: MU 101. Continuation of fundamental approach of MU 101, styles of the Baroque, counterpoint, form, diatonic harmony, triads and 7th chords, simple modulation.

MU 103. INTRODUCTION TO MUSIC (2)
For non-music majors. A study of the art of music and its materials, designed to develop an understanding of basic principles of music and a technique for listening to music.

MU 105. UNIVERSITY ORCHESTRA (1)
Description under MU 109.

MU 107. UNIVERSITY BAND (1)
Description under MU 109.
MU 109. UNIVERSITY CHORUS (1)
PR: Cl. The study, rehearsal and performance of major musical works. Membership open to all University students by audition on a credit or non-credit basis. Non-credit members receive no grade but are required to participate in all scheduled rehearsals and concerts. Credit members will complete a documented written report on a trimester self-study project in addition to the performance requirements and the study of musicological aspects of the literature performed by the group. May be repeated for credit.

APPLIED MUSIC
Vocal and instrumental instruction for all levels. Students are classified according to technical ability and musical background. They are placed in graded units by audition only. Students have one private lesson each week, which is devoted to individual technical and musical problems. They also meet in a class once each week, which follows the pattern of a master class, hearing each other perform, and learning to analyze and discuss technic, interpretation, style, etc.

More detailed information may be obtained from the Music Office of the Division of Fine Arts.

ENSEMBLE REQUIREMENT
Music majors are required to participate in a major ensemble during each period of registration at the University. Piano majors may elect to enroll in MU 304, Chamber Music Ensemble. Ensemble courses may be repeated for credit four times applicable on the B.A. degree, by non-music majors.

MU 111. BEGINNING STRING INSTRUMENTS (1)
MU 121. BEGINNING PIANO (1)
MU 123. BEGINNING ORGAN (1)
MU 131. BEGINNING VOICE (1)
MU 141. BEGINNING WOODWIND INSTRUMENTS (1)
MU 151. BEGINNING BRASS INSTRUMENTS (1)
MU 161. BEGINNING PERCUSSION INSTRUMENTS (1)

MU 201. MUSIC THEORY (3)
PR: MU 102. Continuation of fundamental approach of MU 101-102. Styles of the Classic and Romantic periods; chromatic harmony, larger forms; transposition and instrumentation, score reading; stylistic composition for piano, voices and instrumental combinations.

MU 202. MUSIC THEORY (3)
PR: MU 201. Continuation of fundamental approach of MU 201. Twentieth century styles, serial composition and other contemporary techniques, creative composition for various performance media.

MU 211. INTERMEDIATE STRING INSTRUMENTS (2)
MU 221. INTERMEDIATE PIANO (2)
MU 223. INTERMEDIATE ORGAN (2)
MU 231. INTERMEDIATE VOICE (2)
MU 241. INTERMEDIATE WOODWIND INSTRUMENTS (2)
MU 251. INTERMEDIATE BRASS INSTRUMENTS (2)
MU 261. INTERMEDIATE PERCUSSION INSTRUMENTS (2)

MU 301. MUSIC THEORY (3)

MU 302. MUSIC THEORY (3)
PR: MU 301. Continuation of MU 301.

MU 303. CONTEMPORARY MUSIC LITERATURE (3)
PR: MU 202. Criticism and analysis of selected musical works of the 20th century.

MU 304. CHAMBER MUSIC ENSEMBLE (1)
Open to students with the necessary proficiency in their performance mediums. Study and performance of literature for small combinations of string, woodwind or brass instruments, voice, and piano. May be repeated for a maximum of 4 credits.

MU 307. MUSIC LITERATURE (2)
PR: MU 102 or CI. A stylistic and historical survey of Western music from its beginnings to the end of the 17th century designed to develop a technique for listening analytically to music. Required of all music majors and open to non-music majors.

MU 308. MUSIC LITERATURE (2)
PR: MU 102 or CI. A continuation of MU 307. A survey of Western music from the 18th century to the present.

MU 377. STRING WORKSHOP (2)
To prepare music teachers for inaugurating a string instrumental program. Methods, techniques and materials for the organization and execution of heterogeneous string classes will be studied, performed and evaluated.

MU 403. COMPOSITION (3)
PR: MU 202 or CI. Creative writing for various instrumental and vocal media, solo, and ensemble. Emphasis on composition in contemporary idioms. Includes class performance, critical discussion of compositions by students and instructor. May be repeated for a maximum of 12 credits.

MU 405. ORCHESTRA WORKSHOP (2)
Description under MU 409.

MU 407. BAND WORKSHOP (2)
Description under MU 409.

MU 409. CHORUS WORKSHOP (2)
PR: CI. The study, rehearsal and performance of ensemble literature. Membership open to University students, teachers and secondary school pupils. Those eligible may register for credit. Non-credit members receive no grade but are required to participate in all scheduled classes and concerts.

MU 411. ADVANCED STRING INSTRUMENTS (2)
MU 421. ADVANCED PIANO (2)
MU 423. ADVANCED ORGAN (2)
MU 425. PIANO MASTER CLASS (2)
PR: CI. Study and performance of selected piano literature with special emphasis on style, form and technique. Especially designed for teachers, piano majors and talented secondary school pupils. Credit and non-credit students must attend all scheduled class sessions, private lessons and concerts.

MU 431. ADVANCED VOICE (2)

MU 435. VOICE MASTER CLASS (2)
PR: CI. Study and performance of selected voice literature with special emphasis on style, form and technique. Especially designed for teachers, voice majors and talented secondary school pupils. Credit and non-credit students must attend all scheduled class sessions, private lessons and concerts.

MU 441. ADVANCED WOODWIND INSTRUMENTS (2)

MU 451. ADVANCED BRASS INSTRUMENTS (2)

MU 461. ADVANCED PERCUSSION INSTRUMENTS (2)

MU 471. STUDIO TEACHING (2)
PR: CI. Advanced instrumentalists or vocalists planning studio teaching as a career. Emphasis on the organization of materials, literature and techniques.

MU 481. DIRECTED STUDY (1-6)
PR: CI.

MU 501. THE SYMPHONY (3)
A chronological study of the development of orchestral music. Works will be analyzed and studied from a stylistic and biographical perspective.

MU 502. MASTERWORKS OF CHORAL LITERATURE (3)
A chronological study of the development of choral music. Works will be analyzed and studied from a stylistic and biographical perspective.

MU 507. COUNTERPOINT (3)
PR: MU 202. A study of the compositional techniques of Lassus and Palestrina of the 16th century and Bach and his contemporaries of the 18th century. Stylistic principles to be derived from intensive analysis and writing.

MU 508. COMPOSITION (3)
PR: MU 202. Original composition in varied forms. Emphasis on analysis and application of contemporary techniques and styles. May be repeated for a maximum of 9 credits.

MU 509. TWENTIETH CENTURY HARMONY (3)

MU 515. VOCAL MATERIALS AND ConductING (3)
A study of materials appropriate for use in vocal groups. Emphasis given to conducting skills.

MU 516. INSTRUMENTAL MATERIALS AND ConductING (3)
A study of materials appropriate for use in instrumental groups. Emphasis given to conducting skills.
Interdisciplinary Oceanography

Faculty: Briggs, chairman; Dawes, Kopp, Linton, Simon, Taft.

A committee on Oceanography is preparing a program for undergraduate and graduate study in Oceanography in 1965.

OG 311. INTRODUCTION TO OCEANOGRAPHY (2)
A survey of modern oceanography and its methods including the important features of physical, chemical, biological and geological oceanography.

Office Administration

Faculty: E. Miller, E. Webb.

OA 141. INTRODUCTORY TYPEWRITING (2)
For students with no previous instruction in typewriting. Basic skills of typing for personal use, common types of business letters, reports and tabulated materials.

OA 143. ADVANCED TYPEWRITING (2)
PR: OA 141 or equivalent. Expands typewriting skills and applications, introduces skill-building procedures.

OA 251. INTRODUCTORY SHORTHAND (3)
PR: OA 141. Introduction to basic skills and vocabulary in Gregg Shorthand.

OA 253. DICTATION AND TRANSCRIPTION (3)
PR: OA 251 and 143, or equivalent of each. Review of basic skills and vocabulary and emphasis on dictation and transcription skills.

OA 351. ADVANCED SHORTHAND (3)
PR: OA 253 and 143, or equivalent of each. Increased dictation speed and the transcription of mailable business correspondence.

OA 353. OFFICE ADMINISTRATION (3)
Function of the business office, including planning for office equipment and supplies, actuating office employees, controlling the work of the office and principles of office organization.

OA 361. BUSINESS MACHINES (2)
PR: OA 141 or equivalent. Instruction and practice in the use and functions of calculating and secretarial machines in today’s business office.

OA 461. SECRETARIAL PROCEDURES (3)
PR: OA 351. Development of executive secretarial concepts, instruction and practice in various office duties such as records control, handling mail, arranging itineraries and telephone techniques.

Philosophy

Faculty: Hocutt, chairman; J. A. Gould.

PY 201-202. PROBLEMS OF PHILOSOPHY (3,3)
An introduction to the major questions of mankind. (What is good? What is real? What is knowledge?) and the different ways of answering these questions.

PY 203. FUNDAMENTALS OF DEDUCTIVE LOGIC (3)
Language analysis and classical and modern formal logic, including the logic of classes and propositions.
PHYSICS

PY 204. INTRODUCTION TO SCIENTIFIC METHOD (3)
Probability, inductive inference, the hypothetico-deductive method, experimen-
tation and selected topics in the philosophy of science.

PY 301. ETHICS (3)
The writing of some of the great moral philosophers on the questions "What is
good?" and "Can there be a science of good?"

PY 302. AESTHETICS (3)
The nature of beauty and fine art with illustrations from the arts.

PY 303. ANCIENT AND MEDIEVAL PHILOSOPHY (3)
A survey of philosophy from Thales through the medieval writers.

PY 304. RENAISSANCE AND MODERN PHILOSOPHY (3)
A survey of philosophy from the Renaissance through the modern writers.

PY 305. CONTEMPORARY PHILOSOPHY (3)
Selected schools of 20th century thought such as idealism, positivism, pragmatism,
realism and existentialism.

PY 307. SOCIAL PHILOSOPHY (3)
A semantic and logical analysis of rival theories of social order; their philoso-
phical foundations and comparative gaps between their ideological claim and
social reality.

PY 401. SEMINAR IN EPISTEMOLOGY I (3)
PR: Major in philosophy or psychology and CI. Theory of perception.

PY 402. SEMINAR IN EPISTEMOLOGY II (3)
PR: Major in philosophy or psychology and CI. The possibility and conditions of
knowledge.

PY 403. METAPHYSICS/SENIOR SEMINAR I (3)
PR: Major in philosophy and CI. A consideration of the theory of reality.

PY 404. METAPHYSICS/SENIOR SEMINAR II (3)
PR: Major in philosophy and CI. Theology and cosmology.

PY 405. DIRECTED STUDY (1-3)
PR: Approval by the instructor of project submitted by the student. For majors
in philosophy who want to pursue a personal research interest.

Physical Education — Basic

Faculty: Bowers, Cheatham, Grindley, Heeschen, Hertz, Osborne, Prather, Rey,
Schrader, S. Taylor, H. Wright, J. Young.

See Education, page 111, for Physical Education for Teachers.
Abbreviations: (C) coeducational; (M) men; (W) women.

PE 101. FUNCTIONAL PHYSICAL EDUCATION (0)
Prerequisite to all courses except Beginning Swimming. Stresses importance of
optimum fitness for daily living and basic instruction in the appreciation of par-
ticipation sports. Evaluation of physical fitness and motor abilities.

PE 102-129. TEAM SPORTS, CONDITIONING, DANCE, RECREATION (0)
Fundamental experiences in team and group activities. Physical conditioning and
self-expression through team competition, rhythmic activities and outdoor educa-
tion skills.
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Description</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>BASKETBALL AND VOLLEYBALL (M) (W)</td>
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</tr>
<tr>
<td>106</td>
<td>FIELD HOCKEY AND TRACK &amp; FIELD (W)</td>
<td></td>
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<tr>
<td>112</td>
<td>SOFTBALL AND VOLLEYBALL (M) (W)</td>
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<tr>
<td>113</td>
<td>SOCCER AND SPEEDBALL (M) (W)</td>
<td></td>
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<tr>
<td>115</td>
<td>SPECIAL CONDITIONING (C)</td>
<td>Adaptive</td>
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<tr>
<td>116</td>
<td>SPECIAL CONDITIONING (M) (W)</td>
<td>Required of lower 25th percentile on motor fitness.</td>
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<tr>
<td>117</td>
<td>SPECIAL CONDITIONING (M) (W)</td>
<td>Special interest.</td>
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<tr>
<td>119</td>
<td>FOLK AND SQUARE DANCE (C)</td>
<td>Recommended for elementary education majors.</td>
</tr>
<tr>
<td>120</td>
<td>MODERN DANCE (INTERMEDIATE-ADVANCED) (C)</td>
<td>PR: PE 166 or equivalent.</td>
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<tr>
<td>121</td>
<td>TAP DANCE (C)</td>
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<tr>
<td>122</td>
<td>SOCIAL DANCE (C)</td>
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<tr>
<td>123</td>
<td>OUTDOOR EDUCATION (C)</td>
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<tr>
<td>124</td>
<td>RECREATIONAL ACTIVITIES (C)</td>
<td></td>
</tr>
<tr>
<td>125</td>
<td>RIFLERY (C)</td>
<td></td>
</tr>
<tr>
<td>126</td>
<td>BEGINNING RIDING (C)</td>
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<tr>
<td>129</td>
<td>PROFICIENCY (content to be certified by Physical Education Division)</td>
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</table>

**PE 130-149. AQUATIC SPORTS (0)**
Essential aquatic skills and knowledges vital to individual and group survival, safety and recreation.

<table>
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<tr>
<th>Course Number</th>
<th>Course Description</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>130</td>
<td>BEGINNING SWIMMING (C)</td>
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<tr>
<td>132</td>
<td>INTERMEDIATE SWIMMING (C)</td>
<td></td>
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<tr>
<td>134</td>
<td>ADVANCED SWIMMING (C)</td>
<td></td>
</tr>
<tr>
<td>136</td>
<td>LIFE SAVING (C)</td>
<td></td>
</tr>
<tr>
<td>138</td>
<td>SCUBA DIVING (C)</td>
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<tr>
<td>140</td>
<td>WATER SAFETY INSTRUCTION (C)</td>
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<tr>
<td>142</td>
<td>SYNCHRONIZED SWIMMING (C)</td>
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<td>144</td>
<td>CANOEING AND SAILING (C)</td>
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<tr>
<td>149</td>
<td>PROFICIENCY (content to be certified by Physical Education Division)</td>
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**PE 150-180. INDIVIDUAL AND DUAL ACTIVITIES (0)**
Basic instruction in recreational sports, fundamental sport skills, individual development and acquisition of dance techniques and skills. Development of desirable levels of strength, endurance, agility, balance and poise.
150 ARCHERY (C)
152 BADMINTON (C)
156 BOWLING (C)
158 FENCING (C)
160 GOLF (C)
164 HANDBALL AND PADDLEBALL (C)
166 MODERN DANCE (BEGINNERS) (C)
168 TENNIS (C)
169 WRESTLING (M)
170 GYMNASTICS (C)
178 WEIGHT TRAINING (M)
179 PROFICIENCY (content to be certified by Physical Education Division)

Physics

Faculty: Forman, chairman; Aubel, Bloch, Brooker, Chung, Clapp, D. Cooper, Kendall, R. Mitchell, Turbeville.

PH 205-207. GENERAL PHYSICS (3:1)
PR: Proficiency test in mathematics and science. First half of general physics and lab for science students. Must be taken concurrently.

PH 206-208. GENERAL PHYSICS (3:1)
PR: PH 205-207. Second half of general physics and lab for science students. Must be taken concurrently.

PH 215. MATHEMATICAL ANALYSIS OF PROBLEMS IN MECHANICS AND ELECTRICITY (2)
PR: One year of non-calculus general physics. CR: MA 204. A course designed for physics majors and engineering students who have taken a non-calculus, general physics course. Not open to students who take PH 221 and 222 or equivalent.

PH 221-223. GENERAL PHYSICS (3:1)
CR: MA 203. First half of general physics and lab for physics majors and engineering students. Must be taken concurrently.

PH 222-224. GENERAL PHYSICS (3:1)
PR: PH 221-223. Second half of general physics and lab for physics majors and engineering students. Must be taken concurrently.

PH 301. MODERN PHYSICS (3)
PR: PH 206 or 222. Electron dynamics, X-rays, Bohr-Sommerfeld atom and photoelectricity.

PH 305. THERMODYNAMICS (3)
PR: MA 205 and either prerequisite PH 222 or corequisite PH 215. Heat, the kinetic theory of gases, the laws of thermodynamics and introduction to statistical mechanics.
PH 307. MECHANICS I (3)
CR: MA 205 and either prerequisite PH 222 or corequisite PH 215. Kinematics and dynamics of a particle, of a system of particles and of a solid body.

PH 311. ELECTRICITY AND MAGNETISM (3)
PR: MA 205 and either prerequisite PH 222 or corequisite PH 215. Electrostatics and electrokinetics, direct and alternating circuits, magnetic fields and magnetic properties of matter.

PH 323. MODERN PHYSICS (3)

PH 331. GEOMETRICAL AND PHYSICAL OPTICS (3)
PR: PH 206 or 222. CR: MA 204. Wave motion, reflection, refraction, dispersion, emission of spectra, interference, diffraction and polarization.

PH 341. INTERMEDIATE LABORATORY — GENERAL (1)
CR: Physics course of 300 level or above. Experiments related to various areas of physics.

PH 342. INTERMEDIATE LABORATORY — GENERAL (1)
PR: PH 341. Continuation of PH 341.

PH 401. NUCLEAR PHYSICS (3)
PR: PH 301 and MA 205. Stable nuclei and isotopes, radio-activity, nuclear reactions, binding energies, fission and fusion.

PH 407. MECHANICS II (3)
PR: PH 307 and MA 301. Mathematical analysis of the statics and dynamics of particles and rigid bodies.

PH 421. SOLID STATE PHYSICS (3)

PH 423. ELECTRONICS (3)
PR: PH 311. Vacuum and gas-discharge tubes and associated circuits, electron dynamics, thermionic emission, space charge phenomena and electronic circuit analysis. (formerly PH 321)

PH 437. QUANTUM MECHANICS (3)
PR: PH 407, MA 301 and CI. De Broglie’s wave equation, Heisenberg’s uncertainty principle, Schrodinger’s equation and the hydrogen atom.

PH 441. ADVANCED LABORATORY I (1)
PR: PH 341. Experiments related to nuclear physics.

PH 442. ADVANCED LABORATORY II (1)
PR: PH 341. Experiments related to optical phenomena.

PH 443. ADVANCED LABORATORY III (1)
PR: PH 341. Experiments related to electrical concepts.

PH 481. UNDERGRADUATE RESEARCH (1-3)
PR: Senior or advanced junior standing and CI. Individual experimental work under supervision of instructor.
PH 483. SELECTED TOPICS IN PHYSICS (1-3)
PR: Senior or advanced junior standing and CI. Each topic is a course in directed study under the supervision of a faculty member. The following courses are contemplated: electromagnetic theory, gaseous electronics, plasma physics, relativity and atomic and molecular structure.

PH 491. PHYSICS SEMINAR (1)
PR: Senior or advanced junior standing and CI. May be repeated once.

PH 501. MODERN PHYSICS (3)
PR: PH 437 and CI. Quantitative study of molecular, atomic, and nuclear structure and spectra.

PH 507. CLASSICAL MECHANICS I (3)
PR: PH 407 and CI. Review of vectors, tensors and matrices; dynamics of particles and systems of particles; the equations of Hamilton and Lagrange; fluid mechanics.

PH 508. CLASSICAL MECHANICS II (3)
PR: PH 507 and CI. Continuation of PH 507.

PH 531. ELECTROMAGNETIC THEORY I (3)
PR: PH 311 and CI. Electrostatics and magnetostatics; potential and boundary value problems; Maxwell's equations, plane electromagnetic waves.

PH 532. ELECTROMAGNETIC THEORY II (3)
PR: PH 531 and CI. Continuation of PH 531.

PH 537. QUANTUM MECHANICS (3)
PR: PH 437 and CI. The theory of non-relativistic quantum mechanics.

PH 541. EXPERIMENTAL PHYSICS (1)
PR: Graduate standing. The practice of laboratory techniques.

PH 581. GRADUATE RESEARCH (1-3)
PR: CI.

PH 583. SELECTED TOPICS IN PHYSICS (1-3)
PR: CI. Each topic is a course in directed study under the supervision of a faculty member.

PH 599. MASTER'S THESIS (1-6)
PR: PH 541.

Political Science

Faculty: Horrigan, chairman; R. Cooper, J. A. Gould, A. Kelley, Kim, Thompson, W. Young.

PS 201. AMERICAN NATIONAL GOVERNMENT (3)
Basic principles and procedures of the American governmental system with emphasis on current issues and trends.

PS 203. STATE AND LOCAL GOVERNMENT (3)
Analysis of the structure and function of state and local governments, of the social and political influences that shape them, and the dynamics of their administrative processes.
PS 205. INTRODUCTION TO POLITICAL SCIENCE (3)
A survey of the institutions and processes of government with special emphasis
on the scope and methods of political science. Designed primarily for students
planning to major in the social sciences.

PS 311. COMPARATIVE POLITICS (3)
Analysis of political systems using the concepts and methods of comparative
politics. Studies of selected countries will be included. (formerly "Governments
of Europe")

PS 321. CONSTITUTIONAL LAW (3)
The development of the United States government through judicial interpretation

PS 323. POLITICAL THEORY (3)
PR: PS 205 or CI. Basic philosophical conceptions underlying the democratic
system based on writings from the Greeks to the present day.

PS 331. INTERNATIONAL RELATIONS (3)
Contemporary international affairs, including analysis of politics among nations;
control of national foreign policies, sovereignty, nationalism and diplomacy;
technology, public opinion and war in international relations.

PS 333. INTERNATIONAL ORGANIZATION (3)
The problem of achieving peace through existing international structures, both
within and outside the United Nations. The background, achievement and organi-
zational problems of these agencies.

PS 341. POLITICAL PARTIES (3)
PR: PS 201 or CI. The development, structure, operation and significance of
political parties in the American system of government.

PS 343. POLITICAL BEHAVIOR (3)
PR: PS 201 or CI. Economic, psychological and social dimensions of political
behavior; political participation, leadership and elites; political attitudes; voting
behavior and decision-making processes.

PS 345. PRIVATE GROUPS AND PUBLIC POLICY (3)
Role of non-party groups in the American society and their impact on public
policy; growth of interest groups, internal politics, and formation of public policy.

PS 351. PUBLIC ADMINISTRATION (3)
PR: Upper level standing. An examination of the administrative structure and
processes by which public policies are implemented in a democratic society. De-
signed especially for persons planning to enter public service. (formerly PS 451)

PS 353. URBAN GOVERNMENT (3)
An introduction to the theory of urbanism, formal and informal structures that
govern urban areas, new patterns and policy emphases of urban government.

PS 355. THE AMERICAN LEGISLATIVE PROCESS (3)
Intensive analysis of the nature of the legislative process in the United States;
organization, procedure, leadership, relation with other governmental agencies,
group tactics, decision-making process in the formation of policy.

PS 357. STATE PUBLIC POLICY (3)
Analysis and comparison of the structures and process by which state govern-
ments develop public policy with emphasis on Florida government.
PS 361. AMERICAN POLITICAL THOUGHT (3)
American political thought from the Colonial period to the present with emphasis on recent contributions.

PS 371. FIELD WORK (3)
Designed for political science majors. Practical participation in a political organization or governmental bureau observing its operation and making a critical analysis in light of political science principles.

PS 411. SOUTHEAST ASIA IN WORLD POLITICS (3)
The foundations of politics in Southeast Asia as found in its ecology, cultures, and social structures with particular emphasis on the political process and international relations.

PS 421. GOVERNMENT AND POLITICS OF THE FAR EAST (3)
Development of political ideas and institutions in Japan and China with emphasis upon 20th century issues. (formerly PS 381)

PS 441. THE AMERICAN PRESIDENCY (3)
The presidency as an institution of American democracy: constitutional status and powers, administrative responsibilities, legislative and political leadership, decision-making process.

PS 445. CONTEMPORARY AMERICAN FOREIGN POLICY (3)
The structure and processes involved in making American foreign policy. The constitutional framework of decision making, the role of specialized executive agencies, and an analysis of selected contemporary problems in foreign policy.

PS 461. POLITICS OF THE DEVELOPING AREAS (3)
PR: Upper level standing. An analysis of the ideologies, governmental structures, and political processes of selected nations of the non-Western world.

PS 481. INDIVIDUAL RESEARCH (1-3)
PR: Senior standing and CI. Investigation of some aspect of political science culminating in the preparation of an original research paper.

PS 491. SENIOR SEMINAR (3)
Required of all political science majors. An examination of the content and methods of political science as a social science discipline.

Psychology


PC 101. INTRODUCTION TO PSYCHOLOGY (3)
PR: Second trimester standing. A survey of major topics in psychology (learning, perception, thinking, intelligence, etc.), and an introduction to methods used in psychological investigation.

PC 111. APPLIED PSYCHOLOGY (3)
PR: CB 103 or PC 101. The application of psychological principles and the functions of psychologists in education, government and industry, and clinical practice.

PC 211-212. EXPERIMENTAL DESIGN AND METHODOLOGY (3,3)
PR: PC 101 and SS 201. Major research methods in psychology, application of these to problems of psychology. Experiments on problems in the various areas of psychology. lec-lab.
PC 231. PSYCHOLOGY OF ADJUSTMENT (3)
PR: PC 101. Genetic, organic and learned factors involved in the processes of personal adjustment; applications of mental health principles to everyday living.

PC 311. MEASUREMENT IN PSYCHOLOGY (3)
PR: SS 201. A consideration of measurement theory and study of tests and other tools of measurement. lec-lab.

PC 321. PHYSIOLOGICAL PSYCHOLOGY (3)
PR: PC 212 or CI. Gross neural and physiological components of behavior. Structure and function of the central and peripheral nervous systems as related to emotion, motivation, learning and theory of brain functions.

PC 323. SENSATION AND PERCEPTION (3)

PC 331. SOCIAL PSYCHOLOGY (3)
PR: PC 101 or SO 201. (See also SO 331. Credit may not be earned for both.) Behavior of the individual human being as affected by the social and cultural influences of society.

PC 333. PERSONALITY THEORY (3)
PR: 6 hours in PC courses. Methods and findings of personality theories and an evaluation of constitutional, biosocial and psychological determinants of personality. (formerly PC 330)

PC 341. CHILD PSYCHOLOGY (3)
PR: PC 101 or ED 205. Developmental and psychosocial aspects of childhood, including hereditary, maturational, psychological and social determinants of child behavior.

PC 343. PSYCHOLOGY OF ADOLESCENCE AND ADULTHOOD (3)
PR: PC 101 or ED 206. Development through the adolescent and adult years, with emphasis on psychosocial problems of those age groups.

PC 401. HISTORY AND SYSTEMS OF PSYCHOLOGY (3)
PR: PC 211 plus 9 hours in PC courses, or CI. The historical roots of modern psychological theories, investigation of the various schools of psychology such as behaviorism, Gestalt psychology, psychoanalysis and phenomenological psychology.

PC 411. ADVANCED EXPERIMENTAL PSYCHOLOGY (3)
PR: PC 211-212 and CI. A course wherein students will design, conduct and report experiments in psychology. The topics of experimentation will vary.

PC 431. ABNORMAL PSYCHOLOGY (3)
PR: PC 101 plus 231 or 333. A study of the classifications of variant behavior and some of the hypotheses used to explain such behavior.

PC 451. LEARNING PROCESSES (3)
PR: PC 101; PC 211-212 recommended. The influence of learning on behavior, using principles derived from learning theories. lec-lab.

PC 481. INDIVIDUAL RESEARCH (1-3)
PR: Upper division standing and CI. The student plans and conducts an individual research project under the supervision of a staff member. May be repeated with a maximum of 6 hours credit.
PC 485. DIRECTED READING (1-3)
PR: Upper division standing and CI. A reading program of topics in psychology is conducted with the supervision of a psychology staff member. May be repeated with a maximum of 6 hours credit.

PC 491. SENIOR SEMINAR IN PSYCHOLOGY (3)
PR: Senior standing and completion of the core program in psychology. Designed to give the advanced undergraduate student an opportunity to integrate concepts within the field of psychology and relate these to other areas of study.

Romance Languages

Faculty: Milani.

RL 417. HISTORY OF ROMANCE LANGUAGES (3)
A historical treatment of French, Italian and Spanish beginning with an examination of the Latin base; non-Latin influences; vulgar Latin and its influence; change of forms to the present. This course may be counted toward a major in French, Italian or Spanish.

Russian

Faculty: Artzybushev, Karklins, Sokolsky.

Basic courses listed under Basic Studies.

RN 221. SCIENTIFIC RUSSIAN (3)
Primarily for students majoring in science or those desiring help in learning to read texts and research material in a specialized field.

RN 301. ADVANCED COMPOSITION (3)
To improve the student's ability in reading and writing Russian; practice in free and fixed composition.

RN 303. ADVANCED CONVERSATION AND PRONUNCIATION (3)
To develop fluency and correctness in spoken Russian.

RN 305. SURVEY OF RUSSIAN LITERATURE (3)
Main currents of Russian literature from the 11th century through the 18th century.

RN 306. SURVEY OF RUSSIAN LITERATURE (3)
Main currents of Russian literature of the 19th and 20th centuries.

RN 415. HISTORY OF THE RUSSIAN LANGUAGE (3)
Development of Russian literary language; changes within Russian morphology, syntax and phonetics from the time of the earliest writings to the present. Studies from excerpts of various periods.

RN 431. EIGHTEENTH CENTURY RUSSIAN LITERATURE (3)
Study of outstanding authors of the 18th century.

RN 441. RUSSIAN DRAMA AND POETRY OF THE NINETEENTH CENTURY (3)
Study of Russian drama and poetry of the 19th century.

RN 451-542. NINETEENTH CENTURY RUSSIAN LITERATURE (3,3)
Emphasis on the novel and short story. The major writers from Pushkin to Dostoevsky. Lectures, reading and analysis of important works.
RN 461. RUSSIAN LITERATURE 1880-1917 (3)
The major authors of the period from Chekhov to Andreyev.

RN 463. RUSSIAN SOVIET LITERATURE (3)
Revolutionary and post-revolutionary Soviet literature including Mayakovsky, Tolstoi, Sholokhov, Fadeev, Simonov and others.

RN 481. DIRECTED STUDY (3)
Specialized individual work in an area not covered by a regular course.

RN 491. SENIOR SEMINAR: RUSSIAN LITERATURE (3)
Study in depth of a specific writer or literary movement as chosen by the instructor. Individual research required of students.

**Interdisciplinary Social Sciences**


SS 201. SOCIAL SCIENCE STATISTICS (3)
Topics selected from the following: measures of central tendency and variability, probability and the normal curve, correlation, curve fitting, scale and index number theory, polling, interview and survey techniques, content analysis.

SS 311. COMMUNICATION (3)
The theories, modes and processes of communication, its history as an instrument of social change and its role in human behavior.

SS 315. PUBLIC OPINION AND PRESSURE MECHANISM (3)
The content and formation of public opinion, properties of opinions and attitudes, and the principles and mechanisms of their formation and change.

SS 321. HUMAN RELATIONS AND PRODUCTIVITY (3)
The elements of industrial psychology, organization theory, automation and psychological problems of labor and management, analysis of consumer habits, the influence of changing business practices on psychological problems of mass culture, the use of leisure and social status.

SS 325. PSYCHOLOGY AND THE SOCIAL ORDER (3)
Psychological roots of cultural and social ways of life, the quest for personal identity in modern mass society, political and industrial behavior, national character and international conflict.

SS 341. LATIN AMERICA (3)
The development of Latin American cultures and peoples emphasizing current problems. Several countries are discussed in detail.

SS 343. ASIA (3)
A case study of an Asian region showing its historical and cultural roots and the transformation now occurring in its political, social and international relations.

SS 345. AFRICA (3)
A case study of an African region showing its historical and cultural roots and the transformation now occurring in its political, social and international relations.

SS 347. THE MIDDLE EAST (3)
A case study of a Middle Eastern region showing its historical and cultural roots and the transformation now occurring in its political, social and international relations.
SS 361. COMMUNISM IN THE MODERN WORLD (3)
Strategy and tactics of world communism, its program and techniques. Nature of the economy and politics of Soviet and Chinese Communism.

SS 441. SOCIAL ISSUES OF OUR TIME (3)
An examination of some of the major contemporary social issues, such as freedom versus authority, modern dilemmas for democracy, human problems of an industrial civilization, implications of changing social patterns of Western culture and opportunities for social reconstruction.

SS 415. COMMUNITY PLANNING (3)
Theory and practice of planning for the orderly development and growth of communities to achieve optimal utilization of natural and human resources, sociological, geographic, political, psychological, economic, financial, and legal aspects of planning.

SS 449. THE EMERGING NATIONS (3)
PR: One of the following: SS 341, 343, 345, 347. This course examines the processes and problems involved when a retarded country seeks to develop a modern industrial civilization.

SS 501. SOCIAL PATHOLOGY (3)
An examination of the variety of social criticism which has been leveled at Western society and of some of the defenses which have been made in its behalf. Materials will be chosen from several of the social sciences.

SS 503. CONTEMPORARY AMERICAN CULTURE (3)
A social analysis of the leading characteristics, ideals, and values of American life. An effort will be made to deal with a variety of contexts in which American cultural themes, standards and practices receive expression.

SS 505. SOCIAL VALUES AND SOCIAL ORDER (3)
Current and anticipated factors and problems which will govern the seven fundamental relationships with which the individual and the community are concerned. These are: man's relationship to himself, to his fellow man, to the opposite sex, to his society and culture, to work, to Nature, and to God.

Sociology

Faculty: D. Allen, chairman; W. Allen, Aseltine, R. Burton, Ross, Sandhu, Washburne.

SO 201. INTRODUCTION TO SOCIOLOGY (3)
The structure and functioning of contemporary society, social institutions and associations, social processes, social change and the relationship of society to the individual.

SO 251. MARRIAGE (3)
Structure and function of the modern family. Social, cultural and legal factors related to success and failure in mate selection and marriage. (formerly SO 211)

SO 261. SOCIAL PROBLEMS (3)
Descriptive and analytical consideration of major social problems affecting individuals and groups in modern industrial societies, with emphasis on American society. (formerly SO 231)
SO 301. INTRODUCTION TO SOCIAL WELFARE (3)
PR: 6 credits in sociology. The historical and contemporary development of organized social services and institutions to meet human needs. Field visits to welfare agencies.

SO 321. SOCIAL INVESTIGATION (3)
PR: 9 credits in sociology or other social science. Methods and techniques of social research. Design of sociological studies, collection of data, and interpretation of results. (formerly SO 361)

SO 331. SOCIAL PSYCHOLOGY (3)
PR: SO 201 or CB 103 or CI. (See also PC 331. Credit may not be earned for both.) Behavior of the individual human being as affected by social and cultural influences of modern society.

SO 335. COLLECTIVE BEHAVIOR (3)
PR: SO 201 or CB 104. A study of the spontaneous development of new forms of group and mass behavior—crowds, social movements and diffuse mass behavior. (formerly SO 343)

SO 341. SOCIAL ORGANIZATION (3)
PR: SO 201 or CB 104 or CI. Social organization in the broadest sense, including institutions and associations, as well as variations in role and status—emphasizes present American society. (formerly SO 221)

SO 345. SOCIAL STRATIFICATION (3)
PR: SO 201 or CB 104 or CI. Social status and social stratification in the United States and Western European societies. Social class as a factor in behavior, social mobility. (formerly SO 323)

SO 351. THE FAMILY (3)
Principles of family organization, social adjustment and control, the family as a social and cultural agency. Maturation and stability of the family.

SO 371. RACIAL AND ETHNIC RELATIONS (3)
Comparative study of interracial relations, social tensions, attitudes, and modes of adjustment in various areas of the world. (formerly SO 311)

SO 373. SOCIOLOGY OF RELIGION (3)
PR: Upper division standing. Types, sources and functions of religious behavior. Religious behavior of individuals and groups in relation to other aspects of personality and culture. (formerly SO 453)

SO 401. GOVERNMENTAL WELFARE PROGRAMS (3)
PR: SO 301. Responsibilities and programs of the federal, state and local governments for health and welfare programs.

SO 405. COMMUNITY WELFARE RESOURCES (3)
PR: SO 301. Emphasis upon voluntary programs and their orderly development, planning and coordination of health and welfare services.

SO 407. FIELD WORK AND AGENCY PLACEMENT (3)
PR: SO 301, 401, 405, and senior standing. Supervised observation and experience in selected social welfare agencies and institutions.
SO 415. FOUNDATIONS OF THEORY (3)
PR: SO 201 or CI. Historical development of significant social thought. Consideration of selected systematic theories of sociology. (formerly SO 403)

SO 435. SOCIOLOGY OF SMALL GROUPS (3)
Theory of small group structure, mechanics of interaction, observation of small groups under controlled conditions. Leadership, organization and task performance in small groups.

SO 441. SOCIAL CHANGE (3)
PR: SO 201 or CB 104 or CI. Major theories of social and cultural change, and mechanisms of change in preliterate, modern under-developed and advanced industrial societies.

SO 443. URBAN SOCIOLOGY (3)
PR: SO 201 or CB 104 or CI. The city in modern industrial societies, urban social institutions and processes, sociology in city planning. (formerly SO 355)

SO 461. CRIMINOLOGY (3)
Etiology of criminal behavior, law and law enforcement, crime in the United States, penology and crime prevention. (formerly SO 333)

SO 463. JUVENILE DELINQUENCY (3)
Incidence of the problem, theories of delinquency as a social product, individual factors, family and school influences, patterns of delinquent behavior, methods of legal and para-legal control and treatment.

SO 471. POPULATION POLICY AND ANALYSIS (3)
Problems of population control, national and world-wide population trends and characteristics. (formerly SO 363)

SO 475. INDUSTRIAL SOCIOLOGY (3)
Industrialism in Western and non-Western society; interaction, communication and authority in economic organizations; the factory as a social system; comparisons of industrial organizations with other major organizational types.

SO 481. INDIVIDUAL RESEARCH (1-3)
PR: 12 credits in sociology. Content and method dependent upon interests and competence of the student.

SO 491. SENIOR SEMINAR (3)
For seniors majoring in sociology or other social sciences. Major issues in sociology, stressing theory and research.

SO 531. ADVANCED SOCIAL PSYCHOLOGY (3)
PR: 12 credits in social sciences including 6 in sociology or CI, and graduate standing. Theories of the community and community organization; methodological approaches to community study, substantive community studies, and problems of urban areas. Course focused on Tampa Bay metropolitan area.

SO 551. ANALYSIS (3)
PR: 12 credits in social sciences including 6 in sociology or CI, and graduate standing. Theory of interpersonal relations and interactions; functional analysis, role analysis and socialization in relation to the modern family. The family in relation to other social structures.
Spanish

Faculty: McLean, Micarelli, Neugaard, Porter, Sand, Tatum.

Basic courses listed under Basic Studies.
History of Romance Languages listed under Romance Languages.

SP 301. ADVANCED SPANISH COMPOSITION AND GRAMMAR (3)
To improve student’s ability in writing Spanish, to increase his accuracy in comprehension and use of the grammatical elements; practice in both free and fixed composition.

SP 303. ADVANCED SPANISH CONVERSATION AND PRONUNCIATION (3)
To develop fluency and correctness in spoken Spanish for non-native speakers.

SP 305. SURVEY OF SPANISH LITERATURE (3)
Main currents of Spanish literature from the 12th century through the 18th century.

SP 306. SURVEY OF SPANISH LITERATURE (3)
Main currents of Spanish literature of the 19th and 20th centuries.

SP 309. COMMERCIAL CORRESPONDENCE (2)
Forms and techniques of business letter writing in Spanish, with practical studies of commerce between the United States and Latin America.

SP 311. LATIN-AMERICAN PERIODICALS (3)
Politics, economics and literature from readings in current Latin-American periodicals.

SP 313-314. SURVEY OF LATIN-AMERICAN LITERATURE (3,3)
Literary study with historical, political and cultural background of Latin-America from the 15th century to the present day.

SP 401. MIDDLE AGES AND RENAISSANCE (3)
Spanish literature from its beginnings through the immediate predecessors of Lope de Vega.

SP 423-424. GOLDEN AGE LITERATURE (6)
Development of major genres of 16th and 17th centuries with emphasis on drama, poetry and picaresque novel.

SP 425. CERVANTES (3)
Life and works of Cervantes including his Entremeses, Novelas, Ejemplares and the structure, content and influence of the Don Quixote.

SP 441-442. NINETEENTH CENTURY SPANISH LITERATURE (6)
The Romantic movement, the Costumbrista, Realistic and Naturalistic movements.

SP 445. GENERATION OF 1898 (3)
Historical background of the period; development of literary genres and analyses of themes treated; specific study of the more important writers.

SP 451. TWENTIETH CENTURY SPANISH LITERATURE (3)
Drama, poetry and prose since the generation of 1898.

SP 481. DIRECTED STUDY (Credits vary)
Specialized individual work in an area not covered by a regular course.

SP 491. SENIOR SEMINAR (3)
Study in depth of a specific writer or literary movement as chosen by the instructor. Individual research required of students.
Speech

Faculty: Popovich, chairman; Brady, Kearney, Luoff, O'Hara, Sarett, Scheib, Stelzner, Wagner, Zaitz.

SH 103. SPEECH FOR FOREIGN STUDENTS (0)
A special course for students learning English as a second language. Intensive study and drill in American English pronunciation and listening comprehension. Must be taken in conjunction with CB 100 – English for Foreign Students.

SH 161. PARLIAMENTARY SPEAKING (1)
Principles of parliamentary procedure and practice in conducting and participating in meetings governed by parliamentary rules.

SH 201. FUNDAMENTALS OF SPEECH (3)
The nature and basic principles of speech; emphasis on improving speaking and listening skills common to all forms of oral communication through a variety of experiences in public discourse.

SH 203. VOICE TRAINING AND PHONETICS (3)
Designed to improve vocal quality and expressiveness, articulation, and pronunciation, and to give instruction and practice in using the International Phonetic Alphabet for speech improvement.

SH 241. INTRODUCTION TO BROADCASTING (3)
PR: SH 201 or 203. Introduction to the principles, tools and skills involved in radio and television broadcasting.

SH 311. SPEECH BEHAVIOR AND PROCESSES (3)
PR: SH 203 or CI. Study of the theories of the simple and complex acoustical phenomenon of speech; intensive analysis of the stimulus-feedback variables of speech.

SH 321. FUNDAMENTALS OF ORAL READING (3)
PR: SH 201 or 203. Designed to develop proficiency in the understanding and oral communication of literary and other written materials.

SH 343. BROADCAST SPEECH (3)
PR: SH 203. The development of skills required for effective announcing, acting, newscasting and other speaking before microphone and camera.

SH 345. THE MASS MEDIA AND SOCIETY (3)
The mass communication process and influence of the mass media upon society.

SH 347. RADIO PRODUCTION AND DIRECTION (3)

SH 351. INTRODUCTION TO AUDIOLOGY AND SPEECH PATHOLOGY (3)
PR: SH 203. The development of speech behavior; the nature, causes and principles of treatment of speech and hearing disorders.

SH 361. GROUP DISCUSSION AND CONFERENCE METHODS (3)
PR: SH 201 or CI. Principles and methods of leading and participating in various types of group discussion and conference. Emphasis on reflective thinking and group dynamics.
SH 363. PUBLIC SPEAKING (3)
PR: SH 201 or CI. Study of selected public addresses as aids in speaking extemporaneously and from manuscript. The relationship between public speaking and public policy formulation.

SH 365. PUBLIC DISCUSSION: ARGUMENTATION AND PERSUASION (3)
PR: SH 201. Advanced study of factors involved in changing beliefs and behavior of audiences; Rhetorical analysis of public addresses; the study of effective organization and presentation of public questions through panel discussions, symposia, forums and debate.

SH 367. FORMS OF PUBLIC ADDRESS (3)
PR: SH 363 or 365. An advanced course emphasizing arrangement and style in informative, persuasive and ceremonial public address.

SH 411. EXPERIMENTAL PHONETICS (3)
PR: SH 203. Understanding and application of experimental methods in analyzing speech sounds. Emphasis upon important research findings, instruments and methodologies in the laboratory study of normal speech. Development of phonetic skills of discrimination and reproduction of speech sounds.

SH 421. ORAL INTERPRETATION OF POETRY AND DRAMA (3)
PR: SH 321 or CI. Critical appreciation of poetic and dramatic literature and communication of that appreciation to an audience. The presentation of public programs.

SH 423. LITERARY ADAPTION AND ORAL INTERPRETATION (3)
PR: SH 421. Practice in composition and adaptation of literary materials for oral presentation; an investigation of the more advanced problems in oral interpretation as in Choral Speaking and Chamber Theatre.

SH 441. TELEVISION PRODUCTION AND DIRECTION (3)
PR: SH 241. An introductory course in the techniques of producing and directing television programs.

SH 442. ADVANCED TELEVISION PRODUCTION AND DIRECTION (3)
PR: SH 441. Intensive study and practice of the techniques of television production and direction with emphasis on both creative and administrative aspects.

SH 465. HISTORY AND CRITICISM OF PUBLIC ADDRESS (3)
PR: SH 363 or CI. The principles of rhetorical criticism applied to selected great speeches of Western civilization.

SH 481. DIRECTED STUDIES (Credits Vary)
PR: At least junior standing. Directed study in the theory and practice of oral discourse, with attention to the individual student’s needs and interests.

SH 491. SENIOR SEMINAR: PROBLEMS IN ORAL COMMUNICATION (3)
PR: Senior standing. Exploration of problems in all aspects of speaking and listening. Open to non-majors by consent of the speech faculty. May be repeated once for credit.

SH 493. LANGUAGE AND SPEECH FOR CHILDREN (3)
PR: SH 203 or CI. A diagnostic study of language development; the analysis of speech behavior and oral language needs of children; techniques of speech improvement for children.
### Theatre Arts

Faculty: Whaley, chairman; Clay, Moise, O'Sullivan, R. Wolff.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>TA 101</td>
<td>INTRODUCTION TO THEATRE ARTS (3)</td>
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<tr>
<td></td>
<td>Initial readings and exercises in theatre history, play analysis, performance, and technical theatre.</td>
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<td>TA 111</td>
<td>PANTOMIME (3)</td>
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<td>A performance course investigating the nature of stage action: the actor's inner creative state and the physical means by which he expresses himself.</td>
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<td>TA 221</td>
<td>STAGECRAFT (3)</td>
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<td></td>
<td>Basic design practice, color and drafting as applied to stage and television settings. Practical exercises in construction, painting and mounting of scenery, with participation in performance productions.</td>
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<td>TA 311</td>
<td>ACTING (3)</td>
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<td></td>
<td>PR: TA 111. Exercises in external techniques of line reading, timing of speech and movement, song selling and comedy. Analysis and building of stage characters in plays of a selected dramatist.</td>
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<tr>
<td>TA 312</td>
<td>DIRECTING (3)</td>
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<td></td>
<td>PR: TA 311. Staging the play, including script analysis and breakdown, business, composition, movement, rhythm, rehearsal procedures and general organization. Lecture-lab using illustrative exercises and scene work.</td>
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<td>TA 313</td>
<td>PERFORMANCE PRODUCTION (3)</td>
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<td>PR: TA 311 and 312. Actual production work in which members of the class each assist the director of a play for public performance, teamed with a designer from TA 329.</td>
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<tr>
<td>TA 321</td>
<td>SCENERY AND PROPERTIES (3)</td>
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<td>PR: TA 221. The aesthetics and theories of scenic design with a historical study of the development of the physical theatre and scenery, interior decor and furnishings. Practical design problems.</td>
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<td>TA 322</td>
<td>COSTUME (3)</td>
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<td>Aesthetics, design and techniques of stage costuming. A history of fashion of the Western World and its interpretation as costume for the stage.</td>
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<td>TA 323</td>
<td>STAGE LIGHTING (3)</td>
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<td>Aesthetics, design and techniques of lighting as they relate to play production and theatre architecture.</td>
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<td>TA 329</td>
<td>TECHNICAL PRODUCTION (3)</td>
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<td>PR: TA 321, 322 and 323. Actual production work in which class members assist in design and execution of scenery, costumes, properties, and lighting for public performance, teamed with directors from TA 313. (formerly TA 323)</td>
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<tr>
<td>TA 331</td>
<td>THEATRE LITERATURE OF MYTH AND RITUAL (3)</td>
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<td></td>
<td>Development of dramatic form as it emerged from Greek and Medieval religious rites; concentration on plays of Aeschylus, Sophocles, Euripides, Aristophanes, Menander and the English miracle, mystery and morality plays.</td>
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<tr>
<td>TA 333</td>
<td>LITERATURE OF THE RENAISSANCE THEATRE (3)</td>
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<td></td>
<td>Historical study of Renaissance drama; readings from the plays of Machiavelli, Goldoni, Lope de Vega, Calderon, Marlowe, Jonson, Corneille, Moliere, and Racine.</td>
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TA 335. LITERATURE OF THE EIGHTEENTH 
AND NINETEENTH CENTURIES (3)
Selected plays from the 18th and 19th centuries including works of Dryden, 
Etherege, Wycherley, Congreve, Gay, Goldsmith, Sheridan, Goethe, Schiller, 
Hugo, Scribe, Tyler, and Dunlap.

TA 337. LITERATURE OF THE MODERN 
AND CONTEMPORARY THEATRE (3)
Readings of contemporary American, British, and Continental drama from Ibsen 
to Ionesco.

TA 351. THEATRE MANAGEMENT (3)
A study of commercial, community and educational theatre operation with special 
emphasis on box office management, production costs, contracts, publicity, and 
public relations.

TA 401. DRAMATIC CRITICISM (3)
A study of the aesthetics of drama in performance including basic critical writings 
from Aristotle to the present.

TA 481. DIRECTED STUDIES (1-6)
Independent studies in the various areas of Theatre Arts. Application to do work 
in directed studies must be made, and a course of study with the number of credit 
hours to be allowed will be assigned prior to registration.

Zoology
Faculty: Briggs, chairman; Friedl, Gratzner, Krivanek, Latina, Linton, Meyerriecks, 
Simon, Woolfenden.

Interdisciplinary courses listed under Botany-Zoology.

ZO 202. ANIMAL KINGDOM (4)
PR: BZ 201. A phylogenetic survey of the major animal groups and organ systems, 
accompanied by dissection of selected types. lec-lab.

ZO 271. HUMAN ANATOMY AND PHYSIOLOGY (4)
PR: CB 106 or BZ 201. The structure and function of the human body. lec-lab.

ZO 311. COMPARATIVE VERTEBRATE ANATOMY (4)
PR: ZO 202. Anatomy of selected vertebrate types emphasizing evolutionary 
trends. lec-lab.

ZO 312. COMPARATIVE EMBRYOLOGY (4)
PR: ZO 202; ZO 311 strongly recommended. A comparative study of develop-
mental processes among selected invertebrates and vertebrates with emphasis on 
experimental approaches. lec-lab.

ZO 313. INVERTEBRATE ZOOLOGY (4)
PR: CI. The natural history of the major invertebrate groups, with emphasis on 
local marine forms. Field work will be required. lec-lab. (formerly ZO 411)

ZO 315. INTRODUCTION TO ENTOMOLOGY (3)
PR: BZ 201 or CB 105 or CI. An introduction to general aspects of insect morpho-
logy, development and classification. The identification of local forms will be 
emphasized. lec-lab.
ZO 317. ORNITHOLOGY (4)
PR: BZ 201 or CB 105 or CI. An introduction to bird biology with emphasis on how birds can be used to solve biological problems. lec-lab.

ZO 321. GENERAL ANIMAL PHYSIOLOGY (4)
PR: ZO 202, CH 331 or 303. Introduction to animal physiology at the cellular level. lec-lab.

ZO 413. PARASITOLOGY (4)
PR: ZO 202. Fundamentals of animal parasitology and parasitism; the biology of selected animal parasites including those of major importance to man. lec-lab. (formerly ZO 313)

ZO 415 VERTEBRATE ZOOLOGY (4)
PR: CI. Natural history of the vertebrates. lec-lab.

ZO 416. ICHTHYOLOGY (4)
PR: ZO 311. Systematics of fishes, including major classification, comparative anatomy, embryology, and general distribution. lec-lab.

ZO 421. COMPARATIVE PHYSIOLOGY (4)
PR: ZO 321 or CI. The evolution of physiological mechanisms. lec-lab.

ZO 445. ZOOGEOGRAPHY (3)

ZO 461. ANIMAL BEHAVIOR (4)
PR: CI. Introduction to principles and practices of comparative animal behavior (ethology). Examples for lectures and laboratories drawn from selected local invertebrate and vertebrate groups. lec-lab.

ZO 481. UNDERGRADUATE RESEARCH (1-3)
PR: Senior standing or junior standing with CI. Individual investigation with faculty supervision.

ZO 483. SELECTED TOPICS IN ZOOLOGY (1-4)
PR: CI. Each topic is a program in directed study under supervision of a faculty member.

ZO 491. SEMINAR IN ZOOLOGY (1)
PR: Senior or advanced junior standing or CI. May be repeated once.

ZO 511. EXPERIMENTAL EMBRYOLOGY (4)
PR: ZO 312 and 321. Lectures, laboratories, readings and discussions relating to contemporary advances in the area of biochemistry or development. Experimental techniques will be studied. lec-lab.

ZO 513. ADVANCED INVERTEBRATE ZOOLOGY (4)
PR: CI. The phylogeny, systematics, functional morphology, development and ecology of major invertebrate groups, with emphasis on local forms. Individual laboratory and field work will be required. lec-lab.

ZO 515. ADVANCED ICHTHYOLOGY (4)
PR: CI. Systematic ichthyology with particular reference to the important literature together with a historical introduction. Laboratory devoted to completion of a systematic problem by each student. lec-lab.
ZO 517. ADVANCED ORNITHOLOGY (4)
   PR: ZO 317. Classification and distribution of the birds of the world and a survey of ornithological literature. lec-lab.

ZO 521. PHYSIOLOGICAL ECOLOGY (4)
   PR: CI. Effect of environmental factors on animal function at the cellular and organ system level with emphasis on control mechanisms. lec-lab.

ZO 522. INVERTEBRATE PHYSIOLOGY (4)
   PR: CI. A study of the physiological and metabolic bases of alimentation, transport, excretion, and coordination in selected invertebrate types emphasizing local forms. Student project and field collections required. lec-lab.

ZO 531. ADVANCED GENETICS (4)
   PR: CI. A course in contemporary genetics, with special reference to molecular genetics, genetic fine structure analysis, and control of protein synthesis. lec-lab.

ZO 561. ADVANCED ANIMAL BEHAVIOR (4)
   PR: ZO 461 or CI. Recent advances in comparative animal behavior (ethology). lec-lab.

ZO 581. GRADUATE RESEARCH (1-6)
   PR: CI. Directed research on non-thesis topics. May be repeated.

ZO 583. SELECTED TOPICS IN ZOOLOGY (1-3)
   PR: CI.

ZO 591. GRADUATE SEMINAR IN ZOOLOGY (1)
   PR: Graduate standing. May be repeated.

ZO 599. M.A. THESIS (1-6)
   PR: CI. May be repeated to a maximum of 6 credits.
GLOSSARY

An explanation of terms with which the reader may not be familiar.

Academic Year: Beginning of Trimester I to end of Trimester III; usually considered as September 1 to August 31.

Admission: Acceptance of a student for enrollment.

Audit: To enroll in a course for instruction only. Although regular attendance is customary, no homework or examinations are required, and no grade or credit is recorded. Regular fees apply to audited courses.

College: A unit within the University responsible for providing instruction in a given area of knowledge.

Course: A unit of instruction in a particular subject, usually one trimester in length.

Credit Hour: A unit of academic work. The number of credit hours specified for a course is usually equal to the number of times the class meets each week. Often abbreviated as "Credit" or "Hour".

Curriculum: A group of courses, forming a major field of study, required for a degree or certificate.

Elective: Any of a number of courses from which a student is allowed to select. A "free elective" is one not required in the student's curriculum.

Faculty: Persons in teaching and research; the instructional staff of the University.

Grade Point Ratio (GPR): Ratio of grade points to credit hours attempted; similar to "grade average".

Major: Student's academic area of concentration or field of specialization.

Matriculation: The first registration following admission as a classified student.

Prerequisite: Prior study or authorization required to qualify for enrollment in a course.

Registration: Process of enrolling for classes.

Upper Level: A general term applying to courses and programs offered at the junior and senior levels.

Trimester: Period of instruction into which the academic year is divided (15 weeks).
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163
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Dean of Women (Acting)

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Financial Aids

Physical Education and Intramurals

Student Health Service

Student Organizations

University Center

Information Services

Editor

* Upon the retirement of Dr. Clarence C. Clark on June 30, 1965, Dr. Jack H. Robinson will become chairman of Physical Science.
ACADEMIC STAFF

All members of the University of South Florida’s academic staff, including teaching, research, administrative and professional personnel, are listed below in alphabetical order. The listing includes name, highest degree, institution conferring the degree, and current rank and field as of December 10, 1964.

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INDEX

Major curricula and programs are listed in italics.

Absence, leave of, 19
Academic advising, 23
Academic Calendar, 5
Academic policies and procedures, 18
Academic programs, 45
Academic services, 28
Academic staff, 167
Academic standing, 18
Academic Warning, 18
Accounting, 52
Courses, 88
Accreditation, 9
Adding courses, 19
Administration, University, 163
Admission, 13
of freshmen, 13
of graduate students, 15
of transfer students, 14
Admission to:
College of Business
Administration, 51
College of Education, 55
College of Engineering, 68
College of Liberal Arts, 71
Division of Natural Sciences, 78
Evening Sessions, 15
Graduate study, 84
University, 13
Upper Level, 20
Adult education; see Continuing Education
Advanced placement, 24, 25
Advising, academic, 23
Afro-Asian Studies, 77
Aids, financial, 37
Alumni Association, 11
Anthropology, 75
Courses, 89
Application
for admission, 15
for degree, 21
for graduate study, 84
Area Studies, 77
Art, 73
Courses, 90
Art Education: undergraduate, 59;
graduate, 65
Courses, 106
Astronomy, 79
Courses, 91
Athletics, 43
Audio-Visual Education; see
Library-Audio Visual Education
Audio-Visual Services, 29
Auditing courses, 19
Availability of courses, 22
Bacteriology, 79; see also Botany and Bacteriology
Basic physical education, 49
Basic Studies, 49
Courses, 93
Basic Studies, College of, 48
Biology, secondary education, 64
Bookstore, 37
Botany and Bacteriology, 79
Courses, 95
Botany-Zoology, interdisciplinary courses, 96
Broadcasting, 75
Buildings, University, 9
Business Administration: undergraduate,
graduate, 54
Courses; see specific subject
Business Administration, College of, 51;
admission requirements, 51;
graduation requirements, 52
Business Education, 53, 60
Calendar, academic, 5
Calendar, monthly, 4
Campus, University, 9; map, 183
Cancellation of registration, 19
Cashier, University, 32
Certification, Teacher, 57
Change, notice of, 22
Change of major, 21
Chemistry: Liberal Arts, 80; secondary education, undergraduate, 61;
graduate, 64
Courses, 97
Class standing, 20
Classification, 20
Clubs and organizations, 41
Conduct, student, 39
Continuing Education, 46
Cooperative Education Program, 25
Courses, 100
Correspondence directory, 2
Counseling, student, 23, 24
Course audits, 19
Course descriptions, 87
Course drops, 20
Course prefixes, 87
Credit by examination, 24
Cultural events, 42
Data Processing, 28
Degrees, application for, 21
Deposit fee, 32
Description of courses, 87; see also
specific subject
Developmental Center, 34
Developmental courses, 100
Discipline, student, 39
Disqualification, 19
Distributive Education: undergraduate, 54, 60; graduate, 63
Courses, 106
Divisions, College of Liberal Arts:
   Fine Arts, 72; Language & Literature, 73; Natural Science and Mathematics, 77; Social Sciences, 75
Double major, 21
Dress, student, 39
Dropping courses, 20
Economics: 53, 76
Courses, 101
Education: undergraduate, 57; graduate, 62; see also specialized majors
Education, College of, 55; admission requirements, 55; graduation requirements, 56
Educational Resources, 28
Elementary Education: undergraduate, 58; graduate, 63
Courses, 107
Engineering, 69
Courses, 114
Engineering, College of, 66; admission requirements, 67; degree requirements, 68
English: Liberal Arts, 73; secondary education, undergraduate, 60; graduate, 63
Courses, 116
Evening Sessions, 15, 48
Events, cultural, 42
Examinations, 27
Exchange programs, 22
Expenses, 30
Extra-class life, 40
Extra credit loads, 25
Faculty, 167
Fees, 30
Final Academic Warning, 18
Finance, 53
Courses, 120
Financial aids, 37
Fine Arts, intradivisional courses, 121
Fine Arts, Division of, 72
Florida College exchange program, 22
Florida residency, 31
Food Service, 36
Foreign Languages: liberal arts, 74; secondary education, undergraduate, 61; graduate, 63
Courses, Basic Studies, 93; see also specific languages
Foundation, University, 11
Fraternal societies, 41
French, 74
Courses, 122
Functional courses (Basic Studies), 93
General Administration, courses, 122
General information, 9
Geography, 76
Courses, 123
Geology, 81
Courses, 124
German, 74
Courses, 126
Glossary of terms, 162
Goals, University, 11
Government, student, 40
Grade point, 28
Grades, 27
Grading system, 27
Graduate programs, 84; see also specific programs
Graduate study, 84
Graduation requirements, 21
   College of Business Administration, 52
   College of Education, 56
   College of Engineering, 70
   College of Liberal Arts, 72
Graduation with honors, 22
Graphic Services, 29
Health insurance, 34
Health Service, 33
History, 76
Courses, 127
History of the University, 9
Honors: convocation, 25; graduation, 22
Housing, 35
Humanities, 49
Courses, 129
Independent Study, 24
Instructional Materials Service, 29
Insurance, 34
Intercollegiate athletics, 43
International Studies, 77
Intra-American Exchange Program, 22
Intramural sports, 42
Italian, 74
Courses, 130
Journalism Education, 60
Kindergarten teacher requirements, 58
Language curricula; see foreign languages and/or English
Language Education, 61
Language and Literature, Division of, 73
Language placement, 49
Latin, 74
Courses, 131
Latin-American Studies, 77
Law; see pre-law
Leave of absence, 19
Liberal Arts, College of, 71; admission requirements, 71; graduation requirements, 72
Library, 29
Library-Audio Visual Education, 59
Courses, 109
Linguistics courses, 131
Loans, 37
Major: change of, 21; double, 21
Management, 53
Courses, 132
Maps, campus and area, 183
Marketing, 53
Courses, 133
Master's degree, 84: see also specific programs
Mathematics: Liberal Arts, 81; secondary education, undergraduate, 61; graduate, 63
Courses, 134
Medicine; see pre-medicine
Mentally retarded, teaching the; see special education
Meteorology, 76
Music, 73
Courses, 137
Music Education, undergraduate, 59; graduate, 65
Courses, 110
Natural Science, 83
Natural Sciences, Division of, 77
Newspaper, campus, 41
Oceanography course, 141
Off-campus housing, 36
Office Administration, 53
Courses, 141
Organization, University, 10, 163
Organizations, student, 41
Orientation, 17
Personal property insurance, 34
Philosophy, 74
Courses, 141
Photographic Services, 29
Physical Education: basic requirements, 49; basic courses, 142; education major, see below
Physical Education, professional, 59
Courses, 111
Physics: Liberal Arts, 81; secondary education, undergraduate, 61; graduate, 65
Courses, 144
Placement, of language students, 49
Placement Services, 38
Political Science, 76
Courses 146
Practice teaching, 56
Prefixes, of courses, 87
Pre-Law, 47, 77
Pre-Medicine, 47, 82
Pre-professional programs, 47
Professional laboratory experiences for teachers, 56
Professional Physical Education; see Physical Education, professional
Psychology, 76
Courses, 148
Publications, student, 41
Purposes and goals, University, 11
Radio Station, WUSF, 28
Reading Service, 34
Readmission, 19
Reapplication, 17
Recreational sports, 42
Refund of fees, 31
Religious organizations, 41
Requirements; see specific topic
Research, 29
Research and Development Program in Special Education, 57
Residence halls, 35
Residency, Florida, 31
Rhetoric and Public Address, 75
Romance Language, general course, 150
Russian, 74
Courses, 150
Scholarships, 37
Science Education, undergraduate, 61; graduate, 63
Secondary Education, undergraduate 60; graduate, 63
Selective Service, 22
Service clubs, 42
Social fraternities, 41
Social Science, secondary education, undergraduate, 62; graduate, 65
Social Science courses, interdisciplinary, 151
Social Science, divisional major, 76
Social Sciences, Division of, 75
Sociology, 76
Courses, 152
Sororities, social, 41
Spanish, 74
Courses, 155
Special Education, undergraduate, 59; graduate, 65; Research and Development Program, 57
Courses, 113
Special students, 15, 20
Speech, 75
Courses, 156
Speech and Hearing Service, 34
Sponsored research, 29
Sports, recreational, 42; intercollegiate, 43
Staff, academic, 167
Standing: academic, 18; class, 20
Student Affairs, 33
Student Association, 40
Student conduct, 39
Student health, 33; insurance, 34
Student welfare, 33
Summer counseling, 17
Summer Sessions, 45
Teacher certification, 57
Teacher education curricula, 57
Teaching internship, 56
Television, 28
Theatre Arts, 73
Courses, 158
Transfer students, 14
Transient students, 14
Travel insurance, 34
University Center, 36
University of South Florida Foundation, 11
Upper Level, 20
Visiting the University, 2
Visual Arts, 73
Courses, 90
Waiver, Basic Studies courses, 48
Warning, Academic, 18
Withdrawal, 20
Work-Study; see Cooperative Education
WUSF-FM radio, 28
Yearbook, student, 41
Zoology, 82
Courses, 159
Location:

The Campus:

Key to Campus Map

1. Fine Arts Building
2. University Theatre
3. University Center
4. Life Sciences Building
5. Chemistry Building
6. Physics Building
7. Administration Building
8. Library
9. Argos Residence Complex
10. Andros Residence Complex
11. Power Plant and Maintenance