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## Academic Calendar

 1977-78
## FALL 1977

26 Aug. Fri. Registration-9:00 a.m.-4:30 p.m.
27 Aug. Sat. Registration-Saturday and evening students
29 Aug. Mon. Classes begin-8:10 a.m.

30 Aug. Tues. First day for Late Registration and to add or
5 Sept. Mon. Classes suspended for the day
8 Sept. Thurs. Last day for Late Registration and to add courses; last day for students to drop courses without receiving "W" grades; last day for undergraduate students to file $\mathrm{S} / \mathrm{U}$ or A.E grading options for semester and First Quarter courses
13 Sept. Tues. and

Classes suspended
14 Sept. Wed.
22 Sept. Thurs. Classes suspended for the day
7 Oct. Fri. Last day to file Fall 1977 degree application in Office of the Registrar-Records Service (AD B5)
21 Oct. Fri. Last day for undergraduate students to drop First Quarter Courses
27 Oct. Thurs.
and
First Quarter Final Examination Period
28 Oct. Fri.
28 Oct. Fri. Last day for graduate students to drop courses; last day for undergraduate students to formally initiate withdrawal from the University and still be eligible for readmission for the following Spring
31 Oct. Mon. Second Quarter classes begin-8:10 a.m.; Preregistration for Spring 1978 begins (Colonial Quad)
4 Nov. Fri. Last day for students to add Second Quarter courses; last day for undergraduate students to file S/U or A-E grading options for Second Quarter courses
18 Nov. Fri. Last day to make up Incomplete grades
22 Nov. Tues. Preregistration ends-3:00 p.m.
23 Nov. Wed. Classes suspended--5:00 p.m.
28 Nov. Mon. Classes Resume-8:10 a.m.

1 Dec. Thurs. Last day for dissertation and thesis submission for Fall 1977 graduation
7 Dec. Wed. Last day for undergraduate students to drop courses
13 Dec. Tues. Last day for undergraduate students to drop Second Quarter courses
14 Dec. Wed. Classes end; classes which meet once a week on Thursday and Second Quarter courses continue to meet thru 15 December
15 Dec. Thurs. Reading day
16 Dec. Fri.
through Final Examinations
23 Dec. Fri.

SPRING 1978
23 Jan. Mon. Registration
24 Jan. Tues. Classes begin-8:10 a.m.
25 Jan. Wed. First day for Late Registration and to add or drop courses
3 Feb. Fri. Last day for Late Registration and to add courses; last day for students to drop courses without receiving "W" grades; last day for undergraduate students to file S/U or A-E grading options for semester and Third Quarter courses
6 Feb. Mon. Last day to file Spring 1978 degree application in Office of the Registrar-Records Service (AD B5)
20 Feh. Mon. Classes suspended for the day
10 Mar. Fri. Last day for undergraduate students to drop Third Quarter courses
16 Mar. Thurs.
and Third Quarter Final Examination Period
17 Mar, Fri.
18 Mar. Sat. Classes suspended-5:00 p.m.
24 Mar. Fri. Last day for undergraduate students to formally initiate withdrawal from the University and still be eligible for readmission for the following Summer and/or Fall
27 Mar. Mon. Classes resume-2:10 p.m.; Fourth Quarter classes begin
$\left.\begin{array}{ll}\text { 31 Mar. Fri. } & \begin{array}{l}\text { Last day for graduate students to drop } \\ \text { courses; last day for students to add Fourth } \\ \text { Quarter courses; last day for undergraduate }\end{array} \\ \text { students to file S/U or A.E grading option for }\end{array}\right\}$

State University of New York at Albany does not discriminate on the basis of age, color, creed, disability, marital status, national origin, race, or sex in any of its practices.

Inquiries concerning this policy should be referred to the Affirmative Action Office, Administration Building; or to the Director of the Office for Civil Rights, Department of Health, Education \& Welfare, Washington, DC 20201. Sex discrimination is prohibited by Title $I X$ of the Education Amendments of 1972 Application of Title $I X$ is administered by the University Title IX Coordinator, Affirmative Action Office.

## State University of New York at Albany OFFICES OF ADMINISTRATION

### 1977.78

President (Acting) .............................. Vincent O'Leary
Assistants to the President...............Robert C. Shirley J. Fredericks Volkwein

Vice President for Academic Affairs......David W. Martin
Vice President for Finance and Business.. John A. Hartigan
Assistant Vice President for
Finance and Business.................... Robert A. Stierer
Vice President for Research and
Dean of Graduate Studies.............. Louis R. Salkever
Vice President for University Affairs....... Lewis P. Welch Assistant Vice President for

University Affairs..................... . . Sorrell E. Chesin
Dean for Student Affairs. . . . . . . . . . . . . . .Neil C. Brown, Jr.
Dean of the College of Humanities and
Fine Arts.................................. John W. Shumaker
Dean of the College of Sciences and
Mathematics........................... . . Vincent F. Cowling
Dean of the College of Social and Behavioral Sciences.

Richard Kendall
Dean of the School of Business......... William K. Holstein Dean of the School of Criminal Justice (Acting)
.Donald J. Newman
Dean of the School of Education.............Gilbert D. Moore
Dean of the College of General Studies....Hilton M. Power
Dean of the School of Library and
Information Science (Acting)......... Robert S. Burgess
Dean of the School of Nursing. ........... Marjorie A. Meyer
Dean of the Graduate School of
Public Affairs (Acting)
.L. Gray Cowan
Dean of the School of Social Welfare....Seth W. Spellman
Director of Personnel.......................Leon J. Calhoun, Sr.
Director of Undergraduate Admissions..... Rodney A. Hart
Director of Libraries....................... C. James Schmidt
University Registrar. . . . . . . . . . . . . . . . . . . . . . . Donald Bunis
Affirmative Action Officer........ . Rosemary Kilkenny Sabai

## UNIVERSITY COUNCIL

J. Vanderbilt Straub, Chairman AlbanyKenneth E. Buhrmaster.................................... . . . ScotiaC. Theodore Carlson, III. . . . . . . . . . . . . . . . . . . . . . . . . AlbanyJohn F. Filippone. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Albany
Carl C. Hudson. ..... Niskayuna
Harry O. Lee ..... Troy
Victor K. Looper, Jr Hempstead
Mrs. Marvin Posner. ..... Albany
Wayne E. Wagner ..... Scotia

# State University of New York at Albany 

## GENERAL INFORMATION

State University of New York at Albany is the oldest of four university centers of the state-wide university system. It offers undergraduate and graduate education in a wide variety of fields of study culminating in bachelors', masters', and doctoral degrees.

The University at Albany acknowledges its three traditional obligations-for teaching, for research, and for service to its community.

To fulfill the first of these obligations, the university provides, through teaching and the design of academic programs, opportunities for students to become liberally educated men and women with superior competence in their chosen professions or occupations. This goal is accomplished through the expansion of intellectual horizons, which is the traditional aim of liberal studies, in combination with thorough specialized or professional study. Such preparation presupposes an environment in which the student is encouraged to explore freely and to accept the corequisite responsibility which such freedom affords.

The university's responsibility for research rests on its historic obligation to extend the boundaries of knowledge by all the means at its command. Thus, the university offers the most active assistance and encouragement to its members to carry out scholarly, scientific or creative projects and to make their results widely available.

These traditional activities of the university underlie and support the services it renders to its community. The university shares its interest in intellectual and artistic pursuits, disseminates the results of its research, and encourages its scholars to serve the community through application of their skills and special competencies.

All these responsibilities are mutually reinforcing; accordingly, the university recognizes that in order to discharge effectively any one of its responsibilities, it must be wholeheartedly committed to them all.

## DESCRIPTION

State University of New York at Albany enrolled more than 15,000 students in 1976-77. The University at Albany is committed to a policy of development consistent with the maintenance of the high standards of educational quality which have marked the excellent reputation Albany has enjoyed for more than 130 years.
A new campus, boldly conceived and striking in appearance, is located at the junction of the Northway and the Thruway (Interstate 87 and 90 ). Designed by Edward Durrell Stone, it contains 13 academic buildings on a common platform, all connected by a continuous roof and an enclosed below-level corridor.

Four nearby residence units house students in quadrangles; each contains eight three-story halls surrounding a 23 -story tower. The living units consist of four-, five-, and six-student suites, divided into two or three sleeping rooms, a common study and an adjacent bath. Lounge, recreation, and dining facilities are provided for each unit.

Heart of the academic group is the Lecture Hall Center. Rooms seating $60-500$ students are arranged around a central court. Each is equipped with the latest audio-visual communications devices, connected to the nearby Educational Communication Center. On one end of the lecture complex is the University Library which contains more than 850,000 volumes and seats 3,000 readers at one time.
On the opposite side is the Performing Arts Center with its several theatres, recital halls and rehearsal rooms, in addition to instructional space.

The Fine Arts Building houses one of the outstanding galleries in the Northeast with an exciting series of exhibitions constantly underway.

The Campus Center serves the entire university. Its four floors include a variety of lounges, meeting and activities rooms, a ballroom, cafeteria, snack bar-rathskeller, dining room, bookstore, bowling lanes, information and checkcashing services.

Outdoor recreation facilities include 24 tennis courts, four backetball and six volleyball courts, as well as several grassed multi-purpose playing areas. In the Physical Education Center are a pool, handball and squash courts and areas for team sports.

The university maintains residence, instructional, clinical, and research facilities in the heart of the city. Shuttle buses connect the uptown campus with university buildings and commercial areas downtown.

Facilities for the disabled, including wheel chair ramps and shower facilities, are incorporated in the university. A program expanding these features is well underway.

Located near the junction of the Hudson and Mohawk rivers, Albany offers a variety of cultural and recreational activities. Summer and winter sports are available in the mountains and lakes nearby, and major metropolitan centers are only a few hours away by highway.

## ACCREDITATION

State University of New York at Albany enjoys unusual accreditation privileges. It is chartered by the Board of Regents of New York State. All its degrees and programs are registered and its professional programs fully approved by the Board of Regents through the New York State Education Department.

It is a member of the Council of Graduate Schools in the United States. It is fully accredited by: The Middle States Association of Colleges and Secondary Schools, The National Council for Accreditation of Teacher Education, The Council on Social Work Education, The National League for Nursing, Inc., The American Assembly of Collegiate Schools of Business, The American Chemical Society, The American Library Association, The Medical Library Association, and The American Board on Counseling Services, Inc.

Its graduates are recognized by the American Association of University Women. Many national scholastic honorary organizations are chartered at the university, including Phi Beta Kappa and Sigma Xi.

## LIBRARIES

The University Libraries include the main library housing the bulk of the collection, the Downtown Campus Branch Library in Hawley Hall, and the School of Library and Information Science Library located on the ground floor of the University Library. The main library provides individual student carrels and study rooms for faculty and doctoral research. Books and periodicals resources, organized by the

Library of Congress classification scheme, exceed 900,000 volumes. Current periodical and newspaper subscriptions number 7200 with extensive backfiles. The library, a selective depository for U.S. government publications, also collects documents of local, state, foreign and international governmental agencies, Membership in the Center for Research Libraries provides access to the center's $3,000,000$ volume collection. The University Library is also a member of the Association of Research Libraries.

The main library, except for holidays, is open during reg. ular sessions Monday-Thursday, 7:30 a.m.-12 midnight; Friday, 7:30 a.m. 10:00 p.m.; Saturday, 9:00 a.m. $8: 00$ p.m.; and Sunday, 12 noon 12 midnight. Information on library hours is available by calling 457-8551 at any hour.

As part of reference service, the Information Retrieval Section formulates computer-produced bibliographies using MEDLARS, ERIC BIOSIS Previews and Psychological Abstracts data bases. These data bases, providing nearly 3,300 , 000 monographic and journal citations, are particularly useful for searches requiring an interrelationship between two or among more subjects.

In addition to the Reference Staff, Bibliographic Development provides subject qualified specialists to aid faculty and students in the use of library materials. A Learning Resources Center provides equipment for audio visual packages, media packages for the curriculum laboratory and for the collection of phonograph records. A Film Service Library provides films for on-campus use and for schools in the area. Other available services include tours, orientation sessions and intruction in the techniques of bibliographic research.

## COMPUTING CENTER

The Computing Center is a regional computing facility with responsibility for providing computer resources to the State University of New York at Albany campus and to other participating public and private educational institutions, research labs, and state agencies. The major computer hardware is a UNIVAC 1110, a large, high-speed, general purpose computer which provides research, instructional and administrative data processing support in both an interactive and batch mode.

The center supports a wide range of programming languages as well as a comprehensive library of applications programs and subprograms which are available to the user community. Besides a general purpose time-sharing capability that allows access to most of the currently popular programming languages, high volume time-sharing is provided by a system called RTB. Written at SUNYA, RTB gives access to a rich and responsive BASIC programming language.

User rooms, maintained by the Center, are equipped with RTB terminals, express demand (general purpose time-sharing) terminals, keypunches, and graphics terminals. These facilities are available, except for holidays, Monday-Friday, 8:00 a.m. 12 midnight; and Saturday, 8:00 a.m. -4 p.m.

In addition to the computer hardware and terminals, the Center also maintains a documentation library (CS-21) where materials on how to use the system and services may be referenced or purchased. Student and full-time professional staff consultants are also available to assist faculty, staff, and students with their use of the facilities.

## Undergraduate Study

Undergraduate study is offered through the faculties of many of the separate schools and colleges comprising the university.

The basic undergraduate administrative unit is the University College in which most freshmen, all undeclared majors, and all other undergraduates not yet accepted into restricted majors receive assistance in their academic planning. This unit does not offer courses nor grant degrees but does, among other duties, coordinate undergraduate academic advisement at the university.

The Colleges of Humanities and Fine Arts, Social and Behavioral Sciences, and Sciences and Mathematics provide all undergraduates with study in most of the disciplines within the liberal arts and sciences. Those students wishing to explore any of these areas in depth may become majors within any of these colleges. It joins with the Graduate School of Public Affairs in providing study in political science. It cooperates with the School of Education in offering a program which prepares students for certification as teachers of academic subjects in the secondary schools. Programs in the college lead to the degrees of Bachelor of Arts and Bachelor of Science.

The School of Business offers programs in business administration and accounting. Admission to these programs is competitive, open only to the best-qualified students who have completed 56 or more credits, including specific courses outlined in the School of Business section of this bulletin.

The Graduate School of Public Affairs offers an under. graduate major in political science.

The School of Criminal Justice, primarily a graduate school concerned with all aspects of crime and society's reaction thereto, offers several undergraduate courses.

In addition to providing the professional education for Arts and Science students planning to enter the field of teaching in the secondary schools, the School of Education offers undergraduate majors in Business Education and Speech Pathology and Audiology.

The School of Library and Information Science, although primarily a graduate school, offers several introductory courses on the undergraduate level.

The School of Nursing has developed an integrated fouryear program which leads to a Bachelor of Science degree and prepares students for licensing as registered professional nurses. This program will not be available after the 1978.79 academic year.
The School of Social Welfare offers coursework leading to a Bachelor of Science degree with a major in Social Welfare. The program objective of this course of study is to educate students in becoming familiar with the basic nature of the field of social welfare and various forms of service.

## CROSS-REGISTRATION

Undergraduate students at SUNYA may cross-register for courses at other campuses within this area while enrolled at this institution. Cross-registration enrollments must be in courses not available through the SUNYA curriculum.

Cross-registered students must be full-time undergraduate, matriculated students and at least one half of a student's credits registered during a cross-registered term must be SUNYA courses. No extra tuition charge is assessed, but students are responsible for any fees that may be required by the host institution for a particular course. Credits earned through cross-registration are recorded as transfer credits.

Students seeking more information about the participating institutions and the courses available should contact the Associate Dean of the University College, ULB 36.

## ROTC (Reserve Officers Training Corps)

Albany undergraduate students have the opportunity to enroll in Army, Navy, or Air Force ROTC programs at Siena College and Rensselaer Polytechnic Institute through the Northeastern New York Cross-Registration program. SUNY-Albany does not grant graduation credit for these enrollments. Students should contact the appropriate military affairs offices on the two host campuses for precise information regarding course content, sequencing, and summer expectations. The procedure for obtaining SUNY-Albany approval for these enrollments is the same as for any other cross-registration enrollment as cited in this Bulletin.

## THE VISITING STUDENT PROGRAM

State University of New York at Albany participates in the Visiting Student Program which allows students to study at participating public and private institutions in the state. The purpose of the program is to enable students to take advantage of the extraordinarily rich educational resources represented by the institutions for a session or year.

There are 50 colleges and universities participating in the Visiting Student Program. Further details on the participating schools and procedures for applying may be obtained from University College, ULB 36.

## LEAVE OF ABSENCE

A student at State University of New York at Albany may apply for a leave of absence to study in an approved program at another accredited college or university. The student on leave must have the approval of his academic adviser. Information and applications for leaves of absence may be obtained at the Office of the Dean of Student Affairs.

## STUDENT PROGRESS RECORD

A student's official progress records are maintained in the files of the Office of the University Registrar. A transcript of a student's academic progress to date is sent to each student at the end of each semester of enrollment.

## READMISSION PROCEDURE

A former student who wishes to be readmitted as an undergraduate to any school or college of the university must submit a formal application for readmission. Such an application is available from the Director of Admissions, Room 101, Administration Building, State University of New York at Albany, 1400 Washington Avenue, Albany, New York 12222. When making such a request, one should state the date of, and reason for, the previous withdrawal and the date of proposed re-entry into the university. Any request for an application must be submitted well in advance of the readmission application deadlines noted below.

Readmission is contingent on space availability at the university and/or in a given program for any session or academic year, regardless of the conditions under which a student left the university.

A readmitted student is required to meet the provisions of the university's Undergraduate Bulletin in effect for the class he/she will join upon readmission.

## Readmission Application Deadlines

A student who has not been in attendance at the State University of New York at Albany for at least a session must have a readmission application on file with the Office of Undergraduate Admission no later than two (2) months prior to registration day for the desired session of readmission.

A student who has attended classes in the session immediately preceding the session for which one is applying is ineligible for readmission consideration if the date on which the withdrawal was formally initiated comes after the ninth week of classes. (For example, a student filing a withdrawal form after the ninth week of the spring session is not eligible to be considered for the following summer or fall session.)

Any request for a waiver of the deadlines stated above must be supported with written justification, including certifiable evidence. Waivers will be seriously considered only for reasons of withdrawal which are deemed to be for circumstances beyond the control of the applicant.

In addition to the application deadlines, one must clear all "holds" or obligations to the university at least one (1) month prior to registration day.

## Office of Undergraduate Admissions

Information, materials, and forms dealing with all aspects of admission to the State University of New York at Albany may be secured from the Undergraduate Admissions Office. Information and materials comprehensively cover such areas as the admission process, special groups and programs, fees, schedules and calendars, crediting and placement opportunities for previous learning experiences. Appointments to discuss admissions to and opportunities at the university are available to prospective students and their parents.

## FINANCIAL ASSISTANCE

All matters regarding financial assistance to students of the university should be directed to:

Office of Financial Aids
Administration Building, Room 152
State University of New York at Albany
1400 Washington Avenue
Albany, New York 12222
Phone: (518) 457-8882

## ACADEMIC ADVISEMENT

Academic advisement services for undergraduate students are coordinated by the University College. Advisers assist students to plan and select a course of study which is consistent with the student's abilities, interests, achievements, and future plans. Information about courses, academic study beyond the SUNY-Albany campus, interpretation of the university's academic policies, and referral to other university offices and persons for assistance in psychological counseling, health problems, financial needs, and other specialized resources are part of the services provided by academic advisers.

Students who are "open majors", or who intend to pursue one of the "limited enrollment" majors are advised by the staff of the University College until they are ready to declare a major or until they are accepted by the academic unit that offers their intended major. Various patterns exist as to when a student may be accepted as a major in a specific department. The University College works closely with each of the degree-granting schools and colleges within the university to insure that students have access to trained and knowledgeable persons who can assist students to make responsible decisions as they plan their academic programs.

Specialized advisement opportunities are provided for students who intend to apply to medical, dental, allied health, or law schools. These services are coordinated through the University College and specific information about pre-professional advisement is presented during the orientation programs provided for entering students.

Students are encouraged to meet with their advisers on a regular basis and to review the advisement information materials that are provided to students by the staff of the University College.

## Office of Student Affairs

The Dean for Student Affairs and his staff are responsible for the administration of a large number of student personnel and development services and functions. They provide information and advise in numerous areas of importance to students.

Students seeking information and/or materials about any of the following student personnel and development services should contact the Office of Student Affairs, Neil C. Brown, Dean: participation in student government and the all-university governance process; personal and career advisement and counseling; health services, veterans' services, services for handicapped and other special groups, athletics, extracurricular activities and organizations; housing and board arrangements; student rights and responsibilities, and the rules for the maintenance of order on campus.

## Expenses

## TUITION AND FEES

At the printing of this bulletin, charges for 1977.78 are predicted to be billed at the following rates. They are subject to change. (Tuition and fees are prorated for part-time students.)

All expenses listed below (excluding graduation assessment) are based on one session's cost; items must be doubled for cost of academic year.
A. Tuition-Undergraduate Students:

## 1. New York State Residents

*a. Lower Division-Freshmen and
Sophomores per session ...... $\$ 375.00$
or part-time (under 12 credits). $\$ 25.00$ per credit
*b. Upper Division-Juniors and
Seniors per session .......... $\$ 450.00$
or part-time (under 12 credits). $\$ 30.00$ per credit

## 2. Out-of-State Residents

*a. Lower Division--Freshmen and
Sophomores per session ...... $\$ 600.00$
or part-time (under 12 credits). $\$ 40.00$ per credit
*b. Upper Division-Juniors and
Seniors per session .......... $\$ 750,00$
or part-time (under 12 credits). $\$ 50.00$ per credit
B. Fees:

1. University Fee
a. Full-time $\ldots$..................... $\$ 12.50$
b. Part-time $\ldots \ldots \ldots$.............. $\$ 85$ per credit
2. Health Services Fee
a. Full-time ..................... \$ 8.50
b. Part-time . ..................... 3.00

[^0]C. Student Activity Assessment ..... $\$ 33.00$
D. Books ..... $\$ 75.00$
E. Room in residence hall ..... $\$ 375.00$
F. Board ..... $\$ 365.00$
G. Class Dues ..... \$ 2.00
H. Health and Accident Insurance(See Health Services)Fall session$\$ 30.00$
Spring/summer session ..... $\$ 45.00$
I. Service charge for late registration ..... \$ 10.00
J. Service charge for late payment of fees ..... $\$ 10.00$Invalidated checks received on account will constitutelate payment; the above service charge will be applied.$\mathrm{T}_{0}$ the above costs should be added an estimated cost of$\$ 275$ per session to cover clothing, travel, recreation, andpersonal needs. It is, therefore, suggested that each studentregistered at this university have available for the academicyear the amounts of money indicated below; these amountsrepresent average total cost.
a. New York State Resident
(1) Lower Division ..... \$3,100.00
(2) Upper Division ..... 3,250.00
b. Outof-State Resident
(1) Lower Division ..... 3,650.00
(2) Upper Division ..... $3,850.00$
c. Commuting Students
(1) Lower Division ..... 1,800.00
(2) Upper Division ..... 2,000.00

## REFUNDS

A student withdrawing officially from his courses is entitled to a refund of a proportion of the tuition paid for the course according to the schedule below. The Office of 'Student Accounts, upon receipt of formal notice of withdrawal, automatically refunds tuition due. Saturday of the week in which the first class session occurs shall be deemed the end of the first week for refund purposes.
Last Class Attended During Percent of Tuitjon Refunded
First Week ..... $100 \%$
Second Week ..... $70 \%$
Third Week ..... $50 \%$
Fourth Week ..... $30 \%$
Fifth Week ..... $0 \%$
Example of refund to a student whose program drops below 12 creditaa. Tuition charge for student taking 13 credits. . $\$ 375.00$Student drops a 3 credit course duringfourth week:
b. Tuition charge as a special student for the re-maining 10 credits (10 credits @ $\$ 25.00$ ) . . . . . . 250.00c. Difference between amount originally chargedas a full-time student and reevaluated chargesas a special student:125.00
d. Liability percentage as provided by schedule of tuition during fourth week: ..... $70 \%$
e. Tuition charge: ..... 87.50
f. Refund: ..... $\$ 37.50$

The State University of New York Board of Trustees has established a Student Health Services Fee, effective Fall, 1977 in the amount of $\$ 8.50$ per session for fulltime students and $\$ 3.00$ per session for part-time students. This charge is included in the University Fee
billing on regular session student invoices.

## Undergraduate Academic Regulations

Within the governance framework of this university, the Undergraduate Academic Council recommends policy concerning undergraduate academic programs and regulations. To assist in academic governance, individual schools and colleges have collateral committees which can recommend academic policy to this council and review individual appellate cases. It is the responsibility of each undergraduate student to be knowledgeable concerning pertinent academic policy. The university encourages each student to accept the widest responsibility for his academic program.

University, college, school and department academic regulations are subject to appeal. A student who wishes to be an exception to an existing regulation should, in the case of a college, school or department regulation, consult with the head of the unit in question for the approved procedure for submitting an appeal. In the case of a University regulation, the Office of the Vice President for Academic Affairs should be consulted.

## I. CLASSIFICATION OF STUDENTS

Students are classified by the University Registrar on the basis of graduation credits, as follows:

Freshman .......................... . Fewer than 24
Sophomore ....................... . 24 -55
Junior .............................. . . 56-87
Senior .............................. 88 or more
Most students are enrolled in University College during their freshman year. When a student has been accepted as a major he is enrolled in the school or college offering study in the desired major field.* In line with policy developed by the Committee on Academic Standing of the Undergraduate Academic Council, a particular department, school, or college within the university may permit a student to enroll who has not fulfilled the minimum standards of enrollment. Special conditions of enrollment may be required by individual departments, schools, or colleges.

[^1]
## II. GRADING**

The normative grading pattern is "A-E." Students may select up to 30 credits of courses below the 500 level graded on an "S/U" (satisfactory/unsatisfactory) basis, six of which may be in the major, second field, or combination thereof. Courses for which a student selects " $\mathrm{S} / \mathrm{U}$ " grading are so designated on the aeademic record. In addition, some courses listed in the Schedule of Classes by a department are designated for " $\mathrm{S} / \mathrm{U}$ " grading; these departmentally designated "S/U" graded courses are in addition to the 30 credits of " $\mathrm{S} / \mathrm{U}$ " courses a student may select.

The grade of " $A$ " indicates excellent achievement and the grades of " B ", " C ", " D ", and " E " indicate achievement in descending order of accomplishment. The grade of " D " can only be used to fulfill graduation requirements if it is balanced as defined in section XIV, B of these regulations. The grade of " $E$ " is a failing grade and cannot be used to fulfill graduation requirements.

The grade of " $S$ " indicates satisfactory achievement at least at the level necessary for an undergraduate degree and is acceptable to fulfill graduation requirements. The grade of " U " is unsatisfactory and is not acceptable to fulfill graduation requirements.

Additionally, the following grades may be assigned:
I Incomplete. No graduation credit. A temporary grade assigned by the instructor only when the student has nearly completed his course requirements but because of circumstances beyond the student's control the work is not completed. The incomplete grade must be resolved prior to one month before the end of the term following that in which the incomplete is received. Failure to satisfy the deadline for resolving the grade of "I" will result in the appropriate academic grade being assigned by the instructor.

## N Non-credit.

[^2]W Withdrawn. Not an academic grade. (See the section on dropping a course and withdrawal from the University.)
Z Administrative penalty grade. No graduation credit. The grade was assigned before August 20, 1973, for failure to complete an " I " or when no other grade was appropriate.

## III. ACADEMIC RETENTION STANDARDS

The following minimum retention standards apply to all matriculated, undergraduate students. These standards take effect after the student has been admitted to SUNYA as a matriculated student. Semesters and credits earned by a transfer student before matriculation and by a non-matriculated student at SUNYA count toward meeting graduation requirements, but do not count for academic retention purposes.
A. Academic Dismissal

1. A full-time matriculated student is required to complete for graduation credit:
a) at least three (3) graduation credits in each semester
b) the number of credits as specified in the Academic Retention Chart under "Academic Dismissal" for the corresponding number of fulltime semesters since matriculation at SUNYA.
Failure to meet either of these requirements by the last day of the semester will result in the student being academically dismissed from SUNYA. The student's academic record will have the words "Registration Terminated" placed on the record.
2. A part-time matriculated student is required to complete three (3) graduation credits in each semester of registration at SUNYA, unless registered for fewer than three (3) credits, in which case the student is required to complete for graduation credit, by the last day of the semester, all credits for which registered in that semester. Failure to meet this requirement by the last day of the semester will result in the student academically dismissed from SUNYA and the words "Registration Terminated" will be placed on the record.
3. A student who has been academically dismissed shall have the right to seek reinstatement to the university by submitting a written petition to the appropriate committee on academic standing.
B. Academic Probation

A full-time matriculated student is required to complete for graduation credit the number of credits in the Academic Retention Chart under "Academic Probation" for the corresponding number of full-time semesters since matriculation at SUNYA.
Failure to meet this standard by the last day of the semester will result in the student being placed on Academic Probation for the next semester.
C. Academic Retention Chart

Since Matriculation at SUNYA

| If at the End of Full.Time | Academio Dismissal | Academic Probation |
| :---: | :---: | :---: |
| Semester \# | If Less Than | If Less Than |
| 1 | 6 graduation | 9 graduation |
|  | credits | credits |
| 2 | 18 | 24 |
| 3 | 30 | 36 |
| 4 | 42 | 48 |
| 5 | 54 | 60 |
| 6 | 66 | 72 |
| 7 | 78 | 84 |
| 8 | 92 | 98 |
| 9 | 106 | 112 |
| 10 | 120 |  |

D. Students admitted to SUNYA through the Educational Opportunities Program (EOP) shall have the following Academic Retention Standards.

1. A full-time matriculated EOP student is required to complete for graduation credit:
a) at least three (3) graduation credits in each semester (except for full-time semester \#1, in which a minimum of three (3) credits in university and/or EOP courses must be satisfactorily completed).
b) the number of credits as specified in the EOP Academic Retention Chart under "Academic Dismissal" for the corresponding number of full-time semesters since matriculation at SUNYA.

Failure to meet either of these conditions by the last day of the semester will result in the student being academically dismissed from SUNYA and the words "Registration Terminated" will be placed on the record.
2. An EOP student granted a waiver from full-time study by the President or his designee shall meet requirements for retention as specified in section tion A. 2 of these regulations.
3. An EOP student who has been academically dismissed shall have the right to seek reinstatement to the university by submitting a written petition to the appropriate committee on academic standing.
4. Academic Retention Chart
a) Freshman admittees begin at "Full-Time Semester \#1."
b) Transfer admittees with less than two mandated developmental courses within their first semester shall begin at "Full-Time Semester \#2."
c) Transfer admittees with two or more mandated developmental courses within their first semester shall begin at "Full-Time Semester \#1."

Since Matriculation at SUNYA
If at the End of Full-Time

Semester \#
1


3
4
5
6
7
8
9
10
11
12

Academic Dissmissal If Less Than
3 graduation and/or developmental credits
6 graduation credits 15
24
36
48
60
72
84
96
108
120

## IV. CREDIT LOAD

A. A full-time student is defined as one registered for a minimum of 12 credits at the close of the last day to add a course within semester as defined by the academic calendar. Those carrying fewer credits are classified as part-time students.
B. A normal semester load is $\mathbf{1 5}$ credits.
C. The maximum number of credits for which a student registers in a semester is an individual matter. The maximum credit load for a student in a given semester is determined with the advice and consent of that student's academic adviser.
It is incumbent upon the student to present a rationale to his academic adviser for registration for more than 15 credits.

## V. COURSE ENROLLMENT

A. A student ordinarily enrolls in courses at the level appropriate to his class.
B. Individual departments have the authority to require a " C " or " S " grade in courses that are prerequisite for advanced courses in that area.
C. Graduate-Undergraduate Study

Seniors of high academic standing in the university may receive graduate credit for graduate courses taken in excess of undergraduate requirements in the last session of their senior year provided not more than six credits are needed to complete the student's undergraduate program. Permission of the Dean of Graduate Studies is required and must be obtained in advance of registration to receive such credit. A senior who is permitted to take courses for graduate credit in his last session also must make formal application for admission to a graduate program and be accepted as a graduate student before registering for study in the final session.
D. Graduate Courses-Undergraduate Credit

500 level course enrollment: A senior with a superior academic record may register for a 500 level course for undergraduate credit with the approval of the
major department chairman and the course instructor, 600 level course enrollment: In exceptional circumstances, a senior may be authorized to register for a 600 level graduate course provided he has completed most of the upper division undergraduate and other courses essential to his major and requires a graduate course to strengthen it. To qualify for such enrollment the senior must have a superior record, particularly in his major field. To register for a 600 level course, the student must have the approval of his adviser and obtain the written permission of his department chairman and the instructor offering the course. The department chairman should arrange for copies of these permissions to be distributed to the persons involved and filed in the student's official folder.

## VI. AUDITING COURSES

There are two categories of audit. In the informal audit the student visits courses without tuition, fees, examinations, grading, or credit and no record is maintained. In the formal audit the student pays tuition and fees, and the course is entered on the transcript of the student with the grade of " $N$ " (non-credit).

## VII. TRANSFER OF CREDIT

A degree candidate wishing to take courses at other institutions for credit toward a degree at this university must have prior approval in writing from his academic adviser. Such written approval must be filed with the Office of the University Registrar and an official transcript of work satisfactorily completed at another institution must be received by that office before credit can be awarded.

## VIII. ATTENDANCE

Class attendance is a matter between the instructor and the student. The instructor is obliged to announce and interpret specific attendance policies to his class at the beginning of the course.

## IX. RE-EXAMINATION

A student who fails a course may, under special circumstances and with approval of the instructor, be granted a re-examination.

## X. GRIEVANCE PROCEDURES

Each academic unit of SUNY-Albany has grievance procedures whereby students can have complaints against an instructor investigated. Students should contact the office of the dean of the academic unit involved if further infor. mation is desired.
XI. PROGRAM CHANGES (Consult the Calendar in this Bulletin for applicable dates mentioned in this section.)
A. Adding a Course

A course may be added to a student's program with the consent of the student's adviser up to that day specified for the session in the academic calendar. For Fall and Spring semester, the period to add a course begins with the second day of classes and extends to and includes the tenth calendar day following the beginning of classes.
B. Grading Choice

Students may change their grading choice ("A.E" or "S/U") for courses not departmentally designated for "S/U" grading during the time designated for adding courses. Changes in grading selection cannot be authorized beyond the day specified as the last day to add a course.
C. Dropping a Course

A student may initiate a course withdrawal and receive a " $W$ " by filing the appropriate form with the Registrar at any time after the last day to add a course and on or before the last day to drop.
Normally, a course dropped on or before the last day to add will be deleted from the student record.
The instructor responsible for the course may assign a "W" where there is no evidence of attendance since the last day to add.

A student who attends a course after the last day to add, and does not complete the drop procedure, is assigned the appropriate academic grade by the instructor responsible for the course.
D. Withdrawal from the University. (See also the section on readmission.)

1. A student dropping an entire course load for a session must process a voluntary withdrawal form with the Office of the Dean of Student Affairs.
2. A student who withdraws from the university without having attended any course meetings for that session has the courses for that session deleted from the academic record.
3. A student whose last date of course attendance is on or before the last day to drop courses shall receive the grade of "W" for each registered course.
4. A student who withdraws from the university after the last day to drop courses for that semester will receive the appropriate academic grade assigned by the instructor for each course.
5. A matriculated student who does not register, or registers but does not attend any classes, for a given semester will be withdrawn from the university.
E. Students seeking exceptions to these policies may petition the Undergraduate Academic Council. Information may be obtained from the University College or the Office of Academic Affairs.

## XII. ACADEMIC AVERAGE

The academic average is computed using all course credits graded and weighted as follows: A-4, B-3, C-2, D-1, and E-0. The average does not include courses with the grades of S, U, I, W, or N.

## XIII. DEAN'S LIST

A student shall be placed on the Dean's List if that student has met the following criteria:

1. The student must have completed at SUNYA a minimum of 15 graduation credits by the last day of the semester; that is 15 credits with grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, or S .
2. The student must have completed a minimum of 12 credits graded A, B, C, D, or E by the last day of the semester.
3. The student must have an average of 3.00 or better in courses for which the grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, or E were received.

## XIV. GRADUATION REQUIREMENTS

A. Requirements for the Bachelor's Degree are found in the next section of this bulletin.
B. Credit-Grade Requirements

1. Credits

A student must earn a minimum of 120 acceptable graduation credits to be eligible for graduation from the university.
Acceptable graduation credit is:
a. Credit accepted by transfer.
b. Credit earned through approved proficiency examinations.
c. Credit completed with the grades of "A", " $B$ ", "C", or "S."
d. Credit completed with the grade of "D" only if it is balanced by credit with the grades of "A" or " $B$ ". One credit earned with the grade of " $B$ " balances one credit earned with the grade of " $D$ " and one credit earned with the grade of "A" balances two credits with the grade of "D".
2. Major and Second Field

A student may fulfill the requirements of a major or a second field or a combined major and second field by earning graduation credit as defined above except that credit with the grade of " $D$ " must be balanced as follows:
a. Credit with the grade of " $D$ " may be used to fulfill the requirements of a major only if balanced by credit with grades of "A" or "B" earned within the major.
b. Credit with the grade of "D" may be used to fulfill the requirements of a second field only if balanced by credit with grades of "A" or " $B$ " earned within the second field.
c. Credit with the grade of "D" may be used to fulfill the requirements of a combined major and second field only if balanced by credit with grades of "A" or " $B$ " earned within the combined major and second field.
C. Residence

The university requires a degree candidate to earn his/her last 30 credits in courses for which he or she registered on this campus.
D. Degree Application

Degree requirements may be completed during any session; the degree will be conferred at the following May commencement. The student must file a degree application with the Office of the University Registrar in accordance with the date specified in the official university calendar. Failure to do so will necessitate refiling for the degree at the end of the following session. A student who has properly applied for the degree will be notified in writing by the Office of the University Registrar if he will not meet degree requirements that semester.
E. Degree with Honors

1. University-wide honors are conferred at graduation. A student will be graduated: Cum Laude with an average equal to or greater than 3.00 but less than 3.40; Magna Cum Laude with an average equal to or greater than 3.40 , but less than 3.70 ; Summa Cum Laude with an average equal to or greater than 3.70. For graduation with honors, a student must have completed a minimum of 56 credits at this university graded on the "A-E" scale. Petitions for waiver of these requirements should be addressed to the Undergraduate Academic Council.
2. A student who completes an Honors Program may receive a special Honors Certificate upon the recommendation of his major department.

## Requirements for the Bachelor's Degree

The university awards the degree of Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) to those candidates who have completed an approved sequence of courses and study totaling a minimum of 120 credits and who, by vote of the faculty, are certified as having fulfilled all degree requirements.

## A. BACHELOR OF ARTS

1. The Bachelor of Arts degree requires a minimum of 120 credits.
2. The Bachelor of Arts degree requires at least 90 credits in the liberal arts and sciences.
3. The Bachelor of Arts degree requires $30-36$ credits in a major which has been registered with the Education Department of the State of New York.
a. A major in one of the following:

General Program
Arts and Sciences: African and Afro-American Studies, Anthropology, Art, Biology, Economics, English, French, Gcography, German, Greek, Greek and Roman Civilization, History, InterAmerican Studies, Interdisciplinary Studies (such as Chinese Studies, Asian Studies, Linguistics, Russian and East European Studies), Italian, Judaic Studies, Latin, Mathematics, Music, Philosophy, Political Science, Psychology, Puerto Rican Studies, Rhetoric and Communication, Russian, Sociology, Spanish, Theatre.
Teacher Education: English, French, German, History, Italian, Latin, Mathematics, Russian, Social Studies, Spanish.
4. The Bachelor of Arts degree requires 18-24 credits in a second field which is defined as including at least six credits of advanced course work (usually courses numbered 300 or above). The second field may be closely related to, be supportive of, or be totally independent of the major, but the second field must have coherence; it must be unified and make sense.
5. The Bachelor of Arts degree requires 21 credits in professional courses for the candidate desiring State certification in Education.

## 1. BACHELOR OF SCIENCE

l. The Bachelor of Science degree requires a minimum of 120 credits.
2. The Bachelor of Science degree requires at least 60 credits in the liberal arts and sciences.
3. The Bachelor of Science degree requires $30-42$ credits in a major which has been registered with the Education Department of the State of New York.
a. A major in one of the following

## General Program:

Arts and Sciences: Atmospheric Science, Biology, Chemistry, Economics, Geology, Interdisciplinary Studies (Computer Science and Applied Mathematics), Mathematics, Physics, Medical Technology.
School of Business: Business Administration or Accounting.
School of Education: Speech Pathology and Audiology (not available after the 1978-79 academic year).
School of Nursing: Nursing (not available after the 1978-79 academic year).
School of Social Welfare: Social Welfare,
Teacher Education Program;
Arts and Sciences: Biology, Chemistry, Earth Science, Mathematics Physics.
School of Education: Business Education or Speech Pathology and Audiology.
4. The Bachelor of Science degree requires $18-24$ credits in a second field which is defined as including at least six credits of advanced course work (usually courses numbered 300 or above). The second field may be closely related to, be supportive of, or be totally independent of the major, but the second field must have coherence; it must be unified and make sense. The second field requirements may be combined with the major requirements, but the total not to exceed 66 credits.
5. The Bachelor of Science degree requires 21 credits in professional courses for the candidate desiring State certification in Education.

## C. THE SECOND FIELD

1. In addition to second fields available in the fields represented by the majors noted above, students may complete second fields in Computer Science, Education, Journalism, Peace Studies, Women's Studies and Urban Studies.
2. Moreover, within the parameters noted in A. 4 and B. 4 above, a student may develop and complete an interdepartmental second field.

## D. THE DOUBLE MAJOR

Students who elect to declare a major in two departments may do so with the provision that the faculty of the school or college which houses the department from which the student seeks and receives advisement shall recommend the student for his degree. Both majors that the student has chosen and completed successfully will then appear on the student's "Undergraduate Record."

## Credit and Course Designations

Information concerning specific programs of study may be found by referring to the sections in this bulletin headed College of Humanities and Fine Arts; College of Sciences and Mathematics; and College of Social and Behavioral Sciences; School of Business; School of Criminal Justice; School of Education; College of General Studies; School of Library and Information Science; School of Nursing; Graduate School of Public Affairs; School of Social Welfare.

## 1. UNIT OF ACADEMIC CREDIT

Generally, one credit represents the equivalent of one hour of lecture or recitation or at least two hours of laboratory work each week for one session or the equivalent in honors study.

The number following each course title [e.g. (3)] indicates the credits offered for that course.

## II. SIGNIFICANCE OF THE COURSE NUMBER

Each course offered by the university is assigned a designation and a number according to a plan which is outlined below. The specific course designation and number appears in the bulletin directly in front of the course title,

Each course designation consists of three separate units: (1) the school designation; (2) the subject or departmental designation; and, (3) the course number.

1. The school or college offering a course is identified by a single letter as noted below:

A-College of Humanities and Fine Arts, College of Sciences and Mathematics, and College of Social and Behavioral Sciences
B-School of Business
C-School of Criminal Justice
E-School of Education
G-College of General Studies
L-School of Library and Information Science
N-School of Nursing
P-Graduate School of Public Affairs
R-Regional Cross-Registration
S-School of Social Welfare

All courses listed in the section of a particular school are understood to be preceded by the letter of the school, unless otherwise noted. Example: Eng 100, offered in the College of Humanities and Fine Arts is understood to be preceded by (A Eng 100); Eng 490, offered in the School of Education is understood to be preceded by E (E Eng 490).
2. The subject or departmental designation consists of three letters representing an abbreviation for the subject or the department offering the course. Following is a listing of designations assigned by the various schools and colleges:

College of Humanities and Fine Arts (A)
Art History, Arh; Art (Studio), Art; Arts and Sciences, A \& S; Chinese, Chi; Classical Archaeology, Cla; English, Eng; French, Fre; German, Ger; Ancient Greek, Clg; Greek \& Roman Civilization, Cle; Modern Greek, Cmg; Hebrew, Heb; Humanities, Hum; Inter-American Studies; Ias; Italian, Ita; Journalism, Jrl; Judaic Studies, Jst; Latin, Cll; Linguistics, Lin; Music, Mus; Philosophy, Phi; Polish, Pol; Portuguese, Por; Rhetoric and Communication, Rco; Russian, Rus; Russian \& East European Studies, Res; Slavic Languages and Literatures, Sla; Spanish, Spn; Theatre, Thr; Women's Studies, Wss; Yiddish, Yid.

## College of Science and Mathematics (A)

Arts \& Sciences, A \& S; Atmospheric Sciences, Atm; Biological Sciences, Bio; Chemistry, Chm; Computer Science, Csi; Geological Sciences, Geo; Mathematics, Mat; Physics, Phy.

## College of Social and Behavioral Sciences (A)

African/Afro-American Studies, Aas; Anthropology, Ant; Arts \& Sciences, A \& S; Economics, Eco; Geography, Gog; History, His; Inter-American Studies, Ias; Linguistics, Lin; Psychology, Psy; Puerto Rican Studies, Prs; Social Studies, Sst; Sociology, Soc.

## School of Business (B)

Accounting, Acc; Business Services, Bus; Finance, Fin; Law, Law; Management, Mgt; Management Science, Msi; Marketing, Mkt.

Crj

## School of Education (E)

Business Education, Bus; Comparative Education, Com; Curriculum and Instruction, C\&I; Education, Edu; Educational Administration, Adm; Educational Communications, Cmu; English Education, Eng; Foundations of Education, Fdn; French, Fre; German, Ger; Counseling and Personnel, Cps; Health, Che; History of Education, His; Italian, Ita; Latin Education, Lat; Mathematics Education, Mat; Teaching Foreign Languages, Flt; Philosophy of Education, Phl; Physical Education, Pec; Psychology, Psy; Reading, Rdg; Russian, Rus; Science Education, Sci; Social Studies Education, Sst; Sociology of Education, Soc; Spanish, Spn; Speech Pathology and Audiology, Sau; Teacher Education, Tch; Teaching English as a Second Language, Esl; Traffic and Safety Education, Tsp.

College of General Studles (G)
International Programs, Ins

School of Library and Information Science (L)
Lib

School of Nursing (N)
Nursing, Nur; Nursing Science, Nsc

Graduate School of Public Affairs (P)
Political Economy, Pec; Political Science, Pos; Public Administration, Pad; Public Affairs, Paf.

School of Social Welfare (S)
Ssw

## 3. Course Number

The course number is a three-digit number reflecting the level at which the course is taught and the specific number assigned to the course by the department offering the course. Some courses are given the designation $a$ or $b$ following the number, with $a$ being assigned for the first session and $b$ for the second. The level designations are noted below:
000-099 Non-credit courses
100-299 Lower division courses with 200-299 primarily for sophomores.
300-499 Upper division course with 400-499 primarily for seniors.

500-699 First year graduate courses. Open to seniors with appropriate background, and special permission. See section V,D.
700-899 Advanced graduate courses ordinarily beyond the master's degree.

## Colleges of Arts and Sciences

Three discrete colleges provide instruction and research in the traditional areas of the Arts and Sciences. They are the College of Humanities and Fine Arts, the College of Sciences and Mathematics, and the College of Social and Behavioral Sciences.

They offer the undergraduate degree of Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) to those candidates who complete an approved sequence of courses and study totaling 120 credits and who, by vote of the faculty, are certified as having fulfilled all degree requirements. To complete a major in the colleges of arts and sciences, a minimum of 12 credits of upper division courses ( 300 and 400 level) must be completed in the major in residence at State University of New York at Albany.

All undergraduate courses offered by the above three colleges except Bio 400a and $b$ are defined as liberal arts and sciences courses for purposes of degree requirements for the B.A. and B.S. degrees.

## University Courses

The University offers several courses designed to facilitate serious independent study and participation in special projects which cannot be undertaken through regular course work. Students interested in the courses described in this section may obtain, further information and application forms from the offices of the college deans.

Credits earned through these courses may be apportioned in whole or in part as major credit, second field credit, or elective credit, as appropriate, and as determined by the student's major department.

## INDEPENDENT STUDY

## A\&S 300 Independent Study ( $1-4$ credits, as approved)

An independent study course with variable credit. Contingent upon the consent of an instructor willing to supervise the study. May be repeated but each registration must be for an approved project. Approval of the appropriate committee is required.

## A\&S 301 Independent Study ( $5-15$ credits, as approved)

An independent study course designed to provide larger blocks of time for independent study projects. Contingent upon the consent of an instructor willing to supervise the study. May be repeated, but each registration must be for an approved project. Approval of the approriate committee is required.

## SPECIAL PROJECTS

## A\&S 390 Special Projects (1-15 credits, as approved)

Special projects involving community activity and collateral study. Contingent upon the consent of an instructor willing to supervise the study. May be repeated, but each registration must be for an approved project. Approval of the appropriate committee is required.

## EXPERIMENTAL PROGRAMS

## A\&S 350 Experimental Programs (3)

Experimental class, the subject varying with instructors and the term offered. See special announcements of courses to be offered under this heading. Approval of the appropriate committee is required.

## Interdisciplinary Majors

The University provides the opportunity for highly motivated students with special educational goals to pursue a course of study in an area not provided for by the current offerings of the university. An interdisciplinary program will usually include course work in several departments as well as independent study in an interdisciplinary field taken under faculty guidance.

Faculty-initiated interdisciplinary majors have thus far been approved in the following areas: Asian Studies, Chinese Studies, Computer Science and Applied Mathematics, Linguistics, and Russian and East European Studies. Descriptions of these programs appear in the bulletin in appropriate alphabetical sequence.

Student-initiated interdisciplinary majors offer qualified students an opportunity to design an individual course of study. Individual programs should constitute a well-integrated whole, but need not be in a conventional academic discipline. Students interested in an interdisciplinary major or one of the interdisciplinary second fields described below, may obtain further information and application forms from the offices of the college deans.

# Interdisciplinary Second Fields 

(Majors Not Available)

## ENVIRONMENTAL STUDIES

The university offers an interdisciplinary second field in environmental studies. Students electing to enroll in this second field receive preparation which will assist them in graduate-level work in environmental study or a career in government, industry, or commerce. The program puts an emphasis on the interdisciplinary nature of human-environmental relationships. The courses in this second field are regular departmental offerings in the natural and social sciences and the humanities. Students must take a minimum of 18 credits, including nine at the 300 level or above, from the following courses: Art 352, Atm 207, Bio 202, Bio 340, Chm 301, Eco 182, Eco 481, Geo 105, Gog 310, Paf 150, Paf 300 a and b, and Phy 302.

## JOURNALISM

The interdisciplinary second field in journalism, consisting of courses listed under the 'Journalism' subject designation ( $\mathrm{Jrl}^{11}$ ) and some offered by various departments, is designed to combine training in journalistic writing and some practical work in the media. with a critical study of the role of the media in society. It is intended primarily as preparation for journalistic careers, but its courses are open to other students. Students wishing to take a second field in journalism will need a minimum of 18 credits in a variety of courses, making their selections to form a coherent body of study adapted to their needs and interests. At least six credits must be in advanced courses (courses with prerequisites or at the 300 level or above). There is only one special requirement for the second field in journalism, skill in writing, to be demonstrated by the end of the junior year by submission of a substantial sample of the student's writing to the academic adviser and the director of the journalism program. The following core courses are offered:

Jrl 300 Introduction to Journalism (3)
Exploration of what journalism is, in the work of the press and television and radio. Readings in journalism, discussion with practicing journalists, journalistic writing and writing about journalism. Prerequisite: consent of instructor.

## Eng 301 Expository Writing (3)

## Eng 308 Journalistic Writing (3)

## Jrl 365 Journalism: Special Topics (3)

Study of special problems in journalism. May be taken more than once with different content.
Prerequisite: consent of instructor.

## Jrl 397 Independent Study in Journalism (1-4)

A project in journalistic investigation and writing or a study of some specific body of journalism, to be sponsored by a faculty member and approved by the director of journalism. May be taken more than once.

## Jrl 400 Internship in Journalism (3-9)

For senior students who will work part time for a term with a newspaper or a television or radio station in the area and coordinate their work with the director of the journalism program. Prerequisite: consent of instructor.

Other courses for the second field may be selected from offerings of various departments, such as Pos 365 Government and the Mass Media, Pos 321 State and Local Government, Pos 426b American Constitutional Law, Soc 255 Mass Media, Soc 281 Criminology, Soc 460 Human Communication, Rco 214 Communication Through Mass Media, Rco 238 Rhetoric of Mass Media, Rco 265 Introduction to Communication Theory, Rco 303 Advanced Speech Composition, Rco 336 Studies in Contempory Public Address: The Rhetoric of the New Journalism, and independent studies in various departments when the subject involves journalism.

Students with particular interests may take other courses to prepare them for a specialized branch of journalism. Courses in this category include Eco 355 Public Finance, Eco 470 History of the Labor Movement, and relevant courses in environmental studies, the physical sciences, art, music, theatre, and cinema. No more than two courses in this category should be included in the minimum 18 credits for the second field in journalism.

## PEACE STUDIES

The second field of Peace Studies has been established to press the development of interdisciplinary education and reseearch in the problems of violence in international and domestic affairs and the possibilities of non-violent conflict resolution in both spheres. The courses in the field are regular departmental offerings in the physical, biological, social, and behavioral sciences. The basic course is the Peace Studies Forum offered by the Graduate School of Public Affairs. For further information, contact Professor Lester Hawkins in the Graduate School of Public Affairs.

## URBAN AFFAIRS

The interdepartmental second field in urban affairs has a two-fold purpose: (l) to provide an understanding of the development of cities and contemporary urban civilization, and (2) to provide background for those interested in pursuing graduate studies in areas relating to the urban milieu. The courses offered by the disciplines concerned with urban topics range widely. It is therefore recommended that students taking a second field in urban affairs include work from at least three departments. Urban courses are offered in the departments of African and Afro-American Studies, Anthropology, Art, Economics, Environmental Studies, Geography, History, Physics, Political Science, Puerto Rican Studies, and Sociology. Current course offerings in the urban affairs second field are listed in the Schedule of Classes. A brochure describing the second field and the list of courses available may be obtained in the office of the Secretary of the Urban Affairs Committee, Graduate School of Public Affairs, Room 904, Mohawk Tower. A roster of the Urban Affairs Committee is also available in this office. Members of the committee, including the chairman, Professor Mark LaGory, Room 603-3, Mohawk Tower, may be consulted for guidance in selecting urban affairs courses.

## WOMEN'S STUDIES

The university offers an interdisciplinary second field in Women's Studies. Wss 210 Introduction to Feminism and Wss 220 Perspectives on Women provide multidisciplinary approaches to the study of women in contemporary society.

Though sharply differentiated in emphasis and form, both are designed as introductions to Women's Studies and to more specialized Women's Studies courses. Such courses concentrating specifically on women are currently offered in the departments of Anthropology, Classics, English, Foundations of Education, Hispanic and Italian Studies, History, and Physical Education (Ant 381; Clc 310; Eng 590 ; Fdn 405; Fdn 505; His 256; His 293; Pec 450; Spn 344; Spn 420). In addition, the following departments and programs offer applicable sections under general course titles: English, French, History, Linguistics, Philosophy, Rhetoric and Communications, and Theatre. Independent study courses are available in various departments and through the Women's Studies Program.

## Wss 210 Introduction to Feminism (3)

A study of the origins and development of feminist thought and of the feminist movement in America, with emphasis on the issues and problems of the contemporary women's movement. Prerequisite: consent of instructor.

## Wss 220 Perspectives on Women (3)

A multidisciplinary approach to women in contemporary society. An examination of women in history under different socio-economic systems, leading to an understanding of the biological, social/ psychological, and cultural image of women. Designed as an introduction to Women's Studies as a discipline and to more specialized Women's Studies courses.

## Wss 397 Independent Study (1-4)

Study by a student in an area of special interest not treated in courses currently offered. Work performed under direction of a professor chosen by the student on a topic approved by the program. May be repeated with approval.

## Wss 399 Topics in Women's Studies (1-3)

Consideration of topics or issues in Women's Studies selected on the basis of faculty and student interest. May be taken more than once with different content. Consult fall and spring schedules for specific topics and prerequisites.

## Wss 450 The Literature of Feminism:

## An Interdisciplinary Seminar (3)

The course draws upon the entire body of writing (fictional and non-fictional) that concerns feminism, In different semesters, it may focus on different themes, periods, ideas, or issues related to feminism. The course combines readings, lectures, seminar discussions, and research. May be repeated for credit when topics differ. Prerequisite: consent of instructor.

# College of Humanities and Fine Arts 

John W. Shumaker, Dean

Judy Held Miller, Assistant to the Dean

The College of Humanities and Fine Arts offers programs in those areas which afford the student opportunities to study. the variety of ways in which the human spirit manifests itself, to explore the meaning of human existence, and to consider the role which values play in the examined life. Faculty members welcome the sharing of ideas and participation in common experiences which help professor and student alike to gain new perspectives on what it means to be human.

Fields of study currently leading to majors in the College of Humanities and Fine Arts are Art, English, French, German, Greek, Greek and Roman Civilization, Itahan, Judaic Studies, Latin, Music, Philosophy, Rhetoric and Communication, Russian, Spanish, and Theatre. In addition, the College of Humanities and Fine Arts is responsible for interdisciplinary majors with concentrations in Chinese Studies, Inter-American Studies, and in Linguistics, and for second fields in Journalism and Women's Studies.

The Edith O. Wallace Humanities Building (dedicated to the memory of the first head of the Division of Humanities) is the home of nine departments of the College. The Department of Art shares a separate building at the main entrance to the campus with the University Art Gallery, the largest in the State University of New York. The Performing Arts Center, with four theatres and the the Recital Hall, is the center of activities of the Departments of Music and Theatre.

## FOREIGN LANGUAGE STUDY PLACEMENT POLICIES

Students with previous language experience, private study or high school language study in a foreign language, who wish to continue the study of that language are required to take a placement examination, The results of the examination are used to determine initial student placement in a language course sequence. Students with high school credit will receive credit for successful completion of the courses into which they are placed.

Transfer students and others with college credit in a language from another institution must also take the placement examination if they wish to continue the study of that language. If the examination scores suggest placement below the level indicated by a student's previous record, he/ she has the option of beginning study at this lower level. However, no credit will be awarded for such repetition or work completed at another college or university.

For further details regarding placement procedures in different departments, consult the announcements of individual departments in this bulletin or the appropriate department chairperson.

## COLLEGE COURSES

## Hum 150 a and b Cultural Diversity and the Human Condition (3, 3)

A humanistically-oriented study of selected cultures and societies, focusing on continuity and change in the following: family; culture and religious values; art and nature; work and play; health-ecology-science and nature. Team-taught by SUNY-Albany faculty, utilizing guest lecturers and international students as resource persons. The Fall session focuses on India, France, and the African Hausa; the Spring session focuses on China, Guatemala, and Iran. Full year course or either session. (Designed primarily for entering freshmen.)

## Hum 240 Modes of Perception in the Arts (3)

The course will introduce the student to various perceptual responses to music, the fine arts, and literature, and to the terminology which serves the act of perception. The interdisciplinary format will encourage the student to explore connections and differences between patterns of response to art, music, and literature.

## Hum 250 Freedom and Control (3)

Exploration and discussion of the physical, psychological, and social system where human beings face complex combinations of constraint and opportunity. Team taught: lectures and workshops.

## Hum 270 Ancient Views of the Human Condition (3)

A team-taught interdisciplinary study of how societies and creative individuals of the ancient Near East and the Classical world perceived human qualities and endeavors in the fact of nature, the gods, and other people. Students are introduced to relevant literary, artistic, philosophical, and religious materials and to the modern academic disciplines that deal with these subjects.

## Hum 280 Literature and Psychoanalysis (3)

A survey of the influence of the ideas of Freud, Jung, Adler, and their school on 20th century literature. Reading, analysis, and interpretation of German, French, English, and other literary works based on these ideas. Readings, lectures, and discussions in English.

## Hum 433 Symbolism and Modernism (3)

An examination of the origins of twentieth-century English, American, and French poetry in Poe, Baudelaire, Gautier, Mallarme, and others. Principal poets studied will be Yeats, Eliot, Poind, and Valery. A team-taught course, by members of the English and French Departments. This course will be offered beginning Spring, 1978. Prerequisite: permission of instructors.

## DEPARTMENT OF ART

Faculty: D. Byng, R. Callner, R. Cartmell, E. Cowley, S. Day, M. Greenwold, A. Lennig, N. Liddle, A. Markhoff, T. O'Connor, R. Stankiewicz, M. Walker, W. Wilson, J. Wisniewski.

The Department of Art seeks to develop artists with a strong understanding of aesthetic criticism and technical excellence. The program provides lecture and studio ex. perience for students with broad interests in the Humanities. By presenting a wide variety of exhibitions, the University Art Gallery furthers all of these interests.

## DEGREE REQUIREMENTS FOR THE MAJOR IN ART (with emphasis in Studio Art)

## General Program

B.A.: Thirty-six credits, including at least 12 credits at the 300 level or above, to be distributed as follows: 27 credits as advised from studio courses in Art; 9 credits from Art lecture courses in either Art or Art History. (A portfolio must be submitted before a student may be officially recognized as a major in Art. Usually the portfolio is presented by the close of the sophomore year.)

## Departmental Major

The Art Department offers a 60 credit major with concentrations in painting, sculpture, lithography, intaglio, photography, and cinema. (A portfolio must be submitted before the end of the freshman year to be officially recognized as a departmental major in art.)

## UNDERGRADUATE COURSES IN ART

## Art 105 a and b Drawing 1a and 1b (3, 3)

Drawing with a variety of media. The second session emphasizing drawing the human figure. May be taken either or both sessions. a must be taken before $b$.

## Art $110 a$ and $b$ Design (3, 3)

The principles of two- and three-dimensional design. Intended primarily for art majors and minors. May be taken either or both sessions. a must be taken before b.

## Art 120 Materials and Methods in the Sculpture Studio (3)

Foundation course offering the processes, materials, equipment and tools in the studio, while being exposed to problems and disciplines of 3 -dimensional work in planning, execution and critical investigation of values in relation to possibilities and choices. This course is a prerequisite for 3-dimensional design and sculpture courses.

## Art 220 a and b Sculpture I (3, 3)

Instruction in the use of traditional and modern sculpture mediums. Prerequisite: Art 110 or equivalent. May be taken either or both sessions.

## Art 230 a and $b$ Painting I $(3,3)$

A studio course in painting; instruction in the use of traditional and modern techniques of composition in painting. Prerequisites: Art 105 a and b and 110 a and b or equivalent. May be taken either or both sessions, a must be taken before $b$.

## Art 240 a and b Graphics: Etching (3, 3)

A studio course using processes of graphic reproduction with a concentration on etching. Prerequisite: Art 105 a or consent of instructor.

## Art 242 a and b Graphics: Lithography (3, 3)

A studio course using processes of graphic reproduction with a concentration on lithography. Prerequisite: Art 105 a or consent of instructor.

## Art 244 a and b Fundamentals of Photographic Art $(3,3)$

Photography as a fine art. Principles of photographic composition and technical means for achieving tone and texture. Analysis of important work by representative studio and candid photographio artists. Prerequisite: consent of instructor. Art 110a recommended. a must be taken before $b$.

## Art 290 Introduction to the Cinema (3)

A survey of the silent and sound classics of the cinema with emphasis on the changing conceptions of cinematographic form and content. Screenings of selected European and American films.

## Art 300 a and b Techniques of Painting (3, 3)

Studio survey of egg tempera, water color, encaustic, oil, acrylic and mural painting techniques. Prerequisites: Art 230 a \& b .

## Art 305 a and b Drawing lla and llb (3, 3)

Primary emphasis on developing an individual approach in draw. ing. Prerequisite: Art 105 b . May be taken either or both sessions.

## Art 306 Workshop in Drawing (3-4)

Special problems in drawing in workshop atmosphere. Emphasis on techniques, composition and criticism.

## Art 310 Advanced Design (3)

Three-dimensional and structural design. Emphasis on the creative use of materials, color, light and movement. Prerequisite: Art 110 a and b .

## Art 333 Stained Glass and Mosaic (3)

Experience with the techniques and processes used in the design and execution of stained glass or mosaic objects; the functional application of designs will be stressed. Prerequisites: Art 105a, Art 110, or consent of instructor.

## Art 340 a and b Serigraphy $(3,3)$

A basic course in serigraphy covering both direct and photographic processes. Prerequisite: Art 240a, Art 244a, and consent of instructor.

## Art 342 Workshop in Lithography (3)

Problems in plate lithography. Prerequisite: consent of instructor.

## Art 346 Introductory Film Production (3)

Seeing and thinking in cinematic terms, with an introduction to the process and equipment with which the film-maker works. Cameras, lenses, film emulsions, and editing procedures are studied in the making of short silent films. Prerequisite: Art 290, or Rco 238 and consent of instructor.

## Art 347 Advanced Photography (3)

A continuation of Art 244 a and $b$ with emphasis on refinement of image and technique. Students must have his/her own adjustable camera. Prerequisite: Art 244 a and b.

## Art 348 Color Photography (3)

A course utilizing transparency and negative materials in color photography with emphasis on color printing. Prerequisite: Art 244 a and b or the consent of instructor. Art 110 recommended.

## Art 350 Art Criticism (3)

A seminar taught by the Art department staff with guest artists and critics. Analysis of the attitudes found in 19 th and 20 th century criticism of the visual arts. Focus on the development of personal judgment. Prerequisite: six credits of art history.

## Art 352 (Env 352) The Environment as Art (3)

The understanding of art as environment as well as enviroument as art; the artist and the conditions of his obligation to society; a continuing analysis of what is, what could be, and what must be. The idea of art made for posterity; the question of recycling and re-use of art.

## Art 387 European Screen Masters (3)

A study of selected films of Fritz Lang, F. W. Murnau, Sergei Eisenstein, V. I. Pudovkin, and Carl Dreyer will be offered. Prerequisite: Art 290.

## Art 388 Great Cinema Directors: D. W. Griffith and Erich Von Stroheim (3)

A close analysis of the aesthetic principles, writings, influences, and films of D. W. Griffith and Erich Von Stroheim. Prerequisite: Art 290.

## Art 395 Art of American Silent Film (3)

A study of the development of the silent film in America, ranging from 1903 to 1930. The works of directors Chaplin, Keaton, Mal St. Clair, Lubitsch, King Vidor and others will be examined. Prerequisite: Art 290.

## Art 396 Cinema of the 30's (3)

A close examination of the techniques, devices and style of the sound film in Europe and America during the 1930's. Prerequisite: Art 290.

## Art 420 a and b Sculpture II (3, 3)

Advanced course in sculpture. Prerequisite: Art 220 a and b. May be taken either or both sessions.

## Art 421 a and b Sculpture Workshop (3, 3)

Studies in sculpture with an emphasis on individual criticism for students of varied technical and aesthetic backgrounds. Prerequisite: Consent of instructor and Department Chairman.

Art 430 a and b Painting II (3, 3)
Advanced course in painting. Prerequisites: Art 230 a and b. May be taken either or both sessions.

## Art 435 a and b Painting Workshop (3, 3)

Studies in painting emphasizing individual criticisms for students of varied technical and aesthetic backgrounds. Prerequisite: Consent of instructor and Department Chairman.

## Art 440 a and b Advanced Graphics: Intaglio (3, 3)

Advanced course in printmaking with an emphasis on intaglio process. Prerequisite: Art 240 a and b.

## Art 442 a and b Advanced Graphics: Lithography (3, 3)

Advanced course in printmaking, with an emphasis on lithographic process. Prerequisite: Art 242 a and b.

## Art 490 Special Topics in Cinema (3)

Can be repeated under special subject title. A course designed to explore various facets of the development of film as art. Offered in alternate years with such subjects as the German film (1913. 1932), The British film (1925-1975), the Classic French cinema (1920-1940), the Scandinavian Cinema (1915-1975), Italian cinema (1913-present), and American films of the 1940's. Prerequisite: Art 290.

Art 497 Independent Study (1-4)
Studio project in a selected art area. Prerequisite: consent of instructor and department chairman. Repeatable with the approval of the department.

The following courses are open to qualified seniors:

## Art 505 a and b Advanced Drawing (3, 3)

Art 506 Workshop in Advanced Drawing and Criticism (3)
Art 510 Advanced Design in Plastics (3)
Art 520 a and b Sculpture III $(3,3)$
Art 525 a and b Projects in Sculpture (3, 3)
Art 530 a and $b$ Painting III $(3,3)$

## Art 531 a and b Projects in Painting (3, 3)

Art 533 Workshop in Stained Glass (3)
Art 540 a and b Graphics (3, 3)
Art 542 Advanced Workshop in Lithography (3)
Art 545 a and b Projects in Graphics (3, 3)

## UNDERGRADUATE COURSES IN ART HISTORY

## Arh 150 a Survey of Art in the Western World I (3)

Sculpture, painting, architecture from the earliest times to the Renaissance.

## Arh 150 b Survey of Art in the Western World II (3)

Sculpture, painting, architecture from the Renaissance to the present.

## Arh 261 a Medieval Art I (3 credits)

European architecture, painting, sculpture, and minor arts from the sixth to the twelfth century. Prerequisites: Arh 150 a or consent of instructor.

## Arh 261 b Medieval Art II (3)

European architecture, painting, sculpture, and minor arts from the twelfth to the fifteenth century, Prerequisites: Arh 150 a or consent of instructor.

Arh 271 a Renaissance Art I (3)
Architecture, painting, and sculpture of the early Renaissance (fifteenth century) in Western Europe, chiefly in Italy and the Netherlands. Prerequisites: Arh 150 a or consent of instructor.

## Arh 271 b Renaissance Art II (3)

Architecture, painting, and sculpture of the later Renaissance (sixteenth century) in Western Europe. Prerequisites: Arh 150 a or consent of instructor.

## Arh 281 a Baroque and Rococo Art I (3)

Architecture, painting, and sculpture of the seventeenth century Western Europe. Prerequisites: Arh 150 b or consent of instructor.

## Arh 281 b Baroque and Rococo Art II (3)

Architecture, painting, and sculpture of the eighteenth century Western Europe. Prerequisites: Arh 150 b or consent of instructor.

## Art 285 American Art (3)

A survey of painting and sculpture in the United States from 1660 to 1940 . Prerequisite: Arh 150 b.

## Arh 354 Art of Eastern and East-Central Europe (3)

A study of the art and architecture of the region bounded by Russia to the east, the Balkans to the south, and Bohemia to the west, from the acceptance of Christianity to the advent of the Baroque age.

## Arh 390 Contemporary Art (3)

A critical analysis of painting and sculpture in Europe and the United States since 1940. Prerequisite: Arh 150 b , or consent of instructor.

## Arh 491 Modern Art (3)

European painting and sculpture from 1870 to 1940. Prerequisite: Arh 150 b or consent of instructor.

## Arh 497 Independent Study (1-4)

Directed reading and/or research in a selected area. Prerequisite: consent of instructor and department chairman. May be repeated with approval of department.

## CHINESE STUDIES PROGRAM

## (Interdisciplinary)

## FACULTY: L. Chung, H. Sun, R. Walton

ASSOCIATE FACULTY: K. Chen, L. Fields, R. Garvin, T. King, N. Lin, C. Sun

The interdisciplinary major with a concentration in Chinese Studies offers to students basic instruction in Chinese language, literature, and historical background and also provides for various courses of independent study in Hu manities (art and literature) and Social Sciences (economics, sociology, geography, anthropology, and law). Students interested in this major should apply through Professor Ling Chung, Director of the Chinese Studies Program.

## Special Programs or Opportunities:

SUNYA has an exchange program with Nanyang University in Singapore. This program provides students with an opportunity to study Mandarin at the Language Center of Nanyang University. One term of intensive Mandarin at Nanyang will substitute for two terms of Chinese language at SUNYA. A major of this program is encouraged to study at Nanyang after, at least, taking Chi 101 and 102 at SUNYA.

Mandarin Program in the Language Center of Nanyang University: intensive language courses: Mandarin 101-102; Mandarin 201-202; Mandarin 301-302; Mandarin 401-402.

## Degree Requirements for the Interdisciplinary Major with a Concentration in Chinese Studies

B.A.: Required courses: 34 credits as follows: Chi 101 and 102; Chi 201 and 202; Chi 210; Chi 211; Chi 300 a and b; His 379 a and $b$; and 12 additional credits as advised from the following: Chi 220; Chi 410; Chi 421; Chi 497; Eco 497; Soc $497 \mathrm{a}, \mathrm{b}$; Ant $498 \mathrm{a}, \mathrm{b}$ or other advanced credits approved by the adviser.

This is a 46 credit interdisciplinary major.

## Chi 101 Elementary Chinese (4)

Introduction to the national language (Kuo-Yï). The emphasis will be on oral work including training in pronunciation (Mandarin), drill in structure, and analysis of the differences in approach to the expression of ideas in Chinese and English. There will also be some study of a limited number of ideographs selected on the basis of word counts. Four classes, two laboratories each week.

## Chi 102 Elementary Chinese (4)

Continuation of Chi 101. Equal emphasis will be placed on speaking, reading, and writing of characters. Prerequisite: Chi 101. Four classes, two laboratories each week.

## Chi 201 Intermediate Chinese (4)

A continuation of spoken and written Chinese at the intermediate level with a review of grammar; composition and conversation. Prerequisite: Chi 102.

## Chi 202 Intermediate Chinese (4)

A continuation of spoken and written Chinese at the intermediate level; composition and conversation. Prerequisite: Chi 201.

## Chi 210 Survey of Classical Chinese Literature I (3)

An introduction to the major works of Chinese literature from The Book of Songs ( $1100-600$ B.C.) to poetry and the short stories of the T'ang Dynasty (618-904 A.D.). Readings in English translation. Knowledge of Chinese not required. Reading of short selections from the original texts for those who have taken Chinese 201 and above. Prerequisiet: None.

## Chi 211 Survey of Classical Chinese Literature II (3)

An introduction to the major works of Chinese literature from the Sung ( $960-1279$ ) to the Ch'ing Dynasty (1644-1911). Readings in English translation of the poems, plays, and fiction of this period, Knowledge of Chinese not required, Reading of short selections from the original texts for those who have taken Chinese 201 and above. Prerequisite: none.

## Chi 220 Chinese Calligraphy (3)

Practical instruction in the artistic design and the different styles of written Chinese with the traditional implements: brush, rice paper, ink plate, and ink bar. No knowledge of the language is required.

## Chi 300 a and b Intermediate Conversation and Composition (3, 3)

Intensive oral practice; building of vocabulary; systematic grammar review. Short stories by modern Chinese writers, a survey of Chinese history, introduction to newspaper Chinese. Conducted in Chinese. Three classes, one laboratory each week. Prerequisite: Chi 201, Chi 300 a is a prerequisite for Chi 300 b .

## Chi 410 Readings in Vernacular Literature (3)

Extensive readings in Chinese vernacular literature in classical and modern periods. Lecture and discussion conducted in Chinese.

## Chi 421 Documentary Chinese (3)

Annotated selections from newspapers, magazines, and other non-literary documents. Texts largely in simplified characters now used in People's Republic of China.

## Chi 497 Independent Study in Chinese (1-6)

Projects in selected areas of Chinese studies, with regular progress reports. Supervised readings written in the Chinese language. May be repeated once for credit when topics differ. Prerequisite: Chi 202 or the equivalent and consent of the department.
A student exchange program co-sponsored by State University of New York at Albany and Nanyang University of Singapore offers students who have taken Chi 101, 102, 201, and 202 an opportunity to spend a year (usually the junior year) at Nanyang University furthering their knowledge of the Chinese language and pursuing selected area studies. Nanyang credits are duly recognized by SUNYA.

## DEPARTMENT OF CLASSICS

FACULTY: S. Barnard, M. Goggin, J. Overbeck, H. Pohlsander, D. Prakken, P. Wallace, L. Williams.
ADJUNCT FACULTY: V. Karageorghis (Department of Antiquities, Nicosia, Cyprus).
ASSOCIATE FACULTY: J. Gould (Department of Philosophy).
The Department of Classics tries to make the values of the world of ancient Greece and Rome become alive and meaningful for its students and thereby to enrich their minds and lives. To this end the department offers courses in classical archaeology, in Greek and Roman civilization, in Greek, and in Latin. A major in Greek and Roman civilization is available through the general program; a major in Greek through the general program and the departmental program; and a major in Latin through the general program, the teacher education program, and the departmental program. A limited number of courses in Modern Greek Studies is also provided. The department is anxious to serve not only its majors but all students in the University.

## Special Programs or Opportunities:

The department will assist students who seek placement in summer or academic-year programs in Greece or Italy. The department sponsors public lectures, museum excursions, and other special events. Students graduating from the department may enter secondary-school teaching, graduate study in classics, or professional programs in law, library science, theology, and other fields.

## Classical Archaeology

No major is offered in Classical Archaeology. Students with an interest in this field should, after consultation with the department, choose one of the other major programs offered by the department.

No knowledge of Greek or Latin is required for these courses:

## Cla 208 Greek Archaeology (3)

A survey of the pre-historic and historical cultures of ancient Greece, as revealed by archaeology, from the Neolithic to the Hellenistic era, with emphasis on the evolution of pottery style, painting, sculpture, and architecture..

## Cla 209 Roman Archaeology (3)

The ancient monuments of Rome and of other Roman and Etruscan sites, including Pompeii and Ostia.

## Cla 402 Greek Sculpture (3)

A study of selected sculptural monuments from the Archaic, Classical, and Helenistic eras, considered in relation to thier historical, intellectual, and religious context.

## Cla 430 Principles and Methods of Classical Archaeology (3)

Study of the aims and procedures of archaeology. Excavation reports from Greek and Roman sites (supplemented from the experience of staff members) will be analyzed for techniques of recovery, recording, and interpretation of archaeological data. Besides such strictly archaeological techniques as stratification and pottery analysis, correlation with historical evidence will also be covered.

## Cla 450 Archaeology of Southern Italy and Sicily (3)

Study of Greek art and civilization in Italy and Sicily, with special attention to both the essential Greekness and the regional peculiarities of the western Greek cities and to relations between Greeks and non-Greeks.

## Cla 460 Greek Architecture (3)

The development of Greek monumental architecture from the earliest temples through the Hellenistic Age.

## CII 497 Independent Study (2-4)

Seniors may offer two to four credits of independent study in place of regular course-work in Classics. Projects must be approved by the department. May be repeated once.

The following courses are open to qualified seniors:

## Cla 520 The Origins of Greek Art (4)

Cla 525 The Ancient City of Rome (4)

Certain courses in classical archaeology may by advisement be elected for credit in art history. See course offerings in Art History.

## Greek and Roman Civilization

## Degree Requirements for the Major in Greek and Roman Civilization

## General Program

B.A.: A minimum of 36 credits to be distributed as fol. lows:

1. Clc 133 and 134, to be completed before the junior year (6).
2. Clc 320, Clc 321, Clc 330, Clc 331 (12).
3. One course in Greek or Latin above the 100 level, as advised (3).
4. Additional courses, as advised, in the Departemnt of Classics, or in other departments if the content is pertinent to this major. At least two of these additional courses must be upper division courses or courses in Greek or Latin above the 100 level (15).

No knowledge of Greek or Latin is required for these courses:

## Cle 105 Myths of the Greek World (3)

A survey in English of the origin and development of the major myths of ancient Greece.

## Clc 106 Religion of Ancient Greece and Rome (3)

A study of the major religious cults, institutions and practices of Greece and Rome from the Late Bronze Age to the age of Constantine.

## Clc 117 The World of Classical Greece (3)

An introduction to the life of the classical Greek world with emphasis on its contributions to our modern world. Among the topics are: democracy, education, theater, myth and religion, science, the alphabet, architecture, and the Olympic Games.

## Clc 118 The World of Classical Rome (3)

An introduction to the life of the classical Roman world with emphasis on its contributions to our modern world. Among the topics are: law and government, the family, education, architecture and engineering, theater, finance and commerce, the calendar, and religions, including Judaism and Christianity.

## Clc 125 Latin and Greek Elements in English (3)

A systematic study of those elements of the Latin and Greek languages that have contributed to the formation of English vocabulary, both general and scientific. Designed for students with no knowledge of Latin or Greek. Note: This course will replace Clc 140 and Clc 141 in Spring, 1978.

## Clc 133 History of Ancient Greece (3)

The antecedents of Greek culture in the Ancient Near East, the Aegean culture, the rise of Greece, the development of Athenian democracy, the decline of Greece, and the Macedonian conquest.

## Clc 134 History of Ancient Rome (3)

Alexander the Great and the Hellenistic Age, the rise of Rome, the Republic and the Empire.

## Clc 140 Latin Elements in English (3)

A systematic study of those elements of the Latin language that have made it the single principal source of modern English vocabulary. Designed for students with no knowledge of Latin. Note: This course will be replaced by Clc 125 in Spring, 1978.

## Clc 141 Greek Elements in English (3)

A systematic study of those elements of the Greek language that have contributed to the formation of modern English vocabulary, both general and scientific. Designed for students with no knowledge of Greek. Note: This course will be replaced by Clc 125 in Spring, 1978.

## Clc 220 Roman Poets and Playwrights (3)

A study of various types of Roman poetry, including lyric, epic, and dramatic, with consideration of their role in the development of the Western Literary tradition.

## Clc 222 Greek Epic Poetry (3)

Homer's Iliad and Odyssey and the works of Hesiod.

## Clc 223 Masterpieces of Greek Tragedy and Comedy (3)

Selected plays of Aeschylus, Sophocles, Euripides, and Aristophanes.

## Clc 300 The Greeks and Their Neighbors (3)

The relations of the Greeks with the Near East and with Rome. Readings in English from the works of five Greek historians: Herodutus, Thucydides, Xenophon, Arrian, and Polybius.

## CIc 301 Rome and the Mediterranean World (3)

The Romans' view of their origin and their destiny in the Mediterranean World. Readings in English from the works of five Roman historians: Livy, Sallust, Caesar, Tacitus, and Ammianus.

## Clc 310 Women in Antiquity (3)

A study of the literary, historical and archaeological evidence concerning the lives and roles of women in Greek and Roman society.

## Cle 320 The Minoan-Mycenean Age (3)

This course uses all available resources of history, art and archaeology, geography, and literature for an area study of the Minoan-Mycenaean Age. Prerequisite: Clc 133 or Cla 208.

## Clc 321 Fifth Century Athens (3)

This course uses all available resources of history, art and archaeology, geography, and literature for an area study of Fifth Century Athens. Prerequisite: Cle 133 or Cla 208.

## Clc 330 Rome: From Republic to Empire (3)

This course uses all available resources of history, art and archaeology, geography, and literature for an area study of Rome in the transition from Republic to Empire. Prerequisite: Clc 134 or Cla 209.

## Cic 331 The Age of Trajan and Hadrian (3)

This course uses all available resources of history, art and archaeology, geography, and literature for an area study of the age of Trajan and Hadrian. Prerequisite: Clc 134 or Cla 209.

## Clc 403 Roman Civilization and Christianity (3)

Roman civilization in the late empire: the relation between pagan and Christian culture based on a study of literary and archacological sources.

## CII 497 Independent Study (2-4)

Seniors may offer two to four credits of independent study in place of regular course-work in Classics. Projects must be approved by the department. May be repeated once.

## Anclent Greek

Degree Requirements for the Major in Ancient Greek

## General Program

B.A.: A minimum of 33 credits, including 24 credits in Greek language and literature above Clg 203 a ; also Cla 208, Clc 133, and Cle 134.

## Departmental Program

B.A.: Part I-65-79 credits including $30-44$ credits in Greek, at least 12 of which must be at the 300 level or above, 14 credits in Latin, 6 credits in Ancient History, 6 in Archaeology, 6 in Greek and Roman Civilization, and three in Ancient Philosophy. Part II-15 credits. These credits have to be chosen from Art, Comparative Literature, History, and Philosophy. Part III-26-40 credits of electives.

Clg 101 a and b Elementary Greek $(4,4)$
Introduction to Attic Greek Composition, and reading of selected passages of Attic prose. Prerequisite for $\mathrm{Clg} 101 \mathrm{~b}: \mathrm{Clg} 101$ a or consent of instructor.

## Clg 203 a and b Introduction to Greek Literature (4, 4)

Review of grammar and selected readings from Greek prose and poetry, especially Plato and Attic tragedy. Prerequisite for Clg $203 \mathrm{a}: \mathrm{Clg} 101 \mathrm{~b}$. Prerequisite for Clg 203 b : Clg 203 a or consent of instructor.

## Clg 402 Greek Philosophy (3)

Reading and discussion of texts selected from the writings of the major Greek philosophers. Prerequisite: Clg 203 b .

## Clg 410 The Homeric Epics (3)

Reading of selections from the Iliad and the Odyssey; discussion of Homeric style, language, and meter and of the technique of oral composition. Prerequisite: Clg 203 b .

## CII 497 Independent Study (2-4)

Senior may offer two to four credits of independent study in place of regular course work in classics. Projects must be approved by the department. May be repeated once.

The following courses are open to qualified seniors:

## Clg 502 Altic Orators (4)

Clg 508 The Homeric Hymns (4)
Clg 510 Hesiod (4)
Clg 512 Herodotus (4)
Clg 514 Hellenistic Poetry (4)
Clg 516 Introduction to Elegiac and Lyric Poetry (4)
Clg 518 Attic Comedy (4)
Clg 520 Greek New Testament (4)

## Latin

Degree Requirements for the Major in Latin

## General Program and Teacher Education Program

B.A.: A minimum of 33 credits. 24 credits in Latin above Cll 201 a, including Cll 204 a, b, Cll 312 a, b, and additional credits on the $400-500$ level as advised. Also Cla 209, Cle 133 , and Cle 134.

## Departmental Program

B.A.: Part I-65-79 credits, including $30-44$ credits in Latin, at least 12 of which must be at the 300 level or above, 14. credits in Greek, 6 credits in Ancient History, 6 in Archaeology, 6 in Greek and Roman Civilization and 3 in Ancient Philosophy. Part II- 15 credits. These credits must be chosen from Art, Comparative Literature, English Literature, History and Philosophy. Part III-26-40 credits of electives.

CII 101 a and b Elementary Latin (4, 4)
Grammar, composition, conversation, and reading of Latin. Prerequisite for Cll 101 b : Cll 101 a or consent of instructor.
CII 201 a and b Introduction to Latin Literature (4, 4)
Selected readings from prose authors, especially Cicero, and from Latin poetry. Prerequisite for Cll 201 a: two years of high school Latin or Cll 101 b. Prerequisite for Cll 201 b : Cll 202 a or consent of instructor.

## CII 204 a and b Latin Literature (3, 3)

Cicero (selections from De Amicitia and De Senectute), Catullus (selections), Horace (selected odes). Prerequisite: three or four years of high school Latin or Cll 201 b .

## CII 312 a and b Prose Reading and Composition (3, 3)

Readings in Livy and other selected prose authors. Studies in prose style and practice in prose composition. Prerequisite: Cll 204 b.

## CII 403 Ovid (3)

The Fasti, a storehouse of folk tradition, and the Metamorphoses; Ovid's place in the history of the Latin epic, and his influence on subsequent European literature. Prerequisite: Cll 204 a, or Cll 204 b , or consent of instructor.

## CII 404 Great Roman Writers of Letters (3)

Selected letters of Cicero and Pliny, with a study both of their epistolary style and of the letters as an important source for the history of the Roman Republic and the Empire. Prerequisite: Cll 204 a, or Cll 204 b , or consent of instructor.

## CII 405 Latin Pronunciation and Conversation (3)

Examination of the evidence for the classical pronunciation of Latin and of the underlying theory. Practice in reading aloud Latin prose and verse, and in the use of conversational Latin. Prerequisite: Cll 204 a , or Cll 204 b , or consent of instructor.

## Cll 414 Critical Studies in Cicero and Caesar (3)

Intensive and extensive reading of selected works of Cicero and Caesar (selections not to be limited to those usually read in the high school), a study of the interacting forces and personalities of the period, and an introduction to the literature on the men and their times. Prerequisite: Cll 204 a, or Cll 204 b , or consent of instructor.

## CII 421 Roman Elegiac Poets (3)

Selection from Tibullus, Propertius, and Ovid. Prerequisite: Cll 312 a , or Cll 312 b , or consent of instructor.

## CII 445 Roman Comedy (3)

Reading and analysis of selected comedies of Plautus and Terence. Study of the development of Roman drama and theatrical presentation. Prerequisite: Cll 312 a , or Cll 312 b , or consent of instructor.

## CII 481 Latin Pastoral Poetry (3)

Readings in the Eclogues and Georgics of Vergil. Prerequisite: Cll 312 a , or Cll 312 b , or consent of instructor.

## CII 497 Independent Study (2-4)

Seniors may offer two to four credits of independent study in place of regular course-work in classics. Projects must be approved by the department. May be repeated once.

The following courses are open to qualified seniors:

## Cll 517 Lucretius (4)

CII 518 Cicero's Philosophical Works (4)
CII 520 Medieval Prose and Poetry (4)
CII 522 Vergil's Aeneid (4)
CII 530 Roman Satire (4)
CII 532 Historical Works of Tacitus (4)
Cll 540 Latin Literature of the Renaissance (4)
CII 546 Elements of the Novel in Latin Literature (4)
Cll 552 History of the Latin Language (4)
Cll 580 History and Legends of Early Rome (4)
CII 582 Roman Religion (4)
CII 590 Latin Lyric and Epigrammatic Poetry (4)

## Modern Greek Studies

No major is offered in Modern Greek Studies. Courses in this field do not apply to the requirements in other programs offered by the department. Related courses are available from the Department of History.

## Cmg 101 a and b Elementary Modern Greek (4, 4)

Introduction to Modern Greek. Oral practice, composition, and reading of selected works in poetry and prose. Prerequisite for Cmg 101 b : Cmg 101 a or consent of instructor.

## Cmg 205 Modern Greek Clvilization (3)

A study of the cultural background of the modern Greek nation from the Bzyantine period to the present.
Cmg 206 The Land of Greece (3)
A survey of the physical environment of Greece and its effects upon Greek history and civilization. Both ancient and modern sources will be consulted.

## Cmg 497 Independent Study (2-4)

Independent study in Modern Greek language and literature. Projects must be approved by the department. May be repeated once.

## DEPARTMENT OF ENGLISH

FACULTY: T. Adams, J. Barlow, J. Berman, R. Bosco, D. Byrd, S. Cohen, F. Colby, A. Collins, D. Daims, R. Donovan, D. Dorfman, W. Dumbleton, J. Fetterley, E. Garber, J. Gerber, R. Goldman, M. E. Grenander, G. Hastings, E. Jennings, W. Knotts, C. Koban, E. LeComte, T. Littlefield, H. Maclean, E. Mirabelli, R. Nelson, D. Odell, D. Redding, H. Regueiro, J. Reilly, L. Ries, R. Robbins, D. Rosenblum, B. Rotundo, W. Rowley, M. Rozett, J. Schulz, F. Silva, E. Sklepowich, T. Smith, H. Staley, D. Stauffer, M. Taylor, R. Thorstensen, P. Westbrook.

The curriculum of the English Department is designed to aid students to write effectively, to read critically, and to acquire a sense of the development of literature written in English and of its relation to society.

## Degree Requirements for the Major in English

## General Program

B.A.: 36 credits in English with at least 6 credits at the 300 level and at least 6 credits at the 400 level.
Other than the distribution pattern described above, there are no specific requirements. Working closely with a departmental adviser, the student builds his or her own coherent sequence of courses. In order that students be able to make as informed a selection as possible amongst the upper level courses, they should use their basic courses to explore genres and subject matter unfamiliar to them.

## Teacher Education Program

B.A.: 36 credits in English with at least 6 credits at the 300 level and at least 6 credits at the 400 level.
Students preparing for provisional certification will be required to include courses in their program (one from group A, one from group B, one from group C, one from group D) which will develop their ability (A) to think and write critically (B) to read and discuss literature critically and analytically (C) to understand the relationships between literature and society and (D) to understand the history and/or structure of the language.

Courses which will satisfy these requirements:
A. English $100 ; 200 ; 300 ; 301 ; 302 ; 303 ; 304 ; 305 ; 308$
B. English 112; 113; 165; 201; 203; 283; 310; 315; 373; $465 ; 485 ; 492 ; 496 ; 498$
C. English $202 ; 213 ; 389 ; 395 ; 396 ; 420 ; 430 ; 431 ; 440$; $441 ; 450 ; 451 ; 460 ; 470 ; 471 ; 472 ; 480 ; 482$
D. English 206; 207; 306; 307 (or satisfactory completion of a competency examination).

## WRITING COURSES

## Eng 100 English Composition (3)

Practice in writing papers of exposition, argument, and criticism, including at least one requiring research.

## Eng 200 Intermediate Writing (3)

Practice in the development and improvement of written expression of complex ideas. Prerequisite: Eng 100 or departmental permission.

## Eng 300 Critical Writing (3)

Exercises in literary description and literary criticism; attention to various critical tasks and approaches and to the major resources of literary bibliography.

## Eng 301 Expository Writing (3)

Designed to develop precise and accurate non-technical writing in such fields as history, the social and natural sciences, philosophy, and the fine arts. Students will choose their own subjects for several essays or one long essay. Admission is limited, and those seeking to enroll should submit a sample of their work to the instructor. Prerequisite: consent of the instructor.

## Eng 302 Creative Writing (3)

A course designed for the student who wishes to experiment with a variety of kinds of writing, but who has little experience. Admission is limited, and those seeking to enroll should submit a sample of their work to the instructor. Prerequisite: consent of the instructor.

## Eng 303 Writing Prose Flction (3)

Advanced workshop in writing fiction. Admission is limited, and those seeking to enroll should submit a sample of their work to the instructor. Prerequisite: consent of the instructor.

## Eng 304 Writing Drama (3)

Advanced workshop in writing for the stage. Admission is limited, and those seeking to enroll should submit a sample of their work to the instructor. Prerequisite: consent of the instructor.

## Eng 305 Writing Poetry (3)

Advanced workshop in writing poetry. Admission is limited, and those seeking to enroll should submit a sample of their work to the instructor. Prerequisite: consent of the instructor.

## Eng 308 Journalistic Writing (3)

Expository writing that might be done for newspaper, magazine, radio or television journalism. Designed for students in the journalism second field but open to others. Admission is limited, and those seeking to enroll should submit a sample of their work to ther instructor. Prerequisite: consent of the instructor.

## CRITICISM AND LINGUISTICS COURSES

## Eng 201 Introduction to Literary Criticism (3)

An introduction to the theory and practice of literary criticism.

## Eng 202 Introduction to Literary History (3)

An introduction to the critical problems arising from the relationships between literary works and their eras.

## Eng 203 Introduction to the Analysis of Ideas, Values, and Issues in Literature (3)

An introduction to working with serious intellectual constructs and setting up methods for the analysis of ideas, values, and issues.

## Eng 206 (Lin 206/Ant 220) Introduction to Linguistics (3)

The principles of modern structural, transformational, and historical linguistics, with English as the prime example in the examination of language and languages.

## Eng 207 The Language of Literature (3)

An introductory course in the application of linguistic and rhetorical principles to the reading of literary texts. Figures of speech, metaphors, symbols, rhetorical structures, and neologisms will be examined as they occur in poetry, fiction and drama.

## Eng 306 History of the English Language (3)

The growth and development of English phonology, morphology, syntax, and semantics. The history of dialects and standards. Prerequisite: Eng (Lin) 206 or consent of the instructor.

## Eng 307 Approaches to English Grammar (3)

Traditional analysis of the sentence structure, word-building and accidence of English, reinterpreted and revised according to the most current linguistic insights.

## Eng 407 Old English (4)

Introductory course in the language of England before 1066 A.D. Students will learn to pronounce and translate selections in prose and verse illustrating the origins of English language, literature, and society.

## LITERATURE COURSES

## Reading Courses

## Eng 112 Reading Prose Fiction (3)

An introduction to the analysis of plot, character, theme, point of view, and other matters dealing with the form and substance of the novel and short story.

## Eng 113 Reading Drama (3)

An introduction to the analysis of dramatic structure: plot, character, theme, setting, the function of dialogue.

## Eng 165 Reading Poetry (3)

An introduction to the analysis of idea, feeling, and verse form in poetry.

## Courses of General Interest

## Eng 213 Popular Literature (3)

Individual sections may concentrate on some aspect of popular culture such as the best seller, song lyrics, detective or mystery fiction, science fiction, books that have had a vogue on the campus during the last twenty years. The student may take the course twice for credit, provided the particular subject matter is not repeated.

## Eng 283 Contemporary American Novel (3)

Forms, techniques, and themes of the novel, as exemplified by a number of American novels of the past 25 years.

## Eng 294 Modern Drama From Ibsen (3)

A survey of modern European and American drama from naturalistic theatre to post-modern theatre. Dramatists to include Ibsen, Chekhov, Shaw, O'Neill, Brecht, Ionesco, Williams, Pinter, and others.

## Eng 390 Old Testament Narratives (3)

The early books of the Old Testament in the King James translation considered as history, literature, and folk art. Evolution of the material and the text. Parallel developments in Greek and other literatures.

## Broad Surveys

## Eng 210 The English Literary Tradition I: From the Angio-Saxon Period through Milton (3)

A study of representative works by major authors from $t$. AngloSaxon Period through Milton, with some attention to nece sary historical, biographical, and intellectual background infoi mation. The survey will provide a sense of continuity and chang in the English literary tradition, offering broad overviews of ex tended chronological periods.

## Eng 211 The English Literary Tradilion II: From the Restoration through the Modern Period (3)

A study of representative works by major authors from the Restoration through the Modern Period, with some attention to necessaty historical, biographical, and intellectual background information. The survey will provide a sense of continuity and change in the English literary tradition, offering broad averviews of extended chronological periods.

## Genres

## Eng 310 The British Novel (3)

Origins and development of the Britigh novel, illustrated by careful attention to selected texts. Major authors include Fielding, Austen, Dickens, Eliot, Hardy, and Conrad.

## Eng 315 Poetry in English (3)

A study of forms in poetry in English (the ballad, the somet, the satire, the heroic epistle, the ode, the dramatic monologue) and modes (meditative, lyrical, satiric, didactic, heroic) as they typify their authors and their eras.

## Eng 317 Survey of English Drama (3)

A chronological study of representative plays from the Middle Ages through the 19th century.

## Eng 373 The American Novel (3)

A survey of the American novel in the nineteenth and twentieth centuries, paying attention to the development of the novel from its origins in romance.

## Eng 377 The American Drama (3)

A survey of the American drama dealing briefly with specimens of mineteenth century drama and more fully with the birth of the art theatre movement in America, its first notable playwright, O'Neill, and representative plays and movements in later American drama.

## Eng 391 Biography and Autobiography (3)

Biography and autobiography are studied in terms of various and changing views of what constitutes a life story (inner life versus public life; objective factual biography versus subjective interpretive biography).

## Author Courses

## Eng 325 Chaucer (3)

The medieval background and the ideas and narrative art in the poet's major works. No previous knowledge of Middle English is required.

## Eng 336 Milton (3)

Milton's poetry and selected prose, in the intellectual context of his time. Major emphasis on Paradise Lost, with appropriately detailed study of Comus, Lycidas, Samson Agonistes, and significant minor poems. In prose, emphasis on Of Education and Areopagitica.

## Eng 337 Shakespeare through 1603 (3)

The development of Shakespeare's dramatic art, with emphasis on action and character in the plays. Primarily the comedies and histories through 1603.

## Eng 338 Shakespeare after 1603 (3)

The development of Shakespeare's dramatic art, with emphasis on action and character in the plays. Primarily the mature tragedies, with particular emphasis on Hamlet; attention also to the "dark comedies" and the dramatic romances.

## Eng 361 Study of a British Author (3)

The major British author to be studied in depth will vary from section to section and from session to session. The student may take the course twice for credit, provided a different author is treated.

## Eng 381 Study of an American Author (3)

The major American author to be studied in depth will vary from section to section and from session to session. The student may take the course twice for credit, provided a different author is treated.

## Eng 389 Study of an Afro-American Author (3)

The major Afro-American writer to be studied in depth will vary from section to section and from session to session. The student may take the course twice for credit, provided a different author is treated.

## Eng 392 Comparative Study of Authors (3)

A course treating a pairing of authors whose works mutuall illuminate each other in their treatment of themes, declaration of artistic purpose, search for a viable style or relation to their eras. The authors studied may vary from section to section and from session to session. The student may take the course twice for credit, provided a different pairing is studied.

## Topical Courses

Eng 395 The Presentation of Social Roles in Litterature (3)
A study of the ways in which factors such as age, sex, class, and race are presented in literature. Individual sections may deal with the presentation of women, of the Black, of the Indian, of the aged, of the young, of the alien. The student may take the course twice for credit, provided the particular subject matter is not repeated.

## Eng 396 The Literature of a Subculture (3)

A course which presents writing by members of a given subculture. Individual sections may concentrate on the literature written by Afro-Americans, Jews, Catholics, etc. The student may take the course twice for credit, provided the particular subject matter is not repeated.

## Eng 460 Regional Studies in British Literature (3)

The regional literature of Great Britain and the literature written in English in the Commonwealth and in the former British possessions. Individual sections may deal with the literature of Ireland, Scotland, Wales, Canada, Australia, New Zealand, India or various countries in Africa. The student may take the course twice for credit, provided the particular subject matter is not repeated.

## Eng 480 Regional Studies in American Literature (3)

The literature of various regions of the North American continent. Individual sections may deal with the literature of New England, of the American South, of the Old West. The student may take the course twice for credit, provided the particular subject matter is not repeated.

## Eng 490 Mythic Concepts in Literature (3)

Individual sections may concentrate on a particular mythic concept which recurs in literature such as the hero, the monster, the ideal society, the fantastic voyage. The student may take the course twice for credit, provided a different mythic concept is studied.

## Eng 491 The Mythic Thought of an Era (3)

Individual sections may concentrate on the direction taken by the mythic imagination in a given place and time, such as the Arthurian legend in medieval literature, the Ovidian tradition in the Renaissance. The student may take the course twice for credit, provided the particular subject matter is not repeated.

## Eng 492 Forms of Modern Fiction (3)

A study of the major narrative modes in modern British, American, and Continental fiction. Special attention to the problem of how experimentation in fictional forms relates to the social realities and philosophical attitudes of the contemporary world. The theories and techniques of such writers as James, Chekhov, Joyce, Proust, Mann, Gide, Hesse, Beckett, Faulkner, and Robbe-Grillet.

## Period Courses

## Eng 420 Literature of the Middle Ages (3)

Selections from Old and Middle English literature (650-1500 A.D.), exclusive of Chaucer, with attention to the evolution of styles and themes under the influences of Catholicism and the heroic and erotic literature of France. Earlier works read in translation.

## Eng 430 Literature of the Early Renaissance (3)

Selections from Tudor and Stuart literature, emphasizing nondramatic poetry and with attention to prose romance, the early novel, and the essay.

## Eng 431 Literature of the Later Renaissance (3)

Selections from seventeenth century literature exclusive of Milton, major attention to the metaphysical and Cavalier traditions of poetry, and the essay.

## Eng 440 English Literature of the Restoration and Early 18th Century (3)

Major poetry and prose of the Neoclassical period, with some attention to the social and philosophical background. This course will trace the development of such literary modes as satire, journalism, the personal diary, and didactic literature in Dryden, Pope, Swift Addison, Defoe, Pepys, Bunyan, and others.

## Eng 441 English Literature of the Late 18th Century (3)

Poetry and prose of the age of sensibility from ballads to biography; selected works of Johnson, Boswell, Gray, Burns and others with attention to Gothicism, sentimentalism, the cult of the picturesque and sublime, the rebirth of lyricism, and other new trends in the period.

## Eng 450 Literature of the Romantic Period (3)

The expression of the Romantic sensibility as found in the prose and poetry of Wordsworth, Coleridge, Byron, Shelley, Keats, and others.

## Eng 451 Literature of the Victorian Period (3)

Major mid-Victorian poets and essayists, the Pre-Raphaelites, and the Decadents, as they reflect the thought of the age.

## Eng 465 Modern British Poetry (3)

Selected poets from Hardy to the present with emphasis on analysis.

## Eng 470 American Literature to 1815 (3)

Major puetry and prose of the Colonial and Federal periods, with some attention to the theological and political backgrounds.

## Eng 471 American Literature 1815-1865 (3)

The works of the major writers of the Romantic period. Particular attention to the Transcendental writers and to the development of the American novel.

## Eng 472 American Literature 1865-1920 (3)

The major writings of the great period of American realism. Special attention to the development of critical theory, the local color writers, the development of the psychological novel.

## Eng 482 American Literature after 1920 (3)

Selections from American literature from 1920 to the present, emphasizing the novel. Major attention to contemporary trends in the redefinition of substance and style in both the novel and poetry.

## Eng 485 Modern American Poetry (3)

Selected poets from Robinson to the present with emphasis on analysis.

## Eng 496 Modern Drama Before 1940 (3)

The growth of Naturalism, Realism, and Expressionism. Selected European and American playwrights from Ibsen to O'Neill.

## Eng 498 Modern Drama Alter 1940 (3)

The conflicting movements and ideas molding world drama in the post-war world. Study of selected plays of Sartre, Brecht, Ionesco, and others.

## Seminars and Independent Study Courses

## Eng 339 Undergraduate Shakespeare Seminar (4)

Selected problems in Shakespeare study for the student who already has some background in reading and interpreting Shakespeare. Prerequisite: Eng 337 or 338 or consent of the instructor.

## Eng 397 Independent Study and Research in English (1-4)

Prerequisite: Consent of a faculty member in the department and of the appropriate departmental committee. May be taken for a maximum of 8 credits.

## Eng 399 Junior Seminar in English (6)

A seminar for qualified juniors: the topic for each term will vary and be announced in advance. The student may take the course twice for credit, provided the particular subject matter is not repeated. Prerequisite: consent of the instructor.

## Eng 495 Interdisciplinary Seminar (6)

A seminar for qualified juniors and seniors which will deal with relations between the study of English and American literature and a related discipline. Prerequisite: consent of the instructor.

## Eng 499 Senior Seminar in English (6)

A seminar for qualified seniors; the topic for each session will vary and be announced in advance. The student may take the course twice for credit, provided the particular subject matter is not repeated. Prerequisite: consent of the instructor.

The following courses are available to qualified seniors:

## Eng 508 Beowulf (4)

## Eng 509 Genres of American Film (3)

Eng 511 Science Fiction and Fantasy (3)
Eng 512 The Utopian Novel and Other Social Criticism (3)
Eng 513 Comedy in the Modern Novel (3)
Eng 514 Tragedy in the Modern Novel (3)
Eng 519 Cinema as Literature (3)
Eng 520 The Arthurian Legend in English Literature (3)
Eng 521 Introduction to English Medieval Life and
Literature (3)
Eng 530 Spenser and His Contemporaries (3)
Eng 539 English Drama to 1642 (3)
Eng 540 The Eighteenth Century Background (3)
Eng 542 The Eighteenth Century English Novel (3)
Eng 549 The Great Satirists (3)
Eng 551 The Edwardians (3)
Eng 560 The Irish Literary Renaissance (3)
Eng 561 Modern Approaches to Literary Criticism (3)
Eng 562 The Twentieth Century English Novel (3)
Eng 565 Twentieth Century British Poetry (3)
Eng 570 Major American Writers, 1800-1850 (3)
Eng 571 Major American Writers, 1850-1900 (3)
Eng 575 Studies in American Poetry (3)
Eng 580 The Southern Literary Renaissance (3)
Eng 581 Modern American Literature: 1900-1920 (3)
Eng 582 Modern American Literature: 1920-1940 (3)
Eng 583 Afro-American Literature (3)
Eng 584 The American Short Story (3)
Eng 587 Modern American Drama (3)
Eng 589 Main Ideas in American Literature (3)
Eng 590 Women in Literature (3)
Eng 594 Special Topics in English (1-3)
Eng 595 Contemporary World Drama (3)

## DEPARTMENT OF FRENCH

FACULTY: D. Alexander, II; C. Colman; G.' Gouraige; R. Greene; D. Levy; M. B. Marvin; F. Moore; C. Odenkirchen; R. Ortali; J. Richtman; H. Salomon; G. Santoni; J. Savitt.

The objective of the department is to provide students with a broad, general linguistic, literary and cultural background in French and to prepare students for teaching, graduate work, and for a diversity of other fields which require a broad background in French. The department expects its students to become highly proficient in under* standing, speaking, reading and writing French.

To accomplish its objectives, the department offers full programs leading to the B.A., and M.A. in French.

## Special Programs or Opportunities

A year abroad program was initiated at the University of Nice in September, 1968. For more detailed information see heading "International Study." The use of the foreign language and the exchange of ideas are fostered through language dormitories, language clubs, colloquia, a lecture series, and other department activities.

## Degree Requirements for the Major in French

The major in French offers four concentrations. All students must take a minimum of 35 credits including Fre 230 or Fre 240, Fre 241, Fre 340 a and Fre 306. Students must also take additional courses according to the requirements of their concentration.

## Concentration in Literature:

Fre 361, Fre 362, plus 18 credits in literature, language or civilization, including a minimum of 6 credits of literature courses numbered above 400.

## Concentration in Language and Linguistics:

Fre 361, Fre 362, plus 18 credits in literature, language linguistios or civilization, including a minimum of 6 credits of language courses numbered above 400 .

## Concentration in Teacher Education:

Either Fre 361, Fre 362, or 363 (choice of one) 340 b ( 340 b may be replaced by a course in French applied linguistics) ; Fre 355 a ; $\operatorname{Lin} 206 ; 12$ additional credits in literature, language or civilization, including a minimum of six credits of courses numbered above 400 .

This program also requires 24 credits in education courses, of which 3 credits must be in Teaching Methods for Languages (E Flt 401), 9 credits in Student Teaching (E Fre 490), and a course on drugs and addictions (3).

## Concentration in Civilization:

One of the following: Fre 361 or Fre 362 or Fre 363 for (3)
Fre 355 a (3)
Fre 355 b (3)
Fre 405 (3)
Three (3) additional credits in French in courses num. bered at the 400 level
Plus 9 additional credits in the French Department or in other departments (History, Anthropology, etc.) sub ject to prior approval by the student's French Department advisor

## Honors Program

B.A.: Admission to the Honors Program is by letter of application submitted to the chairman of the Department of French by April of the student's sophomore year and subsequent approval of the student's candidacy by the departmental Honors Committee. The program requires: 35 credits above Fre 130 b (or Fre 130 c), including Fre 230 or Fre 240, Fre 241, Fre 361 and 362, Fre 340 a, Fre 306, Fre 387 a and b, Fre 487 and at least 9 credits in literature courses numbered 400 or above.

## Other Degree Requirements

All students (whether incoming high school students or transfer students) wishing to enter elementary or intermediate language courses must take the placement examination administered by the department. Previous experience
of the department has indicated that students with one year high school French will usually be placed in Fre 120 a, or 120 b ; two years in Fre 130 a ; three years in Fre 130 b; four years in Fre 230 or Fre 240; more than four years in Fre 340 a.

Language majors must take, in their junior year, the proficiency examination in French administered by the French Department.

## Fre 10 a and b French for Reading Knowledge (0)

Grammar, vocabulary; general and special readings. Designed for graduate students preparing for the French reading knowledge examination. Prerequisites: for Fre 10 b : Fre 10 a or placement.

## Fre 120 a and b Elementary French (4, 4)

French as a spoken and written language.. Extensive oral practice of the basic grammatical structures. Meets five times per week. Prerequisites: 120 a: for beginners, none; for students with high school French: placement; 120 b : 120 a or placement.

## Fre 120 c Intensive Elementary French (8)

A one term course covering the contents of 120 a and b . Meets 10 hours per week. Additional use of laboratory recommended. Prerequisites: for beginners: none; for students with high school French: placement.

## Fre 130 a and b Intermediate French (4, 3)

Extensive practice of basic grammatical structures and vocabulary building through directed conversations, readings, and compositions. 130 a meets four hours per week. 130 b meets three hours per week. Prerequisites: for $130 \mathrm{a}: 120 \mathrm{~b}$ or 120 c or placement; for 130 b : 130 a or placement.

## Fre 130 c Intensive Intermediate French (7)

A one term course covering the contents of 130 a and b . Meets eight hours per week. Additional use of laboratory recommended. Prerequisites: Fre 120 b or 120 c or placement.

## Fre 218 French Culture in English (3)

Historical background of modern France. Close analysis of a selected number of national issues, politics, administration, media (T.V., radio and press), education, arts, leisure, etc. This course may not be used to fulfill the requirements of the major in French.

## Fre 230 Grammar and Composition (3)

Review of the main grammatical structures and training in idiomatic usage through written exercises and compositions. Not open to students who have completed former Fre 240 a. Prerequisites: Fre 130 b or Fre 130 c or placement.

## Fre 240 Reading and Composition (3)

Reading and discussion of modern French texts. Training in idiomatic usage through written exercises and compositions drawn from the readings. Prerequisite: Fre 130 b or Fre 130 c or placement.

## Fre 241 Introduction to Literary Analysis (3)

Presentation of the terminology of literary analysis and various methodological approaches based on selected masterworks of prose and poetry. Prerequisite: Fre 230 or Fre 240 or placement.

## Fre 250 Conversation (2)

A course stressing oral skills. Training in idiomatic usage through directed discussions based on modern French texts. Prerequisite: Fre 130 b or Fre 130 c or placement.

## Fre 306 French Phonetics (2)

Practical introduction to the phonology of standard French drill in conversational speech, including French speech sounds and intonation; analysis of sound production; phonetic transcription of spoken French. Extensive use is made of the language laboratory. Prerequisite: Fre 230 or Fre 240.

## Fre 318 Modern French Theater in English (3)

Reading and analysis of representative French dramatists from Jarry to the present, especially Claudel, Giraudoux, Cocteau, Anouilh, Sartre, Ionesco, Becket and Genet. In addition, attention will be given to outstanding directors of the 20th century. Course may not be used to fulfill the requiremnets of the major in French.

## Fre 328 Modern French Novel in English (3)

Representative novelists of major French literary movements of the 20th century. Includes Proust, Gide, Camus, Sartre, Malraux, and Robbe-Grillet. This course may not be used to fulfill the requirements of the major in French.

## Fre 338 French Cinema and Society in English (3)

A close analysis of selected, commercial feature films by major French directors from the 1930s to the 1970s. Emphasis will be placed on the consideration of each film as a social and cultural document. This course may not be used to fulfill the requirements for the major in French.

## Fre 340 a Advanced Grammar (3)

Study of grammar and idioms, emphasizing complex structures and structural alternatives. Prerequisites: Fre 230 or Fre 240 or Placement.

## Fre 340 b Advanced Composition (3)

Intensive development of writing skills, emphasizing vocabulary expansion and expressive word choice. Fundamental styles of selfexpression and communication. Prerequisites: Fre 340 a or Placement.

## Fre 350 Advanced Conversation (2)

Directed and free discussions based in part on current French publications. Meets three times a week, including one period of supervised laboratory work designed to improve aural comprehension. Prerequisite: Fre 250 or placement.

## Fre 353 a Masterpieces of French Literature (3)

Reading and analysis of selected masterpieces of French literature from the Middle Ages to the 17th century. Readings in French; classes, papers and examinations in English. Course may not be used to fulfill the requirements of the major in French. Prerequisite: reading knowledge of French.

## Fre 353 b Masterpieces of French Literature (3)

Reading and analysis of selected masterpieces of French literature from the 18th to the 20th century. Readings in French; classes, papers and examinations in English. Course may not be used to fulfill the requirements of the major in French. Prerequisite: reading knowledge of French.

## Fre 355 a Contemporary French Society and Culture (3)

A close analysis of the family structures, the educational system, the social classes and the political, economic and cultural institutions of modern France. Prerequisite: Fre 240.

## Fre 355 b Development of French Society and Civilization (3)

An overview of the dominant social, political, economic, and cultural themes as expressed in French society from the medieval period to the present. Prerequisite: Fre 240, Fre 355 a highly recommended.

## Fre 361 Survey of French Literature: Middle Ages and 16th Century (3)

Presentation of the main literary currents from the epic to the end of Renaissance Humanism. Reading and discussion of selected texts. Prerequisite: Fre 241..

## Fre 362 Survey of French Literature: 17th and 18th Century (3)

Presentation of the main literary currents from Malherbe's time to Pre-Romanticism. Reading and discussion of selected texts. Prerequisite: Fre 241.

## Fre 363 Survey of French Literature: 19th and 20th Century (3)

Presentation of the main literary currents from Romanticism to the present. Reading and discussion of selected texts. Prerequisite: Fre 241.

## Fre 365 Coniemporary French Press (3)

A close examination of the press, through the analysis and discussion of newspapers, magazines and their ideologies. Prerequisite: Fre 230 or Fre 240.

## Fre 387 a Junior Honors in French (4)

Study of selected major works in French literature in their entirety and with relation to the background of their authors and periods. Training in techniques of literary analysis, criticism, and research by discussion, instruction in bibliographical methods, and the writing of regular short papers, Restricted to junior French majors who have been admitted to the honors program. First session. Prerequisites: Fre 361 and Fre 362.

## Fre 387 b Junior Honors in French (4)

Reading program in areas of French literature. Preparation of project for individual study. Limited to members of the French honors program. Grade of C or better is required for the prerequisite unless waived by the chairman of the department. Second session. Prerequisite: Fre 387 a.

## Fre 397 Independent Study in French (1-4)

Study by a student in an area of special interest not treated in courses currently offered. Work performed under direction of a professor chosen by the student on a topic approved by the department. May be repeated once with approval. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 405 Civilization Research (3)

Different aspects of French culture of the seventies: French society; politics, economy; education, religion; mass media; the arts. Prerequisites: Fre 355 a and Fre 355 b.

## Fre 406 French Linguistics: Morphology and Syntax (3)

Survey of the structure of the French language in the light of the current linguistic theory. Emphasis will be on the fields of morphology and syntax. Prerequisite: Lin 206, or consent of instructor.

## Fre 415 French Cinema and Society (3)

Form, composition, social and cultural analysis of selected commercial feature films and scenarios by major French directors from the 1930s to the 1970s. Prerequisite: Fre 240.

## Fre 431 Medieval 16th and 17th Century Poetry (3)

Main currents with emphasis on "poètes courtois," Villon, Marot, Ronsard, Malherbe, and La Fontaine. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 440 Advanced Language Analysis (3)

Syntactical analysis and intensive writing of French. Prerequisite: Fre 340 a, Fre 340 b or placement.

## Fre 441 Renaissance and Humanism (3)

Intellectual, religious, and literary expression of the French Renaissance with emphasis on Rabelais, Ronsard, and Montaigne. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 450 French Speech Styles (3)

Training in conversational mastery of spoken French with emphasis on various speech styles: soigné, familier, populaire. Close attention is paid to the grammatical and lexical analysis of these styles, their cultural implications and social contexts. Prerequisite: Fre 350, participation in Nice program, or placement.

## Fre 451 French Classicism (3)

Preclassicism and baroque. The main features of French classicism. Analysis of representative works, with emphasis on Pascal, Corneille, Racine, Molière, and Boileau. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 452 17th and 18th Century Novel (3)

Representative works illustrating the development of the novel as a genre: Mme. de Lafayette, Abbé Prévost, Marivaux, Voltaire, and Laclos. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 453 17th, 18th and 19th Century Theater (3)

Representative works of Corneille, Racine, Molière, Marivaux, Beaumarchais, Hugo and Becque. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 461 The Age of Enlightenment (3)

Philosophy and "sensibilite" in the works of Montesquieu, Voltaire, Diderot, and Rousseau. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 471 French Romanticism (3)

Literary and Philosophical background of French romanticism; romanticism in French poetry; drama, and other literary types. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 472 19th Century Novel (3)

Representative works which illustrate the major trends of the French novel from Romanticism to Naturalism. Emphasis on Hugo, Balzac, Stendhal, Flaubert, and Zola. Prerequisite: Fre 361, Fre 362 or Fre 363.

## Fre 473 19th and 20th Century Poetry (3)

Main poetic currents from Romanticism to modern times. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 481 20th Century Novel (3)

The social novel; exploration of the unconscious in Proust; religious problems and conflicts in Gide, Bernanos, and Mauriac; roman-fleuve; Sartre and existentialism; Camus and the absurd; Malraux. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 482 20th Century Theater (3)

Symbolist influence in 20th Century theater; revival of classical themes; existentialist drama. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 483 Le Nouveau Théâtre (3)

Reaction to the classical tradition in contemporary French theater; the "theater of the absurd" from its earliest manifestations to the present. Prerequisite: Fre 361, Fre 362, or Fre 363.

## Fre 487 Senior Honors in French (4)

Writing of the Senior Honors Thesis under direction of a member of the French faculty. Limited to members of the French honors program. Grade of C or better is required for the prerequisite unless waived by the chairman of the department. Either session. Prerequisite: Fre 387 b .

## Fre 490 Seminar on the Problems of Teaching Secondary School French (1)

Quarter course designed to bring to prospective high school teachers assistance in teaching French more effectively; up-to-date information about French culture, presentation of difficult points of French grammar, sources for supplementary teaching material, etc. A seminar where recent graduates as well as seasoned high school teachers participate on a regular basis in order to discuss their teaching experiences. Open to students during their professional term or consent of instructor.

## Fre 491 Littérature d'Expression Française (3)

General view of literature written in French by African, Canadian, Caribbean, and European authors. Emphasis will vary betwee African-Caribbean, Canadian or European. Course may be repeated twice with different subject emphasis. Prerequisite: Fre 361, Fre 362, or Fre 363.

Fre 499 Undergraduate Seminar (3)
Intensive study of an author, topic or literary theme not treated in regularly offered departmental undergraduate courses. May be repeated. Prerequisite: Fre 361, Fre 362, or Fre 363.

The following courses are open to qualified seniors:
Fre 510 History of the French Language (3)
Fre 511 Stylistique Française (4)
Fre 512 Explication de Textes (4)
Fre 531 The Middle Ages I (3)
Fre 532 The Middle Ages II (3)
Fre 541 Sixteenth Century Prose (3)
Fre 542 Sixteenth Century Poetry (3)
Fre 551 Seventeenth Century Moralists (3)
Fre 552 Philosophical and Religious Thought in the Seventeenth Century (3)

Fre 553 The Classical Drama (3)
Fre 561 Eighteenth Century Novel (3)
Fre 562 Eighteenth Century "Philosophes" (3)
Fre 563 Eighteenth Century Theater (3)
Fre 572 Realism and Naturalism (3)
Fre 573 Nineteenth Century Theater (3)
Fre 574 Symbolist and Parnassian Poetry (3)
Fre 584 Twentieth Century Poetry (3)
Fre 594 Literary Criticism (3)

## DEPARTMENT OF GERMANIC LANGUAGES AND LITERATURES

FACULTY: S. Barlau, F. Beharriell, U. Maché, E. Moore, T. Nadar, E. Schrader-Gentry, J. Spalek, J. Strelka, J. Winkelman, W. Wittkowski.

The department seeks to make available programs that develop knowledge and appreciation of the German language and of the cultures of the German-speaking areas. It promotes opportunities for direct and indirect advancement of such knowledge and appreciation. The programs equip students for positions in education and other fields, and for continued study in graduate and professional schools.

## SPECIAL PROGRAMS AND OPPORTUNITIES

A German Club meets regularly and sponsors occasional social activities. An informal weekly conversation group provides opportunities for interaction with others interested in German, and for development of language skills. Students are eligible to participate in the exchange program with Würzburg University. Available are a summer intensive language program, and a year abroad to advanced students (see under Office of International Programs). The department offers courses in Business German. These are specialized courses intended for students wishing to acquire a language tool for their eventual business-related careers.

## Degree Requirements for the Major in German

The major in German offers four concentrations. All students must complete a minimum of 30 credits above Ger 205 , including a 12 -credit core of Ger $300 \mathrm{a}, 300 \mathrm{~b}, 301 \mathrm{a}$, and 312 , plus 18 additional credits in one of the concentrations described below:

## Concentration in Linguistics

Ger $308 \mathrm{a}, 308 \mathrm{~b}, 400$, Lin 206, and six credits in literature, linguistics, or society and culture in the area of German.

## Concentration in Literature

Ger $308 \mathrm{a}, 308 \mathrm{~b}, 430$, and 6 credits in German literature courses at the 300 level or above, plus 3 credits in litera* ture, linguistics, or society and culture in the area of German.

## Concentration in Society and Culture

Ger 311, Gog 466, and one of the following: His 351 a, 351 b , or 452 , plus 9 credits in literature, linguistics, or society and culture in the area of German.

## Teacher Education Program

Ger $308 \mathrm{a}, 308 \mathrm{~b}$, and 6 credits in German literature courses at the 300 level or above, plus 6 credits of elective courses in the area of German.

## Honors Program

B.A.: Students may apply to the program by letter to the Chairman of the Department of Germanic Languages and Literatures before April 1 of the student's sophomore year. Admission to the program will depend upon prior performance of the student which can be supported by letters of recommendation from his/her teachers. Requirements are as follows: Ger 300 a and b, $301 \mathrm{a}, 308$ a and b, 312, 391 a and b, 491, and at least 6 credits in German literature at the 400 level or above.

## Other Degree Requirements

For each of its undergraduate major programs, the department recommends a course in German history as a supplement. Students electing the Concentration in Society and Culture are urged to take Ger 235 History of the German Cinema, Ger 250 German Folklore and Oral Traditions, and Ger 270 Nordic Saga and Myth to fulfill their elective requirements in the area of German. Students who have taken the course sequence in Business German (Ger 110, 210, 211) and who then determine to major in German are advised to select the Concentration in Society and Culture; or they may choose one of the other concentrations after successful completion of Ger 300 a and b , and Ger 301 a. Students who started in the regular German language track (Ger 101, 102, etc.) and who wish to change to the Business German sequence may do so during their second year of German. After completing Ger 102 they enter Ger 210.

## Ger 101 Elementary German (4)

Beginner's course with audio-lingual approach. Emphasis on fundamentals of German grammar, pronunciation and oral expression; graded readings. Five classes, two half-hour laboratories each week.

## Ger 102 Elementary German (4)

Continuation of audio-lingual approach of Ger 101. Reading of selections from German fiction to further develop the reading skill. Five classes, two half-hour laboratories each week. Prerequisite: Ger 101 or placement by examination.

## Ger 110 Business German for Beginners (4)

Beginner's course intended for students majoring in business, economics, or related fields. Audio-lingual approach. Five classes, two half-hour laboratories each week.

## Ger 120 Germany: East and West (3)

Exploration and discussion of various aspects of German civilization since 1945, as illustrated by contemporary literature, art, and thought. Team teaching and use of audio-visual materials such as films and slides. Conducted in English.

## Ger 125 Goethe to Thomas Mann in English Translation (3)

Representative authors and works from the end of the 18th century to the beginning of the 20th. Includes: Goethe, Kleist, Heine, Büchner, E.T.A. Hoffmann, Fontane, Thomas Mann. Lectures and readings in English.

## Ger 180 Contemporary German Novelists (3)

The representative German novelists from 1945 to the present, including Böll, Grass, Frisch, Johnson, Lenz. Discussed against the background of contemporary social, political and literary developments, both in West and East Germany. Lectures and discussions in English.

## Ger 201 Intermediate German (4)

Review of grammar and syntax, followed by literary readings in conjunction with a continuation of the audio-lingual method. Four classes each week. One hour laboratory attendance each week is recommended. Prerequisite: Ger 102 or placement by examination.

## Ger 202 Intermediate German (3)

Continued literary readings in conjunction with a continued emphasis on the audio-lingual method. Three classes each week. One hour laboratory attendance each week is recommended. Prerequisite: Ger 201 or placement by examination.

## Ger 205 Scientific German (3)

Reading and technique of translation of scientific works for those who wish to use the language in research. Prerequisite: Ger 201 or placement by examination.

## Ger 210 Intermediate Business German I (4)

Continued practice in German grammar with introduction to business vocabulary. Reading of business oriented material. Four classes. Prerequisite: Ger 110 or Ger 102.

## Ger 211 Advanced Business German HI (4)

Intensive practice with idiomatic German as it would occur in everyday business situations. Reading and analysis of contemporary texts from professional journals, letters and documents in the field of Business and Economics. Prerequisite: Ger 210 or placement by examination.

## Ger 220 Lile in Contemporary Germany, Austria and Switzerland (3)

The course deals with family life, education, religious and cultural traditions and activities in the German-speaking countries. The students are also introduced to the forms of government and the socio-economic structures of these areas. Conducted in English; special terminology given in German.

## Ger 230 Luther to Freud: Germany in the Context of Western Civilization (3)

A survey of cultural history of Germany from the Renaissance to the present. Particular emphasis on the impact of other European civilizations on German life as well as on German contributions to Western traditions. Slides and other visual aids are used to supplement the lectures, Conducted in English.

## Ger 235 History of the German Cinema (3)

A survey of the German motion picture since the end of World War I. Examination of film as a cultural, political, sociological and artistic document of Germany in the Twentieth Century, Lectures supplemented by discussions. Conducted in English.

## Ger 240 Great Authors in English Translation (3)

Concentration on the works and life of one major author, such as Franz Kafka, or one of the Nobel Prize winners Thomas Mann, Hermann Hesse, and Heinrich Böll. The works selected will be chosen for their literary value as well as for their significance as a commentary on the problems facing man in our century. Lectures and readings in English. Course may be repeated when subject changes.

## Ger 241 Brecht: Poet and Playwright (3)

A study of representative dramatic and poetic works by Brecht with emphasis on theory and practice of "Epic Theater" and its contributions to modern drama and film; discussion of biographical and political aspects of Brecht's career as reflected in his work. Lectures and readings in English, supplemented by films and recordings.

## Ger 250 German Folklore and Oral Traditions (3)

A survey of German oral traditions and customs in Germany, Austria and Switzerland; their origins, meanings, and reflections in literature of the 19 th and 20th centuries, with slides, films and musieal illustrations. Conducted in English.

## Ger 260 Humor and Satire in German Literature (3)

Reading and discussion of German humorous and satiric literature in all genres, in prose and verse. The readings and lectures are supplemented by discussion of the theories of humor and satire. Conducted in English.

## Ger 270 Nordic Saga and Myth (3)

Readings and discussion of the Poetic Edda, mythic songs of gods and heroes, and Icelandic family sagas. Life in the pre-Christian era as demonstrated by archeological discoveries. Conducted in English.

## Ger 300 a and b Intermediate Conversation and Composition (3, 3)

Intensive oral practice; building of active vocabulary; conversation and composition based upon readings from German literature and history. Classes meet three times per week. Prerequisite: Ger 202 or placement by examination including a written portion, Ger 300 is a prerequisite for Ger 300 b .

## Ger 301 a and b Advanced Conversation and Composition (3, 3)

Advanced oral practice; building of active vocabulary; conversation and composition based upon readings from German literature and history. Classes meet three times per week. Prerequisite: Ger 300 b or placement by examination including a written portion. Ger 301 a is a prerequisite for Ger 301 b.

## Ger 308 a Masterworks of German Literature I (3)

Selected masterworks of German literature, mainly from the 18th and 19th centuries. Introduction to literary analysis. Prerequisite: Ger 202 or placement by examination.

## Ger 308 b Masterworks of German Literature II (3)

Selected masterworks of German literature from the 19th and the 20th centuries. May be taken prior to Ger 308 a. Prerequisite: Ger 202 or placement by examination.

## Ger 311 German Civilization (3)

Social and historical background of modern German institutions and life. Students who plan to teach German are advised to elect this course. Conducted in German. Prerequisite: Ger 300 or concurrent registration.

## Ger 312 German Phonology (3)

Introduction to general phonetics and to the German sound system in contrast to English. Extensive practice in phonetic transcription and analysis of speech segments. Oral drills directed toward improvement of pronunciation, especially in areas of interference from English. In English.

## Ger 320 The German Lyric (3)

A basic course in German lyric poetry concentrating on the representative poets from Goethe to the present. Introduction to the types and movements in German lyric poetry. Includes works of Goethe, Hölderlin, Eichendorff, Heine, Rilke and others. Prerequisite: Ger 202 or consent of instructor.

## Ger 330 Translation and Aural Comprehension (3)

Written translation from and into German with emphasis on the practical use of the language. Text selections from newspapers, business journals, travel literature etc. Exercises in aural comprehension, use of radio broadcasts, taped speeches, and films. Prerequisites: Ger 202 or Ger 210 or placement by examination.

## Ger 391 a Junior Honors in German (4)

Study of selected major works of German literature. Preparation of project for relation to the background of their authors and periods. Training in techniques of literary analysis, criticism, and research by discussion, instruction in bibliographical methods, and the writing of regular short papers. Restricted to junior German majors who have been admitted to the Honors Program. Prerequisites: Ger 308 a and b or concurrent enrollment. First session.

## Ger 391 b Junior Honors in German (4)

Independent reading program in German literature. Preparation of project for individual study. Limited to members of the German Honors Program who have completed Ger 391 a. Second session.

## Ger 400 Growth and Structure of the German Language (3)

Survey of internal and external history of the language, from earliest times to the present. Morphology and syntax of modern German presented within current linguistic framework. Brief review of phonology. Iu English. Prerequisite: Ger 202 or equivalent.

## Ger 415 Masterworks of Medieval German Literature (3)

Study of the major works and literary trends of the German Middle Ages including selections fron the Hildebrandslied, Nibelungenlied, Parzival, Tristan, and Ackerman aus Böhmen as well as the major poets of the Minnesang. The course includes an introduction to the cultural and historical background of the period. Prerequisites: Ger 308 a and b or consent of instructor,

## Ger 430 Age of Goethe I (3)

Reading and discussion of selected works of Lessing, Goethe, Schiller and their contemporaries. Prerequisites: Ger 308 a and b or consent of instructor.

## Ger 435 Age of Goethe II (3)

Reading and discussion of selected works of the German Romantics and their contemporaries. Prerequisites: Ger 308 a and b or consent of instructor.

## Ger 440 19th Cenlury German Prose Fiction (3)

Reading and discussion of representative novels and novellas by the principal German authors of the 19th century. Prerequisites: Ger 308 a and b or consent of instructor.

## Ger 445 19th Century German Drama (3)

Reading and discussion of major dramas of the 19th century and the relevant dramatic theories. Prerequisites: Ger 308 a and bor consent of instructor.

## Ger 450 20th Century German Prose Fiction (3)

Reading and discussion of representative prose works by the principal German authors of the 20th century. Prerequisites: Ger 308 a and b or consent of instructor.

## Ger 455 20th Century German Drama (3)

Reading and discussion of representative German dramatists of the 20th century. Prerequisites: Ger 308 a and $b$ or consent of instructor.

## Ger 460 Goethe's Faust (3)

Reading of Goethe's Faust against the background of Goethe's life: the growth of the Faust legend and of previous Faust dramas. Prerequisites: Ger 308 a and b or consent of instructor.

## Ger 491 Senior Honors in German (4)

Writing of the Senior Honors Thesis under the direction of a member of the German faculty. Linited to members of the German Honors Progran who have completed Ger 391 b. Either session.

## Ger 495 a Reading German for Graduate Students (4)

Introduction to reading German for graduate students, followed by readings of gradually increasing difficulty.

Students passing both sessions with a grade of B or better will be certified to their major departments and to the Office of Graduate Studies as having attained a reading proficiency at least equal to that represented by passing the Princeton Graduate Reading Examination. Prerequisite: admission to graduate study.

## Ger 495 b Reading German for Graduate Students (4)

Continuation of Ger 495 a with readings of increasing difficulty. The last part of the second session will be devoted to reading unedited scholarly and scientific texts elected from the humanities, science, and social science fields.

Students passing both sessions with a grade of B or better will be certified to their major departments and to the Office of Graduate Studies as having attained a reading proficiency at least equal to that represented by passing the Princeton Graduate Reading Examination.

## Ger 497 Independent Studies in German (3-6)

Projects in selected areas of German Studies, with regular progress reports. Prerequisite: consent of department chairman. May be repeated once for credit when topics differ.

The following courses are open to qualified seniors:
Ger 500 Advanced Language (4)
Ger 501 Introduction to Germanic Lingulstics (4)
Ger 502 Middle High German (4)
Ger 515 Medieval German Literature to the 13th Century (4)

Ger 580 Twentieth Century German Drama (4)
Ger 581 Twentieth Century Short Fiction (4)
Ger 582 Twentieth Century German Novel (4)

## DEPARTMENT OF HISPANIC AND ITALIAN STUDIES

FACULTY: A. Baker, A. Berenguer, R. Bosch, C. Brakel, A. Carlos, F. Carrino, R. Castagnino, S. E. Shyfter, D. Fachard, F. Frank, L. Jenaro-MacLennan, C. Nepaulsingh, J. M. Polo de Bernabe, G. Rimanelli, R. Schmidt, A. Zitelli. The Department of Hispanic and Italian Studies expects its students to become highly proficient in speaking, understanding, reading, and writing the foreign language as well as to develop a thorough knowledge of and an appreciation for the literature and civilization. Proficiency in language skills is regarded not only as an end in itself but also as a means of studying a foreign culture. The department offers full programs leading to the B.A. in Spanish and Italian, and a Portuguese curriculum sufficient to permit an undergraduate a second field sequence.

All students wishing to enter language courses must take the placement examination administered by the department.

Language majors normally take, in their junior year, the proficiency examination in their respective languages administered by the New York State Department of Education.

## SPECIAL PROGRAMS OR OPPORTUNITIES

## Interdisciplinary

The major in Inter-American Studies allows for a concentration in Spanish. The Department of Hispanic and Italian Studies also participates in interdisciplinary studies in conjunction with programs in Linguistics, Puerto Rican Studies, the School of Education, and the Departments of Art, Classics, Comparative and World Literature, History, and Music.

A year-abroad program was initiated at the International Institute in Madrid Spain in 1970. Pre-entrance summer programs are offered in Italy and Spain. For more detailed information, see "Office of International Programs--Study Abroad Programs." Use of the foreign language and the exchange of ideas are fostered through language dormitories, language clubs, colloquia, lectures, and other department activities.

## Degree Requirements for the Major In Italian

## General Program

B.A.: A minimum of 33 credits including Ita 207 a and b, Ita 223, Ita 311 a and b, Ita 301, Ita 421. Twelve additional credits must be at the 300 level or above including three credits of literature courses at or above the 400 level.

## Teacher Education Program

B.A.: A minimum of 33 credits including Ita 207 a and b, Ita 223, Ita 301, Ita 311 a and b, Ita 421. Twelve additional credits must be at the 300 level or above including three credits of literature courses at or above the 400 level.
N.B. Lin 206 may be taken as part of the major sequence in both the General and Teacher Education Program.

## Ita 101 a and b Elementary Italian (4, 4)

Beginner's course with audio-lingual approach; fundamentals of language structure and sounds; emphasis on correct pronunciation and oral expression; graded readings. Classes meet four times per week, plus two required homework periods in the language laboratory. Prerequisite: For Ita 101 a, for beginners: none; for students with ligh school Italian: placement. For Ita 101 b : 101 a or placement.

## Ita 101 c Intensive Elementary Italian (8)

An intensive one-session elementary language course covering both 101 a and 101 b . Fundamental language skill with primary emphasis on audio-lingual skills. Meets ten hours per week, including one hour of supervised laboratory work. Prerequisite: For beginners: none; for students with high school Italian: placement.

## Ita 102 a and b intermediate Italian (4, 3)

Modern Italian readings: Review of Italian grammar, composition and conversation. Prerequisite: For Ita $102 \mathrm{a}: 101 \mathrm{~b}$ or 101 c or placement; for Ita 102 b ; 102 a or placement.

## Ita 102 c Intensive Intermediate Italian (7)

An intensive one-session intermediate language course covering both 102 a and 102 b . Primary focus on the development of reading skills and the improvement of audio-lingual skills. Meets eight hours per week including one hour of supervised laboratory work. Prerequisite: Ita 101 b or 101 c or placement.

## Ita 207 a and b Intermediate Conversation and Composition ( 3,3 )

Primary emphasis on the active skills of speaking and writing. Prerequisite: For Ita $207 \mathrm{a}: 102 \mathrm{~b}$ or 102 c or placement; for Ita 207 b : 207 a or placement.

## Ita 213 The Italian American Experience (3)

An exploration of the Italian-American heritage in art, culture and the novel and a study of the psychological and social dimen-
sion of the ethnic experience. Presented in English.

## Ita 223 Introduction to Literary Methods (3)

Textural exposition of readings selected according to genre, with an introduction to literary terminology and writing. Prerequisite: Ita 102 b or 102 c or placement.

## Ita 301 Advanced Conversation and Composition (3)

Intensive practice in speaking and writing Italian, Prerequisite: Ita $207 \mathrm{~b}^{*}$ or placement.

## Ita 311 a General View of Italian Literature (3)

Survey of Italian literature from its origins to the end of the Renaissance. Prerequisite: Ita $223^{*}$ or consent of department chairman.

## Ita 311 b General View of Italian Literature (3)

Survey of Italian literature from the end of the Renaissance to the present. Prerequisite: Ita $223^{*}$ or consent of department chairman.

## Ita 315 a Italian Civilization (3)

Study of fundamental aspects of Italian life, art, and thought during the Middle Ages and the Renaissance. Prerequisite: Ita $207 \mathrm{~b}^{*}$ or placement.

## Ita 315 b Italian Civilization (3)

Continuation of Ita 315 a from the Baroque period to the present time. Prerequisite: Ita $270 b^{*}$ or placement.
Ita 318 Italian Cinema as Literature (3)
A survey of the history, theory and aesthetics of the Italian motion picture, illustrated in the works of major representative film makers. Emphasis will be put on considering each film as a social and cultural document. May not be used to fulfill degree requirements for major in Italian. This course will be offered beginning Spring, 1978.

## Ita 397 Independent Study in Italian (2-4)

Study hy a student in an area of special interest not treated in currently offered courses. Work performed under direction of a professor chosen by the student on a topic approved by the department. May be repeated once with special departmental approval. Prerequisite: Ita 311 b .

[^3]
## Ita 401 Advanced Language (3)

Designed to give students intensive practice in conversation, diction, and translation. Study of passages from modern Italian authors for style and shades of expression. Prerequisites: Ita 301 or placement.

## Ita 421 Dante (3)

Introduction to the Divina Commedia. Conducted in Italian. Required of all majors in Italian. Prerequisite: Ita 311 a or consent of department chairman.

## Ita 435 II Trecento (3)

Introduction to the literature of the period with special emphasis on Petrarch's Canzoniere and Boccaccio's Decamerone. Prerequisite: Ita 311 a or consent of department chairman.

## Ita 441 a The Italian Renaissance (Part I) (3)

A study of Italian Renaissance, with emphasis on the individual authors as well as on their influence on other western cultures and on the thinking of the following centuries. Part I: from Petrarch to Valla to Boiardo and to the circle of Lorenzo de' Medici. The new critical spirit and the search beyond all traditional boundaries. Prerequisite: Ita 311 a.

## Ita 441 b The Italian Renaissance (Part II) (3)

Continuation of Ita 441 a . From Machiavelli, Ariosto, and Guicciardini to Cellini, Bandello, Vasari, and Tasso. Prerequisite: Ita 311 a or consent of department chairman.

## Ita 461 From Baroque to Arcadia (3)

A study of literature, trends, and ideas of the 17th and 18th centuries, from Galileo to Marino to Vico, and to Goldoni, Parini, and Alfieri. Prerequisite: Ita 311 b or consent of department chairman.

## Ita 471 Italian Literature of the 19th Century I (3)

From Neo-Classicism to Romanticism. A study of the prose and poetry of the early 19th century; in particular, the works of Monti, Foscolo, Leopardi, and Manzoni. Prerequisite: Ita 311 b or consent of department chairman.

## Ita 472 Italian Literature of the 19th Century II (3)

A study of the 19th Century prose and poetry, in particular the works of Carducci, Pascoli, D'Annunzio, and Verga. Prerequisite: Ita 311 b or consent of department chairman.

## Ita 481 The Italian Novel of the 20th Century (3)

A study of the Italian novel from the beginning of the century to the present. Prerequisite: Ita 311 b .

## Ita 482 Italian Poetry and Drama of the 20th Century (3)

Survey of the various trends and movements in contemporary Italian poetry and drama. Prerequisite: Ita 311 b .

## Portuguese

## Por 101 a and b Elementary Portuguese (4, 4)

Beginner's course with audio-lingual approach; fundamentals of language structure and sounds; emphasis on correct pronunciation and oral expression; graded readings. Classes meet four times per week, plus two required homework periods in the language laboratory. Prerequisite: For Poi 101 a, for heginners: none; for students with high school Portuguese: placement; for Por 101 b: 101 a or placement.

## Por 102 Intermediate Portuguese (4)

Continued intensive work with the four language skills, giving special emphasis to readings. Conducted in Portuguese, Prerequisite: Por 101 b or placement.

## Por 107 a and b Intermediate Conversation and Composition (3, 3)

Primary emphasis on the active skills of speaking and writing. Prerequisite: For Por 107 a: 102 or placement; for Por 107 b; 107 a or placement.

## Por 211 Introduction to Portuguese Literature (3)

Reading of major works of Portuguese literature from the Middle Ages to the present. Concentration on such masters as Camões, Gil Vicente, Garrett, Eça de Queiroz, Fernando Pessoa. Prerequisite: Por 102 or placement.

## Por 212 Introduction to Brazilian Literature (3)

Reading of major works of Brazilian literature from the Colonial period until the present. Prerequisite: Por 102 or placement.

## Por 221 Introduction to Literary Methods (3)

Textual exposition of readings, selected according to genve with an introduction to literary terminology and writing. Poetry and drama. Prerequisite: Por 102 or placement.

## Por 222 Introduction to Literary Methods (3)

Textual exposition of readings, selected according to genre with an introduction to literary terminology and writing, Prose genres. Prerequisite: Por 102 or placement.

## Por 397 Independent Study in Portuguese (2-3)

Study by a student in an area of special interest not treated in courses currently offered. Work performed under direction of a professor chosen by the student on a topic approved by the departinent. May be repeated once with special departmental approval, Prerequisite: Por 102 or placement.

## Degree Requirements ror the Major in Spanish

## General Program

B.A.: A minimum of 35 credits including $S p n 106$ a, Spn 107 a and b, Spn 123, Spn 211 a and b, Spn 301, Spn 305 and 15 additional credits. Twelve credits must be at the 300 level or above, including a minimum of six credits of literature courses at or above the 400 level.

## Teacher Education Program

B.A.: A minimum of 35 credits including $\operatorname{Spn} 106$ a, Spn 107 a and b, Spn 123, Spn 211 a and b, Spn 301, Spn 305 and 15 additional credits. Twelve credits must be at the 300 level or above, including a minimum of six credits of literature courses at or above the 400 level.
N.B. Lin 206 may be taken as part of the major sequence in both the General and Teacher Education programs.

## Spn 101 a and b Elementary Spanish (4, 4)

Beginner's course with audio-lingual aprpoach; fundamentals of language structure and sounds; emphasis on correct pronunciation and oral expression; graded readings. Classes meet four times per week; plus two required homework periods in the language laboratory. Prerequisite: For Spn 101 a, for beginners: none; for students with high school Spanish: placement; for Spn 101 b: 101 a or placement.

## Spn 101 c Intensive Elementary Spanish (8)

An intensive one-session elementary language course covering both Spn 101 a and 101 b . Fundamental language skills with primary emphasis on audio-lingual skills. Meets ten hours per week, including one hour of supervised laboratory work. Students required to make extensive additional use of laboratory facilities, Prerequisites: For beginners: none; for students with high school Spanish: placement.

## Spn 102 a Intermediate Spanish (4)

Continued intensive work in language skills of listening, speaking, reading, and writing, with special emphasis on reading and the writing of short compositions. Prerequisite: Spn 101 b or 101 c or placement.

## Spn 102 b Intermediate Spanish (3)

Continued work with the four skills as in Spn 102 a, emphasis on the reading of more difficult material. Short compositions and discussions in Spanish. Prerequisite: Spn 102 a or placement.

## Spn 102 c Intensive Intermediate Spanish (7)

An intensive one-session intermediate language course covering both Spn 102 a and 102 b . Primary focus on the development of reading skills and the improvement of audio-lingual skills. Meets eight hours per week, ineluding one hour of supervised laboratory work. Presentation and review of grammatical structures appropriate to these skills. Prerequisite: Spn 101 b or 101 c or placement.

## Spn 105 Spanish for Native Speakers (4)

Especially designed for the native-speaker with little formal study of the language. Topics will include reading, spelling, grammar, composition, vocabulary building, with attention to individual needs. Five meetings per week including required laboratory. Prerequisite: Placement or consent of instructor.

## Spn 106 a and b Intermediate Conversation and Oral Grammar (2, 2)

Primary emphasis on the active skill of speaking. To be taken simultaneously with $\operatorname{Spn} 107$ a and b. Either or both terms of this course may be waived upon demonstration of sufficient oral skill. Prerequisite: For Spn 106 a: 102 b or 102 c or placement; for Spn 106 b: 106 a or placement.

## Spn 107 a and b Intermediate Composition and Written Grammar (2, 2)

Primary emphasis on the active skill of writing. To be taken simultaneously with $\operatorname{Spn} 106$ a and b. Either or both terms of this course may be waived upon demonstration of sufficient writing skill. Prerequisite: For Spn 107 a: 102 b or 102 c or placement; for Spn 107 b : 107 a or placement.

## Spn 123 Introduction to Literary Methods (3)

Textual exposition of readings, selected according to genre with an introduction to literary terminology and writing. Prerequisites: Spn 102 b or 102 c or placement.

## Spn 211 a Representative Spanish Authors (3)

Survey of Spanislı literature from its origins to the end of the 17th century. Prerequisite: Spn 123.

## Spn 211 b Representative Spanish Authors (3)

Survey of Spanish literature from the beginning of the 18th century to the present. Prerequisite: $\operatorname{Spn} 123$.

## Spn 301 Advanced Conversation and Composition (3)

An intensive study of the language, with frequent short compositions. Either session. Prerequisite: Spn 106 b and Spn 107 b, or placement.

## Spn 302 Advanced Conversation and Composition (3)

An intensive study of the language, with special attention to analysis of construction and to organization, expression and style in themes. Either session. Prerequisite: Spn 301 or placement.

## Spn 305 Spanish Phonetics (2)

Spanish speech sounds in prose and verse. Drill in conversational speech, intonation, and the analysis of sound production. Extensive use is made of recordings. Either session. Prerequisite: Spn 102 b or 102 c or placement.

## Spn 311 Readings in Early Spanish Literature (3)

Selected readings in Spanish literature from the 12th through the 15th century, with emphasis on both language and literature. Prerequisite: Spn 123.

## Spn 313 Spanish Civilization (3)

A study of the unique character of the Spanish peoples and an examination of the various aspects of Spanish culture through the 19th century.

## Spn 314 a, b (Jst 314 a, b) Literature of the Spanish Portuguese Jews and Naw Christians $(3,3)$

Same as Jst 314 a, b.

## Spn 315 Hispanic Civilization of the 20th Century (3)

A study of the cultural manifestations of the great political and social changes which have taken place in Spain and Spanish America in the 20 th century. A different country or group of countries will be studied each session. May be repeated once for credit.

## Spn 316 a Spanish American Literature to 1888 (3)

Survey of literary movements in Spanish America. Selected readings, lectures, discussions, and reports on collateral readings. Prerequisite: Spn 123.

## Spn 316 b Spanish American Literature from 1888 to 1940 (3)

Survey of literary movements in Spanish America from 1888 to 1940. Selected readings, lectures, discussions, and reports on collateral readings. Prerequisite: Spn 123.

## Spn 317 Latin American Civilization (3)

A study of Spanish American cultures and institutions from the beginnings to the 20th century.

## Spn 321 Spanish Drama (3)

Analysis of plays from various periods with emphasis on the specific characteristics of the genre. Prerequisite: Spn 123.

## Spn 323 Spanish Poetry (3)

Analysis of poetry from various periods with emphasis on the specific characteristics of the genre. Prerequisite. Spn 123.

## Spn 324 The Spanish Novel (3)

Analysis of novels from various periods with emphasis on the specific characteristics of the genre. Prerequisite. Spn 123.

## Spn 325 Spanish Short Fiction (3)

Analysis of selections from various periods with emphasis on the specific characteristics of the genre. Prerequisite. Spn 123.

## Spn 333 Don Quijote de la Mancha (3)

A study of Don Quijote, including consideration of its importance in world literature. Readings and discussion in English. Majors are expected to read the novel in Spanish.

## Spn 344 Women in Hispanic Literature (3)

Images of women as reflected in diverse works in Hispanic literature. Readings and discussions in English.

## Spn 397 Independent Study in Spanish (1-4)

Study by a student in an area of special interest not treated in courses currently offered. Work performed under direction of a professor chosen by the student on a topic approved by the department. May be repeated once with special departmental approval. Prerequisite Spn 211 a or $\operatorname{Spn} 211$ b.

## Spn 401 Advanced Language (3)

Designed to give students intensive practice in conversation, diction and translation. Study of passages from modern Spanish authors for style and shades of expression. Either term. Prerequisite: Spu 301* or 302 or placement.

## Spn 402 Spanish Linguistics: Morphology and Syntax (3)

A survey of the structure of the Spanish language in the light of current linguistic theory. Emphasis will be on the fields of morphology and syntax. Prerequisite: Spn 305 or consent of instructor.

## Spn 403 Spanish for Teachers (2)

An intensive course in Spanish grammar with the needs of the beginning teacher in mind. Emphasis on those aspects of grammar which cause the most difficulty to English-speaking students. A quarter course. Meets four hours per week. Prerequisite: Spn 301 or placement.

## Spn 404 Advanced Oral Communication (3)

Improving oral communications through panel and round-table discussions, talks for special occasion, debates and other forms of communication. Talks tape recorded. A quarter course. Meets four hours per week plus two additional hours in laboratory. Prerequisites: Spn 301 or Placement.

## Spn 405 Evolution of the Spanish Language (3)

Development of modern Spanish from Vulgar Latin medieval forms; phonology and morphology.

## Spn 414 Literature of the Hispanic Caribbean (3)

A study of selected major writers of Cuba, the Dominican Republic, and Puerto Rico of the 19th and 20th centuries. Special consideration of literature as a reflection of situations and problems peculiar to the Hispanic Caribbean. Conducted in Spanish. Prerequisite: Spn 123.

## Spn 416 Spanish American Literature 1940-present (3)

Survey of literary movements in Spanish America from 1940 to present. Major emphasis on the most recent developments in Spanish American literature. Prerequisite: Spn 211 a or 211 b.

## Spn 420 20th Century Women Writers (3)

A study of the contributions of women writers to 20th Century Hispanic literatures. Special attention to the manner in which women perceive reality in a male-oriented world. Prerequisite: Spn 211 b.

## Spn 444 Comedy and Satire in Hispanic Literature (3)

Study of comic and satiric literature. Discussion on the theory of laughter, comedy, the absurd and the grotesque. Prerequisite: Spn 211 a or Spn 211 b.

## Spn 445 The Anti-Hero in Hispanic Literature (3)

A study of the anti-hero as a protagonist in Hispanic literature. Prerequisite: Spn 211 a or $\operatorname{Spn} 211$ b.

## Spn 446 Literature of Social Protest (3)

An examination of several major works of Hispanic literature which are interesting as literature and also as expression of social protest. Prerequisite: Spn 211 a or $\operatorname{Spn} 211$ b.

## Spn 481 Spanish Literature of the 20th Century (3)

Study of the Generation of '98 within its historical and philosophic context. Prerequisite: Spn 211 b.

## Spn 482 Spanish Literature of the 20th Century (3)

Study of contemporary Spanish literature from the Generation of '98 until today. Prerequisite: Spn 211 b.

## Spn 499 Undergraduate Seminar (4)

A topic in language or literature as determined by the instructor, to include a substantial term paper. Repeatable with change in topic. Open to all Spanish majors. Prerequisite: Pernission of Instructor.

The following courses are open to qualified seniors:
Spn 501 Problems in Spanish Syntax (3)
Spn 503 Explication of Texts (3)
Spn 505 History of the Spanish Language (3)
Spn 515 Cultural Foundations of Spanish Literature I(3)
Spn 516 Cultural Foundations of Spanish Literature II (3)
Spn 517 Spanish American Theatre (3)
Spn 518 Spanish American Short Story (3)
Spn 520 The Twentieth Century Spanish Essay (3)
Spn 521 Spanish Literature for High School Teachers (3)
Spn 522 The Twentieth Century Spanish-American Essay (3)
Spn 526 Spanish American Poetry of the Modernist Period (3)
Spn 527 Spanish American Poetry since Modernism (3)
Spn 531 The Origins of Spanish Poetry (3)
Spn 532 The Aesthetics of Medieval Spanish Narrative (3)
Spn 551 Sixteenth and Seventeenth Century Spanish Prose (3)

Spn 552 Don Quijote de la Mancha (3)
Spn 553 Spanish Drama of the Golden Age (3)
Spn 554 Spanish Poetry of the 16th and 17th Centuries (3)
Spn 561 Literature of the 18th Century (3)
Spn 571 Spanish Literature of the 19th Century (3)
Spn 572 Spanish Literature of the 19th Century (3)
Spn 580 Introduction to Literary Theory and Criticism (3)
Spn 582 Spanish Drama of the 20th Century (3)
Spn 582 Spanish Poetry of the 20th Century (3)
Spn 584 Spanish Narrative Prose of the 20th Century (3)
Spn 586 Spanish American Novel from 1910 to 1950 (3)
Spn 587 Contemporary Spanish American Novel (3)

## PROGRAM IN INTER-AMERICAN STUDIES (Interdisciplinary)

FACULTY: (Inter-departmental) Hispanic Studies: A. Baker, A. Carlos, F. Carrino, R. Castagnino, S. Schyfter; Anthropology: L. Campbell, R. Carmack, P. Furst, D. Snow, D. Wallace; History: J. Hahner, B. Solnick; Geography: S. Blount; Philopsohy: W. Reese; Political Science: A. Astiz; Sociology: A. Iwanska; Puerto Rican Studies: E. Acosta, E. Christensen, J. Silén.

The objective of the interdisciplinary program in InterAmerican Studies is to prepare candidates for: (1) professional and research careers in the Latin American field, (2) domestic service with federal and state governmental agencies, (3) careers in the Foreign Service of the United States, and (4) careers with business and educational organizations engaged in developing, improving and promoting the economic, social, and political life of the Latin American peoples. Upon completion of the program requirements, candidates should possess a more-than-basic knowledge of the major cultural, social, economic, and historical forces that have shaped and continue to shape the destinies of the Latin Americans.

## Special Programs or Opportunities:

Study-abroad programs are available to qualified candidates in Cuernavaca and Guadalajara, Mexico, and in Medellín, Columbia. All Inter-American Studies degree candidates are encouraged to take the Foreign Service Examination given each year in early December.
The Program in Inter-American Studies collaborates with the Office of International Programs in offering study-abroad opportunities at the Cemanahauac center in Cuernavaca, Mexico. Programs also are available in Medellín, Colombia, in the humanities, social sciences, education, health and management.
The program at Cemanahauac is administered through the Brockport campus. Students participating in this program need not have a prior knowledge of Spanish, since most courses are offered in English and intensive Spanish language instruction is available at all proficiency levels. The Medellín program, administered through the Stony Brook campus and initiated in 1974, also may be of one or
two sessions duration. Students with a good command of oral and written Spanish may avail themselves of course work at a consortium of five universities; University of Antioquia, National University (branch unit), Universidad Pontificia Bolivariana, University of Medellín and the Escuela de Administración y Finanzas e Instituto Tecnológico.

These study-abroad programs have a two-fold purpose: 1) to provide an opportunity for qualified students to immerse themselves in a calture different from their own, and 2) to enable students to pursue academic programs within their fields of interest. Students who can best profit from these programs are those who possess a high degree of gelf. confidence and self-direction and, at the same time, are tolerant of an ethnological and academic setting considerably different from their own. These programs are not for students who expect to find the same conveniences, academic resources, organizational patterns and professional competencies available to them on their home campuses.

The total costs for the programs are approximately the same as or slightly more than one would pay for a session or year of study living on campus.

Brochures and application forms for these programs may be obtained by contacting the Office of International Programs, SS 322, State University of New York at Albany.

## Degree Requirements for the Interdisciplinary Major in Inter-American Studies

Spanish emphasis: Combined major and second field in Inter-American Studies, with emphasis in Spanish (B,A. degree). A minimum of 54 credits as advised to include 25 credits of Spanish above 102 b , Portuguese 1.01 a and b , and $A \& S 400$. Eighteen credits of area studies to include History 100 a and b or History 1.31 a and b, History 366 a and $\mathrm{b}, 3$ additional credits of Latin American History as advised, and 3 credits as advised from courses in Social Scir ences dealing with Latin America, Total: 54 credits.

History emphasis: Combined major and second field in Inter- American Studies with emphasis in History, as follows: History 100 a and b , or History 131 a and b, History 366 a and b, and 12 additional credits of History relating to Latin America as advised; 3 credits as advised from courses
in the Social Sciences dealing with Latin America; A\&S 400; 7 credits of intermediate and advanced conversational Spanish and composition, Spanish 316 a and b, Spanish 317, and Portuguese 101 a and b. Total: 54 credits.

Majors are encouraged to participate in at least one term of study abroad at a Latin American university or appropriate study center.

## las 400 (Prs 400) Current Latin American Ideas (3)

Political, economic, and cultural forces which tend to shape Latin American life and society. A central theme will be selected for each semester's work. Students are expected to read fiction and non-fiction materials in Spanish. Prerequisite: consent of instructor.

All other courses focusing on Latin America are listed in the Departments of Hispanic and Italian Studies, History, Anthropology, Sociology, Philosophy, Puerto Rican Studies, Economics, and Political Science.

## DEPARTMENT OF JUDAIC STUDIES

FACULTY: J. Eckstein, D. Grossberg, S. Isser, S. D. Temkin, A. Yuter.

The objective of this department is to transmit knowledge and encourage study of the Jewish people and culture. Toward that end, the department provides instruction in the Hebrew and Yiddish languages and courses in the contemporary and past aspects of Jewish History, Bible Studies, Jewish Philosophy, and Hebrew and Yiddish Litterature.

To accomplish its objectives, the department offers a full program leading to a major in Judaic Studies.

## Special Programs or Opportunities

The State University system has entered into arrangements with the Hebrew University and Tel-Aviv University for students who desire to spend an academic year studying in Israel, and credits toward the major in Judaic Studies will be awarded for suitable courses. This program is administered from the Albany campus and available for majors and non-majors alike.

## Degree Requirements for the Major in Judaic Studies

## General Program

B.A.: The plan of study involves a combined major and second field, 54 credits minimum. These are to be distributed as follows:

## Modern Hebrew Language and Literature

Competence to the third year level, usually in the form of at least 12 credits above Heb 101 a and b: Heb 201 (3), Heb 202 (3), Heb 307 (3), and one course (3) from among Heb 308, Heb 365, or Heb 366. Students beginning at the 100 level may apply Heb 101 a and/or Heb 101 b to the elective requirement.

## Judaic Life and Thought

24 credits as follows: Jst 150 (3) to be taken as early as possible, preferably in the freshman or sophomore year; two courses (6) in Jewish History from among Jst 341, Jst 342, Jst 343 , or Jst 344 ; five courses (15) in Bible, Jewish Literature, and Philosophy-at least one in each area.

## Electives

18 credits, of which at least 9 must be in 300 - or 400 level courses. Of these advanced courses, at least 6 credits must be in one of the following areas as advised: Hebrew Language, Literature, Bible, History, Philosophy.

## Hebrew

## Heb 101 a and b Elementary Hebrew (4, 4)

Beginner's course with audio-lingual approach; fundamentals of language structure and sounds; emphasis on correct pronunciation and oral expressions; graded readings. Classes meet four times per week, plus two required periods in the language laboratory. For begiinners and those who have had only one year of Hebrew on the pre-college level. Students may enter Heb 101 b with consent of department. Heb 101 a and b are now offered only as TV courses.

## Heb 201 and 202 Intermediate Hebrew (3, 3)

Modern Hebrew readings; review of grammar, composition, and conversation. Prerequisite: Heb 101 b or two years of pre-college level Hebrew.

## Heb 203 Biblical Hebrew (3)

Methods and research tools of modern Bible study. Grammar and syntax of classical Hebrew for students familiar with modern Hebrew. Prerequisites: Hebrew 101 a and b.

## Heb 290 The Pentateuch (220) (3)

This course will critically analyze selected texts in the original. The emphasis will be on the structure, style, placement, and authenticity of each of these texts. Old and modern commentaries will be utilized and discussed. Prerequisites: Heb 202 or 203, and Jst 280.

## Heb 307 Hebrew Composition and Conversation (3)

Intensive and extensive composition and conversation based on a variety of modern Hebrew texts. Study of the structure of the language and practice in speaking and writing with clarity and precision. Prerequisite: Heb 202 or three years of pre-college level Hebrew.

## Heb 308 Advanced Conversation and Composition (3)

Continuation of Hebrew 307. Prerequisite: Hebrew 307.
Heb 365 Introduction to Contemporary Hebrew Literature (3)
Textual exposition of readings selected according to genre with an introduction to methods of literary analysis and its terminology. Prerequisite: Heb 202, or 4 years of pre-college level Hebrew.
Heb 366 The Lilterature of the Hebrew Renaissance (380) (3)
Readings in the original and discussion of the works of Mendele, Feierberg, Brenner, Bialik and Tschernichovsky; their significance in the development of the modern Hebrew language and in the rebirth of Hebrew literature. Prerequisite: Heb 307.

## Heb 391 The Three Major Prophets (321) (3)

A critical analysis and reading of selected texts in the original from the books of Isaiah, Jeremiah and Ezekiel. The emphasis will be on the structure, style, placement and authenticity of each of these texts. Leading ideas and concepts will be discussed. Prerequisites: Heb 202 or 203, and Jst 281.

## Heb 431 Philosophic Aspects of the Talmud (3)

Selected texts of the Talmud will be studied in the original. Special emphasis will be placed on philosophic issues, but scientific and social scientific views will also be examined. Prerequisites: Jst 325 and Heb 307.

## Heb 499 Topics in Hebrew Language and Literature (3)

Examination of specific linguistic or literary aspects of Hebrew, e.g., studies of Hebrew philology, or poetry and prose readings on major motifis in Hebrew literature. The course may be taken more than once if different topics are examined. Prerequisite: consent of instructor.

## Yiddish

## Yid 101 a and b Elementary Yiddish (4, 4)

Beginner's course in Yiddish: fundamentals of language structure and sounds; emphasis on pronunciation and oral expression; and graded readings. Classes meet four times per week, plus required homework periods in the language laboratory. Students may enter Yid 101 b with the consent of the department chairman.

## Yid 102 a Intermediate Yiddish (3)

Some modern Yiddish readings, and a review of Yiddish grammar, composition, and conversation. Prerequisite: Yid 101 b.

Yid 102 b Intermediate Yiddish (3)
Readings in Yiddish literature, with an emphasis on the modern period and a minimum of grammatical explanation. Prerequisite: Yid 102 a.

## Judaic Studies

## Jst 150 Survey of Jewish Civilization (3)

A basic orientation into the Jewish tradition from the Biblical period to the present. The history and philosophy of Jewish culture and religion will be emphasized. This course is required for Judaic Studies majors and is recommended preparation for other Jst courses in history and philosophy.

## Jst 171 Modern Ylddish Literature in Translation (3)

A survey of Jewish literature from the 18th century to the present.

## Jst 172 Modern Hebrew Literature in Translation (3)

A survey of Hebrew literature, from the 18th century to the present.

## Jst 180 The Hebrew Bible, A Survey (Pentateuch, Prophets, Writings) (170) (3)

A survey of the Hebrew scriptures considered in terms of their literary, historical, sociological, and religious contents and settings. The course is given in English.

## Jst 280 Introduction to The Pentateuch (174) (3)

A general introduction to The Five Books of Moses (in English), considered against a background of religious, social and philosophical aspects. The significance of the Torah in the development of Judaic civilization will be studied.

## Jst 281 Introduction to The Prophets (203) (3)

A survey course discussing the Prophets in general (in English), emphasizing the moral and social role of the individual Prophet and his impact upon Judaism and Western civilization.

## Jst 314 a (Spn 314 a) Literature of the SpanishPortuguese Jews and New Christians (3)

An analytical and descriptive survey of the literary, theological, liturgical, philosophical productions of the Spanish and Portuguese Jews from the Middle Ages to the middle of the 16th century. Taught in English, some reading knowledge of Iberian languages and Hebrew helpful.

## Jst 314 b (Spn 314 b) Literature of the SpanishPortuguese Jews and New Christians (3)

The ex-Marrano and Converso contribution to the history of European thought (Isaac de la Pereyre; Samuel Usque; Isaac Cardoso; Menasseh Ben Israel; Isaac Orobio de Castro; Uriel da Costa; Spinoza). Taught in English, some reading knowledge of Iberian languages helpful.

## Jst 325 Talmudic Thought: An Introductory Analysis (360) (3)

One tractate of the Talmud will be studied in English transla* tion. Special emphasis will be placed on philosophic issues, but scientific and social scientific views will also be examined.

## Jst 326 Studies in an Individual Judaic Philosopher (340) (3)

The philosopher studied is selected on the basis of faculty and student interest. The course may be taken more than once if a different philosopher's work is examined. Consult fall and spring schedules for specific philosopher analyzed.

## Jst 330 American Jewish Philosophy (3)

A survey of Jewish Philosophy as it has developed in the 20th century in the United States.

## Jst 335 The Holocaust in Christian and Jewish Theology (3)

The course deals with the Christian and Jewish theological and philosophic response to the genocide committed by the Nazis. Christian theologians deal with Chritianity's role in the Holocaust, and Jewish theologians examine the problem of God's justice. The works of Flannery, Eckardt, Littell, Rubenstein, Fackenheim, and Berkovits will be analyzed. Prerequisites: none.

## Jst 337 Existential Jewish Philosophies (3)

The philosophies of the 20th century European Judaic existentialists will be examined. Particular emphasis will be placed on the writings of Shestoy, Rosenzweig and Buber.

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Jst 339 Medieval Jewish Philosophy (3)
A survey of Jewish Philosophy in the Middle Ages.
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## Jst 341 Early Israel and Biblical Civilization (200) (3)

The history and culture of ancient Israel from its begnnings to the Persian Empire. A survey of the Hebrew Bible (in English) as the major source for the study of early Judaic religious and social forms in the context of the Near East.

## Jst 342 Hellenistic-Rabbinic Period of Jewish History (201) (3)

The Jewish people under Greek, Roman, and Persian domination from the time of Alexander the Great until the decline of the ancient world. Judea and the diaspora, cultural conflict and adaptation, sectarianism, and the development of rabbinic thought and institutions.

## Jst 343 The Medieval Period of Jewish History (300) (3)

The history of the exilic community from the Islamic period to the Enlightenment.

## Jst 344 The Modern Period of Jewish History (301) (3)

The history of the Jews from the Englihtenment to the present.

## Jst 351 Development of a Particular Jewish Community (302) (3)

The history of the Jews in a particular place (region, country, city), to be specified, from the time of their settlement, indicating the broader influences at work and comparing similar experiences elsewhere. This course can be taken more than once if different communities are examined.

## Jst 352 Development of the American Jewish Community (303) (3)

A survey of the development of the American Jewish community from the early settlement of Jews in the Americas through the contemporary era. Particular emphasis will be placed on a social analysis of the Jewish community.

## Jst 353 Development of Israeli Society (304) (3)

A survey of the history of Israeli society from the development of the Jewish communities in Ottoman and Mandatory Palestine through the Zionist movement and the State of Israel from 1948 to the present.

Jst 359 (Pos 359) Israeli Politics (3)
Same as Pos 359.

## Jst 370 Talmudic and Medieval Jewish Literature in Translation (3)

Selections from post-biblical and medieval literature.

## Jst 373 The Literature of the Holocaust in Translation (3)

Readings in translation and discussion of memoirs, diaries, fiction, and poetry written originally in Hebrew, Yiddish, and other languages, reflecting the ordeal of European Jewry during the Second World War.

## Jst 375 Israell Literature in English Translation (3)

Selected prose and poetry of contemporary Israeli writers such as Agnon, Alterman, and Shamir, chosen not only for their importance in the development of modern Hebrew literature, but also for their treatment of universal concepts and values.

## Jst 376 Studies in an Individual Judaic Writer (3)

The writer studied (in English) is selected on the basis of faculty and student interest. The course may be taken more thain once if a different writer's work is examined. Consult fall and spring schedules for specific writer analyzed,

## Jst 381 The Book of Job and the Problem of Evil (306) (3)

The Book of Job (in English) and its role in ancient and contemporary Western and Jewish literature and thought.

## Jst 430 Maimonides and Spinoza (3)

An analysis of the philosophies of Maimonides and Spinoza, and an examination of the influence of the former on the latter. Pre. requisite: Consent of instructor.

## Jst 444 Zionism from Herzil to the State of Israel (3)

A discussion of the factors stimulating Jewish nationalism before Herzl. The founding of the World Zionist Organizations (1897)its activities, problems and ideologies up to 1914. Developments, political and practical, in Europe, America and Palestine, during World War I, between the wars, World War II, and the post -war settlement. Prerequisite: Jst 344.

## Jst 445 Post-Holocaust Jewish World (3)

Jewish popalation-numbers and distribution--before and after World War II, including changes through destruction and migration. Forces working for assimilation and integration; organization of Jewish communities, the State of Israel and its relation with the diaspora. Prerequisite: Jst 344.

## Jst 465 (Ant 465) Jewish Communities (3)

Same as Ant 465.

## Jst 497 a and b Independent Study in Judaic

 Studies (3-6), (3-6)Directed reading and conferences on selected topics in Judaic Studies.

Jst 499 Topics in Judaic Studies (3)
A study in depth of selected topics in Jewish history, philosophy, literature, or Bible. The course may be taken more than once if different topics are examined. Prerequisite: consent of instructor. When the following course deals for the entire session with American Jewish Literature it can be used for credit in Judaic Studies:

## Eng 396 Literature of a Subculture

## LINGUISTICS PROGRAM

(Interdisciplinary)
FACULTY: S. Barlau, L.. Campbell, S. Davis, M. Finder, F. Frank, G. Hastings, R. Light, J. Savitt, E. Scatton, R. Thorstensen, R. Walton, M. Williams.
The associate faculty includes additional faculty members who regularly teach courses related to linguistics in their own departments and occasionally teach a course in the linguistics program.

The Linguistics Program provides a faculty-initiated interdisciplinary major with a concentration in linguistics. It is designed to provide students with a basic understanding of the nature of human language and the principles and methods of contemporary linguistic theories. The major offers a liberal education which combines the approaches of the humanities, the social sciences, and the sciences. It also provides appropriate preparation for those interested in pursuing graduate work in linguistics or related disciplines.

## Special Programs or Opportunities:

The possibility of studying a foreign language not regularly taught at State University of New York at Albany is provided by Lin 289, Directed Study in Foreign Languages. This course is open to any undergraduate student in the university. For more information, see the course description below.

## Degree Requirements for the Interdisciplinary Major with a Concentration in Linguistics

## General Program

B.A. 36 credits in the major field of study, including: $\operatorname{Lin} 206, \operatorname{Lin} 320, \operatorname{Lin} 321, \operatorname{Lin} 499$; one year of a foreign
language, as advised;* additional credits, as advised, including a minimum of six credits at the 300 level or above; these are to be chosen from courses offered in the linguistics program and from approved courses in other departments.

## Other Degree Requirements

Language proficiency requirement: majors are expected to demonstrate proficiency in a foreign language (other than the language chosen to fulfill the one-year requirement). Proficiency is considered as equivalent to completion of the third year of skill courses in a foreign language or the passing of the appropriate proficiency examination. Credits earned for the proficiency requirement are additional to the 36 credit requirement described above.

Students are encouraged to complete a second major rather than a second field. This is facilitated by the flexibility of the requirements. Where appropriate, certain courses may be used to fulfill requirements in both majors.

## Lin 206 (Ant 220/Eng 206) Introduction to Linguistics (3)

Introduction to the study of language, including examination of the characteristics and structural principles of natural languages with English as the prime example; survey of subdisciplines of linguistics, such as historical linguistics and the comparative method, psycholinguistics, sociolinguistics, dialectology, and animal communications.

## Lin 289 Directed Study in Foreign Language (4)

Study of a foreign language not regularly taught at SUNYA; independent work, with the guidance of a faculty member, using recordings and other material; meetings with native speakers when possible. A limited number of languages may be offered in any one year. May be repeated, for a different language or for more advanced study in the same language. Prerequisite: consent of program director.

[^4]
## Lin 320 (Ant 320) Introduction to Phonology (3)

An introduction to the analysis of sound systems including articulatory and auditory phonetics; sound in structural and post structural linguistics; analysis of the phonology of American English and of data from other languages. Prerequisite: Lin 206 or consent of instructor.

## Lin 321 (Ant 321) Morphology and Syntax (3)

The analysis and description of the grammatical systems of languages; various current linguistic approaches will be included. Prerequisite: Lin 206 or consent of instructor,

## Lin 421 (Ant 421) Syntax and Semantics (3)

A survey of formal approaches to language such as transformational grammars, generative semantics, cognitive linguistics, and Montague grammar, with special emphasis on recent developments in syntax and semantics. Prerequisite: Lin 32l.

## Lin 497 Independent Study in Linguistics (1-6)

Independent reading or research on a selected topic in linguistics, under the direction of a faculty member. Normally taken for three credits, but if the nature of the project warrants it, as many as six credits may be earned in one session; may be taken a second time, with approval, for a maximum total of 12 credits. Prerequisite: major or second field in linguistics, consent of instructor and director of linguistics program.

## Lin 499 Seminar on Topics in Linguistics (3)

Seminar on selected topics in linguistic theory and methodology, chosen on the basis of current interest; may be repeated for credit with change of topic. Prerequisite: consent of instructor.

The following courses are open to qualified seniors:

## Lin 501 Applied Linguistics (3)

## Lin 550 Dialectology (3)

## Lin 599 Seminar on Topics in Linguistics (4)

Courses in other departments approved for the linguistics major. (Some of these courses may have prerequisites within the departments offering them.)

Consult the director of the Linguistics Program for modifications in this list.

Ant 325, Ant 424; Csi 201, Csi 202, Eng 306, Fre 306, Fre 406, Fre 450 a, Ger 400, Phi 210, Phi 415, Phi 432, Rco 265, Rco 362, Rus 303, Sau 201, Sau 202, Sau 210, Sau 440, Soc 460, Spn 305, Spn 402, Spn 405.

## DEPARTMENT OF MUSIC

faculty: J. Chadabe, A. Ciompi, D. Cobb, F. Cockrell, T. Culley, P. Edelstein, P. Ennis, L. Farrell, D. Gibson, I. Gilman, N. Gottschalk, D. Guidotti, K. D. Hartzell, Jr., R. Hester, P. Knott, S. Kutuchukian, J. Morris, M. Ostrander, K. Peterson, R. Rowe, P. Stebbins, A. Turner.

The objective of the Department of Music is to provide university students with opportunities to study music as an aspect of a liberal arts education, as knowledgeable listeners or trained participants. The department also provides preparation for graduate studies through broad training in musicianship and practicing the musical arts.

## Degree Requirements for the Major in Music

## General Program

B.A.: 36 credits to be distributed as follows: Mus 245, 246,330 a and $b, 345,346$, and 14 credits in major music courses. All music majors must include at least 12 credits of courses at the 300 level or above. Explanatory supplement: General Program Music Major students will be ac* cepted on the basis of admission requirements established by the department-tests, written and oral, after the student has been admitted to the university. Performance study may be available for credit by consent of the instructor and chairman.

## Departmental Programs

B.A.: 66 credits to be distributed as follows: Mus 245, 246,330 a and $b, 345,346,176,177,276,277$ (or proficiency), performing groups, and 32-36 credits in an area of concentration and related music courses as advised. The program is designed to give students a broad coverage of music study and an opportunity for concentration and intensive study in Composition, Electronic Music, History, Performance or Theory. This program permits a course of study that will shape each students individual objective. All music majors must include at least 12 credits of courses at the 300 level or above.

Explanatory supplement: Students accepted into this program must declare an area of concentration-Composition, Electronic Music, History, Performance or Theory.

Admission to this program will be established by the department, tests (written and oral) and performance audition after the student has been admitted to the university.

Major orchestral instrumentalists, and voice majors will be required to participate in symphonic wind ensemble, chorus or orchestra for eight sessions.

Pianists may meet this requirement by four sessions in any ensemble.

Composition, History and Theory majors who achieve a satisfactory performance level may be assigned to Major Performance Study by consent of the instructor and chairman.
Performance majors will be required to take eight sessions of Major Performance Study and to give a satisfactory public recital.

Each student accepted into the Departmental Program in Music will be assigned to a music faculty adviser.

## General Courses Intended for non-majors

## Mus 100 introduction to Music (3)

Understanding the art of music through directed listening emphasizing the many uses of musical material. Using numerous illus. trations accenting the criteria which determine quality. Closed to students with credit in Mus 102.

## Mus 101 Masterpleces of Music (3)

Discussion and analysis of major works (representing different forms, styles and periods) performed by the New York City Ballet, The Philadelphia Orchestra, chamber music groups at the Saratoga Performing Arts Center and by the Lake George Opera. Attendance at 12 performances with written reviews of each will be required. Transportation and admission to all performances will be without cost to enrolled students. May be repeated for credit. Summer session only.

## Mus 102 Masterpieces of Music (2)

Comparative analysis of major works representing different forms, styles, and periods. Approaching the musical elements through the detailed study of a particular masterwork of a significant composer each lecture. Closed to students with credit in Mus 100.

## Mus 108 Keyboard Masters (3)

Understanding the art of music through directed listening to compositions written for harpsichord and piano. Examples are taken from the works of significant composers in historical order, starting with the English virginalists and ending in the mid-20th century.

## Mus 110 Basic Music Theory (3)

Consideration of the rhythmic, melodic, and harmonic elements of music through writing, dictation and analysis of rhythm, modes, intervals, keys, scales, triads in progression and form. Analysis of a variety of musical styles. Previous musical experience helpful but not necessary. Limited to students who are not music majors.

## Mus 111 Fundamentals of Writing and Performing Music (3)

Beginning music theory through study of the classical tradition and popular song. A creative musical project at the level of the individual student-such as writing and harmonizing melodieswill be encouraged. Previous musical experience desirable but not required. Limited to students who are not music majors. Closed to students with credit in Mus 110.

## Mus 112 Music Fundamentals Workshop (1)

Creative musical projects assigned at the level of the individual student. Discussion and evaluation of creative work, including that by visiting musicians. Limited enrollment; open only to students concurrently in Mus 111. Offered during the summer session only.

## Mus 201 Musical Instruments (3)

The evolution of musical instruments in western culture. The classifications, acoustical principles, techniques, and contemporary developments, with examples from the literature and orchestration.

## Mus 205 (105) History of Music (3)

Contributions of the earlier periods of music with their influences on later developments. The study of musical literature, instruments, composers, and performers to the Classic period.

## Mus 206 (106) History of Music (3)

The development of music from the Classic and Romantic periods to the present.

## Mus 207 (202) Composers (3)

Study of representative scores of one composer in regard to form, style and historical contribution. One major composer such as Bach, Mozart, Beethoven, Stravinsky is studied per session. Prerequisites: Mus 110 or 245 or a reading knowledge of music and one of the following: Mus $100,102,205,206$, or 208. May be repeated for credit with consent of instructor:

## Mus 208 (107) Introduction to Opera (3)

Defining the medium, its premises and problems, its gradual formation through history and its function as a dramatic art form.

## Mus 209 (204) The Solo Song (3)

The development of both sacred and secular vocal literature, including the folk song, the art song, and the aria. Prerequisite: Mus 100, 205, 206, or 208.

## Mus 210 (205) Survey of Choral Music (3)

Both sacred and secular choral literature, including the oratorio, cantata, Mass, and other large choral forms. Prerequisite: Mus $100,205,206$, or 208.

## Mus 211 (206) The Concerto (3)

The development of the concerto grosso and solo concerto from the 17 th century onward. The classical forms and the variations which resulted. Prerequisite: Mus 100, 205, 206, or 245.

## Mus 212 (207) Chamber Music (3)

The history of the musical literature for the small instrumental ensembles; the trio sonata, the divertimento, the string quartet, and other forms of chamber music. Prerequisite: Mus 100, 205, 206, or 245.

## Mus 213 (208) Survey of Symphonic Music (3)

The study of symphonic literature. The growth of the orchestra, symphonic forms, the major symphonies. Prerequisite: Mus 100, 205 , 206 , or 245.

## Mus 214 (209) American Music (3)

The study of American music from 1620 to the present. Prerequisite: Mus 205 or 206 or consent of instructor.

## Mus 215 (210) Jazz (3)

A study of Jazz from its origin to current expression. Important musicians and influences are examined through recorded examples of Blues, Dixieland, Swing, Bop, Progressive, Jazz, and Third Stream. Prerequisite: Mus 100, 102, 110, 205, or 206.

## Mus 216 (118) Performing Technique (1)

Coaching of qualified students from the performing ensembles. Development of individual technical proficiency. May be repeated for credit. Prerequisite: consent of instructor.

## Courses Intended for Music Majors Composition

## Mus 220 Introduction to Composition (2)

Techniques of musical composition, notational problems, an examination of creative work. Prerequisite: Mus 246 or consent of instructor.

## Mus 315 Music and Science: An Interactive Study (3)

A non-technical consideration of structure and design in musio and related scientific disciplines, Emphasis will be on methodologies extracted from the sciences for developing non-traditional approaches to music. Prerequisite: consent of instructor.

## Mus 320 Composition Seminar I (3)

Evaluation and discussion of individual creative work in instrumental media. Prerequisites: Mus 346 and consent of instructor.

## Mus 321 Composition Seminar II (3)

Evaluation and discussion of individual creative work in instrumental media. Prerequisites: Mus 346 and consent of instructor.

## Mus 322 Electronic Music Seminar 1 (3)

Evaluation and discussion of individual creative work in electronic media. Prerequisites: Mus 254 a and $b$ and consent of instructor.

## Mus 323 Electronic Music Seminar II (3)

Evaluation and discussion of individual creative work in electronic media. Prerequisites: Mus 254 a and b and consent of instructor.

## Mus 420 Advanced Composition Seminar I (3)

Evaluation and discussion of individual creative work in instrumental media. Prerequisites: Mus 346, 320 and consent of instructor.

## Mus 421 Advanced Composition Seminar II (3)

Evaluation and discussion of individual creative work in instrumental media. Prerequisites: Mus 346 and consent of instructor,

## Mus 422 Advanced Electronic Music Seminar I (3)

Evaluation and discussion of individual creative work in electronic media. Prerequisites: Mus 254 a and b and consent of instructor.

## Mus 423 Advanced Electronic Music Seminar II (3)

Evaluation and discussion of individual creative work in electronic media. Prerequisites: Mas 254, a and band consent of instruetor.

## Music History and Literature

## Mus 235 Keyboard Literature I (2)

Keyboard music from the English virginalists through Haydn and Mozart. Form, styles, performing technique and the development of the instrument. Study based on scores, recordings and performances by students and instructor. Prerequisite: Mus 178 or pianists with consent of instructor.

## Mus 236 Keyboard Literature II (2)

Keyboard musio from Beethoven and Schubert to the present. Form, styles, recordings and performances by students and instructor. Prerequisite; Mus 178 or pianists with consent of instructor.

## Mus 330 and b (230 a and b) Music History (3, 3)

An intensive study of the music of western civilization traoed from the primitive sources to the present. Prerequisites: musio major and Mus 246 or consent of instructor, Mus 330 a is a pre. requisite for Mus 330 b .

## Mus 331 Performance Practices in Early Music (2)

A study of problems in the performance of music composed before 1800, beginning with a general survey and focusing on class and individual analysis and interpretation of selected works, Prerequisites: music major and Mus 330 or consent of instruotor,

## Mus 430 (330) Music of the Medieval and Renaissance Periods (3)

From the beginning of the Christian era through Palestrina including chant, medieval song, early polyphony, the motet and allied forms. Ars Nova and the Renaissance, English and continental vocal and instrumental music. Prerequisite: Mus 330 or consent of instructor.

## Mus 432 (332) Music of the Baroque Period (3)

Study of the music of the period, approximately $1600-1750$, from the invention of opera through the works of J. S. Bach and Handel. Prerequisite: Mus 330 or consent of instructor,

## Mus 433 (333) Music of the Classical Period (3)

An intensive study of the music and the composers from 1730 to 1830, emphasizing the various forms and the emergence of the homophonic texture from the polyphonic techniques of the Baraque era, The signifieant works of Bach's sons, Haydn, Mozart, Gluck, Pergolesi, Beethoven, and others. Prerequisite; Mus 330 or conn sent of instructor.

## Mus 434 (334) Music of the Romantic Period (3)

A study of the influence of romanticism upon 19th century music from Beethoven through Debussy, including the nationalistic schools, the literature of the principal media, the masterworks. Prerequisite: Mus 330 or consent of instructor.

## Mus 435 (335) Music of the 20th Century (3)

A study of music in the present century showing reactions to and progressions from the 19th century as reflected by the significant composers and schools of composition. Prerequisite: Mus 330 or consent of instructor.

## Mus 440 a and b (340 a, b) Seminar in Music History and Literature (2,2)

An intensive study of the basic reference materials and of selected areas of music history. Discussion of general historical and stylistic trends. Individual projects of musical research and investigation with emphasis on the technique of research in music history will be assigned. Prerequisites: Mus 330 and 345 . Mus 440 a is a prerequisite for Mus 440 b .

## Music Theory

Mus 245 (145) Theory and Practice of Music I (4)
Fundamental inaterials of acoustics, melody, rhythm, harmony and musical structure in various styles. Intensive drill in aural perception, writing, keyboard harmony and sight singing. Prerequisite: music major or consent of instructor. Five class hours per week.

## Mus 246 (146) Theory and Practice of Music II (4)

Further exploration of harmony, melody, elements of counterpoint and concepts of musical structure, including traditional harmony up to modulation. Writing experiments in various styles and continued development of the skills of aural perception, sightsinging and keyboard harmony. Prerequisite: Mus 245 or equivalent. Five class hours per week.

## Mus 254 a and b Electronic Music (3, 3)

An integrated approach to the techniques, theories, and aesthetics of electronic music, including essential electronics and acoustics, with a stress on developing studio skills as they apply to the voltage-controlled synthesizer. Prerequisite: music major or consent of instructor.

## Mus 345 (245) Theory and Practice of Music III (4)

Advanced study of harmony, principles of contrapuntal writing, 20th century practices and musical structure with an emphasis on the larger forms. Analysis of selected scores. Writing experiments and continued development of aural skills and sight reading. Prerequisite: Mus 246 or equivalent. Five class hours per week.

## Mus 346 (246) Theory and Practice of Music IV (4)

Continued advanced study of harmony and counterpoint. Emphasis on 20th century techniques. Related problems of aural perception and intensive. work in musical analysis. Prerequisite: Mus 345 or equivalent. Five class hours per week.

## Mus 347 Orchestration I (3)

Study of basic instrumental techniques, principles of orchestration and scoring for various instrumental ensembles. Prerequisite: Mus 345.

## Mus 348 Orchestration II (3)

Advanced scoring for both large and small ensembles with emphasis on contemporary instrumental usage. Study of appropriate literature. Prerequisite: Mus 347 or consent of instructor.

## Mus 445 (345) Analysis of Styles (3)

Technical analysis of the works of composers from Haydn to Debussy. Written assignments in those styles. Prerequisite: Mus 345.

## Mus 446 a and b (346 a, b) Contemporary Techniques (3, 3)

Analysis of 20 th century music from Debussy to the present. Prerequisites: Mus 330 a and b and 346 or consent of instructor for Mus 446 a. Mus 446 a or consent of instructor for Mus 446 b.

## Mus 450 (350) Tonal Counterpoint (2)

Study of tonal counterpoint, primarily of the 18th and 19th centuries, through writing and analysis. Prerequisite: Mus 345.

## Mus 451 (351) Modal Counterpoint (2)

Study of the sacred style of the 16th century, as embodied in the motet and Mass, through analysis and writing in two and three voices. Prerequisite: Mus 246.

## Mus 457 Seminar in Music Theory (2-3)

The seminar topic for each term will vary and be announced in advance. May be repeated for credit provided any particular subject matter is not repeated. Among the topics will be: Readings in Music Theory, Individual Composers, Analytic Technique of Heinrich Schenker, Harmony in the Late 19th and Early 20th Century, Tonal Practice in the 20th Century, and Serialism.

## Mus 459 Senior Project in Music Theory (4)

Research on topics approved by the theory faculty leading to a senior paper in music theory. For qualified music majors. Prerequisites: Mus 445,457 , and either Mus 446 a, 446 b, 450 or 451.

## Performance Study

A

## Mus 172 Voice Class (1)

Study of the fundamentals of vocal production through vocalises and songs. Classes are limited to small groups to allow individual work. Admission only with consent of instructor.

## Mus 216 Performing Technique (1)

(Description under General Courses in music.)

## Mus 260 Conducting I (2)

An introduction to the elements of conducting, including scorereading, baton technique, and aural perception. Emphasis will be on choral and orchestral literature of the 18th and 19th century. Concurrent participation in a university ensemble is required. Prerequisite: Mus 246 or consent of instructor.

## Mus 263 Elements of Singing Pronunciation (3)

An introduction to the principles and practice of standard singing pronunciation of French, German, and Italian. Basic concepts of phonetics, intensive practice with examples from the standard repertoire and references to the best recorded models. Intended mainly for singers and keyboard players interested in vocal coaching. Prerequisite: limited to music majors who have had at least one year collegiate study or the equivalent, of French, German, or Italian.

## Mus 360 Conducting II (2)

A continuation of Mus 260 with emphasis on rehearsal techniques, including music of the 20th century. Prerequisite: Mus 260.

## Mus 371 Woodwind Instruments (2)

Performance of the woodwind instruments: the basic techniques and the fundamental problems involved in playing and teaching the flute, the single reeds and the double reeds. Prerequisite: music major.

## Mus 372 Brass Instrumenis (2)

Performance of the brass instruments: the basic techniques and the fundamental problems involved in playing and teaching the French horn, trumpet, trombone, baritone, and tuba. Prerequisite: music major.

## Mus 373 String Instruments (2)

Performance of the string instruments: the basic techniques and the fundamental problems involved in playing and teaching the violin, viola, cello, and contrabass. Prerequisite: music major.

## Mus 387 Opera Workshop (1-3)

A practical study of the methods and techniques of musictheatre leading to public performances. Activities include acting, vocal coaching, and body movement. May be repeated for credit. Prerequisite: consent of instractor.

## Mus 464 Opera Workshop (3)

Practicum for the professional opera stage. Intensive training in stage techniques for the singing actor, coaching and analysis of roles and diction will be offered. Comprehensive training in the interpretation and performance of operatic roles will culminate in the performances at the end of the course in the Lake George Opera Theatre facilities in Glens Falls and in the SUNYA Performing Arts Theatre. Prerequisite: consent of instructor. Summer session only.

## Mus 467 Workshop in Choral Music (3)

An intensive study and performance of representative choral literature. Seminars will be conducted on the historical, stylistic and technical aspects of the music performed. Qualified students will be given conducting opportunities during the workshop. Offered during summer session only. Prerequisite; consent of instructor.

## Mus 468 Vocal Chamber Music (1-2)

Coaching and performance of solo, duet, trio and quartet vocal literature. Prerequisite: consent of instructor.

## Mus 480 Chamber Music Workshop (3)

Study and performance of standard and contemporary chamber music repertoire. May be repeated for credit. Summer session only.

## Mus 481 Piano Workshop (1-2)

The study and performance of repertoire for piano. Aspects of technique, interpretation and performance practices will be included. May be repeated for credit. Offered during the summer session only. Prerequisite: consent of instructor.

## Mus 482 Jazz Workshop (3)

The applications of Anerican jazz to actual performance. Exploring techniques of ensemble playing, styles, improvisation and teaching. Visiting artists will participate. Offered during the summer session only. Prerequisite: consent of instructor.

## B Secondary Performance Study

The study of piano or orchestral instruments to meet the secondary requirement in performance study. Limited to music majors with the consent of the department chairman.

Mus 176 Secondary Performance Study 1 (1)
Mus 177 Secondary Performance Study II (1) Prerequisite: Mus 176.

Mus 276 Secondary Performance Study III (1)
Prerequisite: Mus 177.
Mus 277 Secondary Performance Study IV (1)
Prerequisite: Mus 276.

## Major Performance Study

Individual study of voice, piano, orchestral instruments. Limited to music majors with consent of the department chairman.
Mus 178 Major Performance Study 1 (3)
Mus 179 Major Performance Study II (3) Prerequisite: Mus 178.

Mus 278 Major Performance Study III (3) Prerequisite: Mus 179.

Mus 279 Major Performance Study IV (3)
Prerequisite: Mus 278.
Mus 378 Major Performance Study V (3)
Prerequisite: Mus 279.
Mus 379 Major Performance Study VI (3)
Prerequisite: Mus 378.

## Mus 478 Major Performance Study VII (3)

Prerequisite: Mus 379.
Mus 479 Major Performance Study VIII (3)
Prerequisite: Mus 478.
Performance Study is available in the following subject areas: Piano; Harpsichord; Trumpet; Voice; Flute; Oboe; Clarinet; Bassoon; French Horn; Trumpet; Trombone; Tuba; Percussion; Harp; Violin; Violoncella, String Bass.

## C

## Mus 180 Chamber Ensembles (1)

Performance of chamber music repertoire. Open to music majors with consent of instructor. May be repeated for credit.

## Mus 084 Repertory Chorus (0)

Development of reading and aural skills through survey of choral literature. Open to singers on non-credit basis. May be repeated.

## Mus 284 University Chorale (1)

Study and performance of choral literature with emphasis on large works. Admission by audition. May be repeated for credit. Prerequisite: consent of instructor.

## Mus 384 University Singers (1)

Highly select chorns to perform extensive and complex repertoire. Admission by audition. May be repeated for credit. Prerequisite: consent of instructor,

## Mus 086 Repertory Band (0)

Development of reading and performing skills through reading of band and wind ensemble repertory. Open to performers on noncredit basis. May be repeated.

## Mus 186 Universily Wind Ensembles (1)

Woodwind, brass, and percussion players organized into both large and small ensembles to stridy and perform music from the Renaissance to the 20th century. Open to all students by audition. May be repeated for credit.

## Mus 088 Reperiory Orchestra (0)

Development of reading and performance skills through reading of symphonic repertory. Open to performers on non-credit basis. May be repeated.

## Mus 188 University Symphony Orchestra (1)

Study and performance of symphonic repertory. May be repeated for credit. Prerequisite: admission by audition.

## Additional Major Course Areas

## Mus 390 The Traditions of Harpsichord and Clavichord Making (2)

The traditions of harpsichord and clavichord making, traced through the European centers of activity from the 16th century to the present. The evolution of keyboard instrument-making as seen from the maker's point of view. Lectures, slides, mechanical examples, and museum visitation. May be taken concurrently with Mus 392. Prerequisites: Mus 330 a and b or consent of instructor.

## Mus 391 The Traditions of Piano Making (2)

The traditions of piano-making from the decline of the harpsichord to the present. Comparative examination of the instrument and its construction from Mozart's time to the 20th century ap. proached from a musical and technical point of view. May be takent concurtently with Mus 392. Prereçuisite: Mus 330 b or consent of instructor.

## Mus 392 Keyboard Workshop Seminar (1)

A seninar in the handwork methods involved in keyboard instrument making. Actual work in the construction, rebuilding, regulation, and tuning of keyboatd instruments covered in Mus 390 and 391. Enrollment limited. May be repeated for credit. Prerequisite: consent of instructor. Initial entollnient must be concurrent with Mus 390 or 391.

## Mus 497 independent Study (1-4)

Intensive study in areas of specific interest to the musio major. This restricted offering represents a culmination of concentration in one of the designated prograins and serves as a basis for further study at the graduate level. The project report is completed under the direction of a staff inember. Consent of the department chairman required. May be repeated for credit.

## DEPARTMENT OF PHILOSOPHY

FACULTY: W. Cadbury, R. Creegan, S. Davis, R. Garvin, J. Gould, Jr., W. Grimes, Jr,, R. Howell, J. Kekes, W. Leue, T. Martland, R. Meyers, H. Morick, W. Reése, B. Steinbock, K. Stern, J. Thomas, C. Whitbeck.

The Department of Philosophy offers diversified and flexible programs leading to the B.A., M.A., and Ph.D. degrees. Through lectures, seminars, tutorials, guided researoh, undergraduate and graduate colloquia, a student philosophy club, interdisciplinary and special studies programs, and visiting philosophers, a challenging and balanced context for philosophical development is provided for major and nonmajor alike.

## Degree Requirements for the Major in Philosophy

## General Program

B.A.: At least 30 credits in Philosophy, including one and only one introductory course (Phi 110, 112, 114 or 116), 210, $212,310,312$, and from the following groups at least one course from each group and at least two courses from one group.

Group I (Systematic) Phi 336, 412, 415, 418, 422, 432, $510,512,515,516,518,520,522,538,540,542$

Group II (Historical) Phi 311, 314, 315, 328, 329, 334, $530,542,544,546,548,550,552,554,556$

Group III, (Axiological) Phi 318, 320, 322, 324, 425, 526, 528, 558

## Phi 110 Introduction to the Problems of Philosophy (\$)

A survey of representative problems in some of the major areas of philosophy; topics such as free will, morality, justice and social order, knowledge and truth, God and religion, art and beauty.

## Phi 112 Introduction to Reasoning and Analysis (3)

A study of selected philosophical problems with emphasis placed on the methods and techniques for the analysis of concepts and arguments, on the recognition and discrimination of deduction and induction, cause and effect, rational decision-making, and on the resolution of confusions, ambiguties and informal fallacies.

## Phi 114 Values in a Changing World (3)

A study of selected philosophical problems with emphasis placed on the understanding and appreciation of alternative ideals of individual and social life and on the relevance of these ideals to current pressing human problems.

## Phil 116 Our Philosophical Heritage (3)

A search, hy an analysis of our philosophical past, for the roots of such current human problems as the functions and limits of science in guiding human life, the place of religion in human experience, and quests for freedom and identity, and the present conflicts among loyalties and values,

## Phi 210 Introduction to Logic (3)

An introduction to classical and modern logic with an emphasis on the theory and application of truth functicns, Introduction to quantification; and discussion of the structure and properties of formal systems of logic.

## Phi 212 Introduction to Ethical Theory (3)

An introduction to the dimensions of ethical experience, the factors in value judgments, and alternative theories and methods of reasoning about such notions as right and wrong, obligations, moral codes, moral conflicts, and responsibility.

## Phi 214 Comparative Religion (3)

A survey of institutions, practices, and beliefs in the major world religoins.

## Phi 216 Existential Thought in Literature and Religion (3)

Exploratory and critical studies of existentialism as a cultural movement of protest, criticism, and vision, with concentration on the writings of such authors as Pascal, Kierkegaard, Nietzsche, Dostoevsky, Berdyaey, Unamuno, Kafka, and Tillich.

## Phi 310 History of Ancient Philosophy (3)

A critical study of the philosophies of representative thinkers of the West from the pre-Socratics to Plotinus. Prerequisite: a 100 or 200 level course in philosophy.

## Phi 311 History of Medieval Philosophy (3)

A critical study of the philosophies of representative thinkers of the West from Plotinus to Descartes. Prerequisite: a 100 or 200 level course in philosophy.

## Phl 312 History of Early Modern Philosophy (3)

A critical study of the development of modern thought from its Medieval and Renaissance background and concentrating on some of the principal European philosophies from Descartes through Kant. Prerequisite: a 100 or 200 level course in philosophy.

## Phi 314 History of Nineteenth Century Philosophy (3)

A critical study of the philosophies of some representative Continental, British, and American thinkers from the Kantian period to the end of the century. Prerequisite: a 100 or 200 level course in philosophy.

## Phi 315 Contemporary Philosophy (3)

A critical study of contrasting philosophical movements in the 20th century, emphasizing divergent tendencies in the United States, Britain, and on the European continent. Prerequisite: a 100 or 200 level course in philosophy.

## Phi 318 Social Ethics (3)

The application of ethical theories to the analysis of problems of conduct encountered in business, the professions, and the political process. Social criticism and its standards. Prerequisite: a 100 or 200 level course in philosophy.

## Phi 320 Political and Social Philosophy (3)

The philosophical bases for social and political institutions and practices. Such issues as the following: the nature of the state; justice and law; rights and natural rights; equality; social utility and public interest. Prerequisite: a 100 or 200 level couse in philosophy.

## Phi 322 Philosophy of Religion (3)

Philosophical analysis of selected religious concepts and programs, based upon the writings of representative philosophers and theologians. The Judeo Christian tradition will provide the chief focus of interest. Prerequisite: a 100 or 200 level course in philosophy.

## Phi 324 Aesthetics (3)

Philosophical amalysis of concepts and sentiments pertaining to ereation, appreciation, and criticism of the arts in the generic sense of the term. Prerequistie: a 100 or 200 level course in philosophy.

## Phi 325 Philosophy of Law (3)

A study of the nature and function of law, the relation of law to morality, standards of judicial reasoning, and the limits of law. Prerequisite: a 100 or 200 level course in philosophy.

## Phi 328 American Philosophy I(3)

A historical survey of philosophy in America up to the Civil War with an emphasis on the relation between philosophy and American culture. Prerequisite: a 100 or 200 level course in philosophy.

## Phi 329 American Philosophy II (3)

A critical survey of "the Golden Age" of American philosophy with an emphasis on Peirce, James, Royce, and Dewey. Prerequisite: a 100 or 200 level course in philosophy.

## Phi 334 Asian Philosophy (3)

An intensive introductory and critical study of representative philosophies of such Asian countries as China, India, Iran, and Japan. Prerequisite: a 100 or 200 level course in philosophy.

## Phi 336 Existentialist Philosophies (3)

Critical study of existentialist thinking as approached through the writings of representative authors such as Heidegger, Sartre, Jaspers, and Merlcau-Ponti. Prerequisite: a 100 or 200 level course in philosophy.

## Phi 338 Philosophy of Medicine (3)

An introduction to the philosophy of the health sciences and medical ethics. Examination of the historical and contemporary concepts of disease and their relation to such concepts as "symp. tom," "syndrome," and "etiology" and the definitions of "person" and "human rights," and their bearing upon such a question as the justification of euthanasia. Prerequisite: consent of instructor.

## Phi 412 Metaphysics (3)

A systematic examination of such philosophical concepts as exis* tence, essence, causality, purpose, value, mind, fredeom, unity. Prerequisites: Phi 210 and a 300 -level course in philosophy,

## Phi 415 Philosophy of Language (3)

An investigation of the structure and properties of language with regard to philosophical issues. Problems of meaning, reference, analyticity, truth, or ontological commitment, will be examined in the context of the contemporary theories of meaning and linguistic structure, Prerequisites; Phi 210 and a 300 -level course in philosophy.

## Phi 418 Philosophy of Science (3)

A critical survey of basic issues in philosophy of science, such as the nature of laws and theories, verifiability and confirmation, explanation and prediction, statistics and probability. Prerequisites: Phi 210 and a 300 -level course in philosophy.

## Phi 420 Senior Seminar iri Philosophy (3)

This course includes tutorial conferences, guided research, and the defense of a seminar paper on some historical or systematic topic.

## Phi 422 Theory of Knowledge (3)

A systematic study of theories of knowledge, including such topics as theories of perception, the character and value of logical systems, theories of the nature of truth and of the nature of proof. Prerequisites: Phi 210 and a 300 -level course in philosophy.

## Phi 425 Contemporary Ethical Theory (3)

Examination of selected normative and meta-ethical theories, with emphasis on issues of interest in contemporary discussions of values and the nature of valuation. Prerequisites: Phi 212 and a 300 -level course in Philosophy.

## Phi 432 Symbolic Logic (3)

An examination of the principles underlying valid deductive inference. Construction of a single system of sentential and firstorder quantificational logic. Discussion of the structure and propn erties of formal sytems of logic. No prerequisite, but Phi 210 is recommended.

## Phi 440 Topics in Philosophy (3)

Consideration of problems selected on the basis of faculty and student interest. May be taken more than once with different content, Consult fall and spring schedules for specific topics. Prerequisite: a 300 -level course in philosophy.

## Phi 450 Philosophy Practicum (4)

This course provides the opportunity for qualified seniors with a strong philosophy background to receive undergraduate credit for teaching experience. The student is enabled to teach other students under controlled situations and under the supervision of faculty, The course may be repeated once, but only four credits may be counted toward satisfaction of the philosophy major requirements.

## Phi 497 Independent Study and Research (1-4)

Guided research and writing on a selected problem in philosophy on a tutorial basis. May be repeated more than once with different content. Prerequisites: a 300 level course in philosophy and the approval of the individual faculty nember acting as project supervisor and of the departmental undergraduate studies committee.

The following courses are open to qualified seniors:
Phi 501 Pro-Seminar in the Philosophy of Medicine (4)
Phi 510 Intermediate Symbolic Logic (4)
Phi 516 Philosophy of Mind (4)
Phil 518 Analytic Philosophy (4)
Phi 520 Philosophy of Science (4)
Phi 526 Value Theory (4)
Phi 528 Theory and Function of Religion (4)
Phi 530 Latin American Philosophy (4)
Phi 538 Philosophy of the Social Sciences (4)
Phi 540 Philosophy of Person (4)
Phi 542 Phenomenology (4)
Phi 544 British Empiricism (4)
Phi 546 The Continental Rationalists (4)
Phi 548 Voluntarism (4)
Phi 550 Plato (4)
Phi 552 Aristotle (4)
Phi 554 Kant and Continental Idealism (4)
Phi 556 Pragmatism (4)
Phi 558 Theory of Art (4)
Phi 560 Philosophy and the Humanitles (4)

# DEPARTMENT OF RHETORIC AND COMMUNICATION 

FaCulty: W. Carleton, T. Conley, D. Cushman, K. Kendall, M. Rudden, L. St. Clair, R. Sanders, T. Smith, D. Switzer, S. Taylor, P. Tompkins, R. Wilkie.

Study in Rhetoric and Communication reflects the general goals of liberal and humanistic education. The department offers a broad range of courses which focus on describing, analyzing, and explaining human communication. These courses examine different settings, forms, and media of communication from a variety of perspectives.

The department's courses are organized into four major areas of study, as follows:

Communication Arts: Rco 201, 203, 204, 206, 208, 212, 214, 303,304 , and 312.

History and Criticism: Rco 238, 330, 335, 336, 337, and 439.

Rhetorical Theory: Rco 355, 362, and 462.
Communication Theory: Rco 365, 367, 368, 369, 465, and 470.

In addition, the department offers an introductory course, Rco 100 , which provides students with insights into matters of concern in each of the four areas of study.

## Degree Requirements for the Major in Rhetoric and Communication

## General Program

B.A.: A minimum of 36 credits in the Department of Rhetoric and Communication including Rco $100,330,355$, and 365 , and at least 12 additional credits in courses on or above the 300 -level.

## Reo 100 Explorations in Rhetoric and Communication (3)

An introduction to the study of rhetoric and human communication. Lectures and discussions exploring various characteristics, functions, and modes of rhetoric and communication in contemporary situations.

## Rco 201 Interpersonal Communication (3)

An introduction to those aspects of communication which typify interpersonal relationships. Included are experientially acquired insights into, and theoretical considerations of, interpersonal communication.

## Rco 203 Speech Composition and Presentation (3)

An introduction to the composition and presentation of speeches. Guided practice in topic selection, organization, and the oral presentation of various kinds of speeches.

## Rco 204 Group Communication (3)

The theory and practice of small group interaction. Examination of hoth group dynamics and cognitive processes, as they relate to group deliberation.

## Rco 206 Parliamentary Procedure (2)

A practical introduction to parliamentary procedure, with experience in chairing meetings and rulings on parliamentary questions.

## Rco 208 Rhetorical Interpretation of Literature I (3)

Theory and practice in determining and conveying the meaning of literary works. Special emphasis upon reading literary works in terms of their rhetorical design (i.e., their intention, structure, and effect on the audience).

## Rco 212 Argumentation and Debate (3)

Study of and practice in the methods of argument. Special em. phasis upon skills needed in oral argumentation.

## Rco 214 Communication Through Mass Media (3)

Theory and practice of creating radio and television broadcasts, with a consideration of the relevant technical features of these media. Prerequisite: Rco 238, consent of instructor, and no previous production experience.

## Rco 238 Rhetoric of Mass Media (3)

An introduction to radio, television, film, and selected popular arts considered as rhetorical forms. Consideration of the history and special properties of each medium, with emphasis on approaches to research and criticism.

## Rco 303 Advanced Speech Composition (3)

Study and exercises in the methods and procedures of speechwriting. This course presumes a mastery of basic public speaking skills. Prerequisite: Rco 203 or consent of instructor.

## Rco 304 Conference and Group Leadership (3)

Advanced study of small group deliberation, with special emphasis upon theories of group leadership as they apply in business and professional group communication settings. Prerequisite: Rco 204, or consent of instructor,

## Rco 312 Advanced Argumentation and Debate (3)

Advanced study of the theory and practice of rhetorical argument. Special attention to theories of argument as they relate to oral debate. Prerequisite: Rco 212 or consent of instructor.

## Rco 330 Rhetorical Criticism (3)

Introductory study of the rhetorical approach in criticism, with consideration of the critical methods developed by such writers as Aristotle, Baird, Black, and Burke. Lectures and guided practice in writing and evaluating rhetorical criticism.

## Rco 335 Studies in the History of Public Address (3)

Study of a selected period, region, genre, or figure in historical public address; e.g., Rhetoric of the American Revolution, Civil War Oratory, Churchill's speeches. May be repeated for a total of nine credits with changes in topic. Prerequisite: Rco 330 or consent of instructor.

## Rco 336 Studies in Contemporary Public Address (3)

Study of a selected region, genre, or figure in contemporary public address; e.g., Black Rhetoric, campaign oratory, speaking in the British Parliament. May be treated for a total of nine credits with changes in topic. Prerequisite: Rco 330 or consent of instructor.

## Rco 337 The Rhetoric of Propaganda Movements (3)

Consideration of the theories of mass persuasion, with application to examples of the use of propaganda in selected movements, Prerequisite: Rco 330 or consent of instructor.

## Rco 355 Introduction to Rhetorical Theory (3)

An examination of the writings of major theorists, from Isocrates to figures of the twentieth century.

## Rco 362 Contemporary Rhetorical Theory (3)

An examination of current rhetorical concerns, as embodied in the writings of such theorists as I. A. Richards, Richard Weaver, Kenneth Burke, and Chaim Perlman. Prerequisite: Rco 355 or consent of instructor.

## Reo 365 Introduction to Communication Theory (3)

A survey of empirical approaches to the study of human communication. Consideration of major research findings, methods, and conceptualizations in such areas as persuasive communication, group communication, and mass communication.

## Rco 367 Theories of Interpersonal and Small Group Communication (3)

An examination of the theories, research methods, and representative research findings related to experimental and observational studies of communication in interpersonal and small group settings. Prerequisite: Rco 201 or 204, and Reo 365 or consent of instructor.

## Reo 368 Empirical Studies of Persuasion (3)

Study of empirical approaches to attitude and behavior change brought about by communication. Prerequisite: Rco 365 or consent of instructor.

## Reo 369 Theories of Organizational Communication (3)

Theoretical models and empirical studies of communication within complex organizations. Indepth case study of one or more organizations. Prerequisite. Rco 365 or consent of instructor.
Rco 397 Independent Study and Research in Rhetoric and Communication (1-3)
Directed reading and conferences ou selected topics. Course may be repeated for a total of six credits. Prerequisite: consent of instructor and department chairman.

## Rco 439 Seminar in Rhetorical Criticism (3)

Study of a particular topic or method of rhetorical criticism, A major research paper will be required. May be repeated for a total of nine credits with changes in topic. Prerequisite: consent of instructor.

## Rco 462 Studies in Rhetorical Theory (3)

Study of a selected topic in rhetorical theory; e.g., the nature of the enthymeme, Ciceronian rhetorical theory in the Renaissance, Rhetorical ethos. May be repeated for a total of nine credits with changes in topic. Prerequisite: consent of instructor.

## Rco 465 Studies in Communication Theory (3)

Study of a selected topic in communication theory; e.g., nonverbal communication, consistency theory, mass communication. May be repeated for a total of nine credits with changes in topic. Prerequisite: consent of instructor.

## Rco 470 Methods of Communication Research (3)

Study of research strategies, design of experiments, and conduct of observational studies of human communication. Preparation of a research proposal. Prerequisite: Rco 365 or consent of instructor.

The following courses are open to qualified seniors:

## Rco 500 a, b, c, d 5, 5, 5, 5, (consent required) Rhetorical and Communicative Problems

Rco 520 The Teaching of Rhetoric and Commurication (3)

# DEPARTMENT OF SLAVIC LANGUAGES AND LITERATURES 

FACULTY: H. Baran, T. Clyman, N. Kisseleff, M. Lazic, S. Lubensky, R. Patterson, E. Scatton, A. Shane, L. Stone, N. Wolniansky.

Proficiency in the foreign language and a mastery of the literature are treated both as an end in themselves and as a means to better acquaint the student with the foreign country, its culture, and ultimately himself. In addition to a variety of language and literature courses taught in the language, the department also offers a series of literature courses in English translation which make Slavic literatures, including the great treasury of Russian literature, accessible to all undergraduate students regardless of language proficiency. Extracurricular opportunities of practicing the foreign language are afforded by language clubs and language tables.

## Degree Requirements for the Major in Russian

 General ProgramB.A.: A minimum of 35 credits of Russian above Rus 201, including Rus 202, 253, 301, 302, 311, and two additional courses from each of the following three groups.

Group I (Language) : 208, 303, 306, 307, 407.
Group II (Literature) : 334, 435, 438.
Group III (Literature in Translation) : 254, 255, 256, 257, 259, 341, 342, 353, 354, 356, 357, 358, 359.
No more than 9 credits for courses in translation (Group III) may be applied toward fulfillment of the 35 credits.

## Teacher Education Program

B.A.: 35 credits of Russian above Rus 201, including Rus 202, 253, 301, 302, 303, 311, at least one additional course from each of the three groups listed above, and Lin 206. No more than 9 credits for courses in translation (Group III) may be applied toward fulfillment of the 35 credits.

All students wishing to enter elementary, intermediate, or advanced language courses must take the placement ex-
amination administered by the department. Previous experience has indicated that students with one year of high school Russian will usually place in Rus 101, two years in Rus 102, three years in Rus 201, and four years in Rus 202. Students are reminded that placement is contingent upon examination results and consultation with a department adviser.

## Russian

## Rus 10 a Elementary Russian for Graduate Students (0)

An intensive study of the basic structure of Russian, supplemented by graded readings. This course is limited to a reading objective.

## Rus 10 b Elementary Russian for Graduate Students (0)

Continued study of the structure of Russian. Careful reading of materials chosen from a wide variety of subject areas. This course is limited to a reading objective. Prerequisite: Rus 10 a or the equivalent.

## Rus 101 Elementary Russian (5)

Beginner's course with audio-lingual approach; fundamentals of the language structure and sounds; emphasis on correct pronounciation and oral expression. Five classes, two laboratories each week.

## Rus 102 Elementary Russian (5)

Beginner's course with audio-lingual approach. Fundamentals of the language structure: the introduction of graded readings. Five classes, two laboratories each week. Prerequisite: Rus 101 or equivalent.

## Rus 150 Russian Masterpieces in English Translation (3)

Reading of important literary works of nineteenth and twentiethcentury Russia, chosen for their intrinsic value and significance in the development of Russian literature and thought. Course may not be used to fulfill the requirements of the major in Russian. Conducted in English. Offered in alternate years.

## Rus 160 Russian Poets in English Translation (3)

Study of major works by Russia's greatest poets of the 20th century such as Blok, Mayakovsky, Pasternak, Akhmatova, and others. Conducted in English, Course may not be used to fulfill the requirements of the major in Russian. Offered in alternate years.

## Rus 201 Intermediate Russian (5)

Completion and review of basic Russian grammar with emphasis on the active skills of speaking and writing. Five classes each week. Prerequisite: Rus. 102 or equivalent.

## Rus 202 Intermediate Russian (5)

Intensive practice in conversation based on everyday subjects and in reading and composition based on a variety of contemporary materials. Prerequisite: Rus 201 or equivalent.

## Rus 208 Scientific Russian (3)

Scientific and technological terminology. Reading and translation from contemporary books and journals in the fields of the physical, biological, and social sciences. Prerequisite. Rus 201 or consent of instructor.

## Rus 253 Russian Civilization (3)

The cultural and ideological development of Russia from the inheritance of the Byzantine Empire to the establishment of Soviet power. Audio-visual materials are used to familiarize students with particular aspects of Russian culture. Conducted in English.

## Rus 254 Soviet Soclety and Culture (3)

An interdisciplinaty study of contemporary Soviet Russian society and culture. Audio-visual materials are used extensively to provide students with a graphic image of the USSR. Conducted in English.

## Rus 255 Russian Science Fiction in English Translation (3)

The development of science fiction in Russia and other selected Slavic countries with readings in writers such as E. Zamiatin, A. Tolstoy, Strugatsky Brothers, S. Lem and K. Capek. Conducted in English. Offered in alternate years.

## Rus 256 Russian Literature in Revolt and Expatriation (3)

A study of leading Russian writers who clashed with their Church and Government and the social and literary norms of their day. Readings from the works of such writers as Avakum, Chaadaev, Pushkin, Tolstoy, Bunin, Solzhenitsyn and Brodsky. Conducted in English. Offered in alternate years.

## Rus 257 The Comic in Russia (3)

Types of the comic in Russian culture and literature. Topics include: the carnival element in folklore, the comedies in Griboedov, Gogol, and Chekhov, the humor of Dostoevsky, and the comic novel in the Soviet Union. Conducted in English. Offered in alternate years.

## Rus 259 Russian Drama in English Translation (3)

From the comcdies of Fonvizin and Griboedov satirizing the Russian social scene to the twilight melancholy of Chekhov and the theater of 20 th-century Soviet Russia, the course surveys major trends in Russian drama and analyzes major works. Conducted in English. Offered in alternate years.

## Rus 301 Advanced Russian (3)

The study of advanced grammar including word formation with intensive practice in speech and writing. Prerequisite: Rus 202.

## Rus 302 Advanced Russian (3)

The study of advanced grammar with intensive practice in speech and writing, and the reading of cultural texts. Prerequisite: Rus 301.

## Rus 303 Russian Phonology (3)

Introduction to articulatory phonetics and phonemics with intensive drill in pronunciation and intonation; extensive use of tapes and records. Prerequisite; Rus 202 or consent of instructor.

## Rus 306 Advanced Conversation (3)

Intensive conversational practice and discussion based on current events and contemporary texts, Prerequisite: Rus 202.

## Rus 307 Contemporary Russian Press (3)

Reading of Russian language newspapers and periodicals.

## Rus 311 Introduction to Genres (3)

An introduction to literary terminology and basic prose genres of modern Russian literature. Textual exposition and literary analysis of individual works representative of specific genres of movements. Prerequisite: Rus 202.

Rus 334 Russian Short Story (3)
A historical survey of the Russian short story from its eighteenthcentury origins to the present. Representative reading from Karamzin, Pushkin, Gogol, Turgenev, Chekhov, Bunin, Babel, and others. Prerequisite: Rus 202.

## Rus 341 History of Russian Literature in English Translation I (3)

History of Russian literature from its beginnings to 1861. Conducted in English. Offered in alternate years.

## Rus 342 History of Russian Literature in English Translation II (3)

History of Russian literature from 1861 to present. Conducted in English. Offered in alternate years.

## Rus 353 19th Century Russian Novel in English Translation (3)

The development of the Russian novelistic tradition from Pushkin, Lermontov, and Gogol through Tolstoy and Dostoevsky, examined against the social and historical background of the times. Conducted in English. Offered in alternate years.

## Rus 354 20th Century Russian Novel in English

 Translation (3)The modern Russian novel of Critical Realists, Symbolists, and Socialist Realists, including the masterworks of Bely, Gorky, Sholokhov, and Stalin Prize winners. Conducted in English. Offered in alternate years.

## Rus 356 Tolstoy In English Translation (3)

A study of Leo Tolstoy's literary evolution and contributions in fiction with attention to his moral quest for self-perfection, views on women's liberation, civil disobedience and rejection of Church. Representative novels, short stories, and essays will be read. Conducted in English.

## Rus 357 Dostoevsky in English Translation (3)

A critical study of Dostoevsky, his life, times, and works and influences as a noyelist, psychologist, religious philosopher, and social theoretician, with special reference to problems of the present time. Conducted in English.

## Rus 358 Solzhenitsyn in English Translation (3)

In-depth reading and discussion of the literary, historical, psychological, and other aspects of the work of the contemporary Russian writer Solzhenitsyn. Conducted in English.

## Rus 359 Chekhov in English Translation (3)

An examination of Chekhov's stories and plays with emphasis on social, psychological and philosophical insights. Special attention to Chekhov's role in the development of the short story and drama. Conducted in English. Offered in alternate years.

## Rus 397 Independent Study (2-6)

Directed reading and conferences on selected topics. May be repeated for credit. Prerequisite: consent of instructor and department chairman.

## Rus 407 Translation from Russian (3)

Written translation and linear interpreting from. Russian into English on a variety of subjects. Prerequisite: Rus 302 or consent of instructor.

## Rus 408 Translation into Russian (3)

Written translation and linear interpreting from English into Russian on a variety of subjects. Prerequisite: Rus 407 or consent of instructor. This course will be offered beginning Spring, 1978. Prerequisite: Rus 407 or consent of instructor.

## Rus 409 Translation and Interpreting (4)

Development and practice of translating and interpreting skills in various disciplines, primarily from English into Russian, for Soviet exchange students. Prerequisite : consent of instructor.

## Rus 435 Russian Poetry (3)

An introduction to Russian versification and a historical survey of Russian verse with emphasis on the Golden and Silver Ages of the early 19th and early 20th centuries. Prerequisite: Rus 202.

## Rus 438 Russian Drama

A historical survey of the Russian theater and the development of Russian drama from its origins to the present. Readings in 19th and 20th century plays. Prerequisite: Rus 202.
Graduate courses on the 500 :level in the Department of Slavic Languages and Literatures are open to qualified seniors (see Bulletin of College of Arts and Sciences for course descriptions).

## Polish

## Pol 101 Elementary Pollsh (4)

Beginner's course with audio-lingual approach; fundamentals of planguage structure and sounds; emphasis on correct pronunciation. Four classes, two laboratories each week.

## Pol 102 Elementary Polish (4)

After completion of structural study, emphasis is given to reading in conjunction with a continuation of the audio-lingual method. Four classes, two laboratories each week. Prerequisite: Pol 101 or equivalent.

## Pol 201 Intermediate Polish (3)

Review of grammar and syntax, followed by literary readings in conjunction with a continuation of the audio-lingual method. Three classes, one laboratory each week. Prerequisite: Pol 102 or equivalent.

## Pol 202 Intermediate Polish (3)

Continued literary readings in conjunction with a continued emphasis on the audio-lingual method. Three classes, one laboratory each week. Prerequisite: Pol 201 or equivalent.

## Pol 256 Masterpieces of Polish Literature (3)

An introduction to major Polish writers with a critical study of outstanding works representative of literary trends examined in the broader context of Polish cultural development. Knowledge of Polish not required. Offered in alternate years.

## Pol 397 Independent Study (2-6)

Directed reading and conferences on selected topics. May be repeated for credit. Prerequisite: consent of instructor and department chairman.

## Slavic

## Sla 101 Elementary Serbo-Croatian (4)

Beginner's course; fundamentals of language structure and sounds with emphasis on oral practice of the basic grammatical structure. Serbo-Croatian as a spoken and written language.

## Sla 102 Elementary Serbo-Croatian (4)

Beginner's course; fundamentals of language structure and sounds with emphasis on oral practice of the basic grammatical structure. Serbo-Croatian as a spoken and written language. Prerequisite: Sla 101.

## Sla 150 Ukrainian Language and Culture (4)

An intensive introductory course, with emphasis on the rapid acquisition of the fundamentals of grammar and conversational practice. Readings in Ukrainian culture and civilization.

## Sla 257 20th Century Slavic Literature (3)

An introduction to major contemporary writers of Poland, Czechoslovakia, Yugoslavia, and the Ukraine such as Gombrowicz, Capek, Andric and Stefanyk.

The following courses are open to qualified seniors:
Rus 500 Advanced Russian (4)
Rus 501 Phonology and Morphology of Modern Russian (4)
Rus 502 Syntax and Stylistics of Modern Russian (4)
Rus 521 Nineteenth Century Russian Literature (4)
Rus 532 Twentieth Century Russian Literature (4)
Rus 560 Russian Folklore (4)

## DEPARTMENT OF THEATRE

FACULTY: J. Burian, R. Donnelly, E. Golden, J. Hanley, R. Herzel, J. Leonard, E. Mendus, L. Salsbury, A. Weiner.

## ADJUNCT FACULTY: P. Snyder.

Theatre is a performing art. It is also a major area of study through which one may gain a liberal arts education. The Department of Theatre offers a program which assumes these two views of the theatre to be mutually supportive rather than in opposition. The studies of designing, directing, acting, writing, stagecraft, history, theory, criticism, and dramatic literature are considered interdependent studies. However, a degree of specialization is expected of all students.

## Degree Requirements for the Major in Theatre

A student may elect either a 36 -credit General Program or a 54 -credit Departmental Program in which emphasis in a particular area of theatre is required.

All theatre majors take the following 21 credit core sequence of courses:

Thr 207, Thr 210, Thr 220, Thr 235, Eng 337 or Eng 338 plus six credits of upper division history and literature courses available in the Theatre Department.

## General Program

36 -credits (At least 12 credits must be at the 300 level or above.) Students in the General Program are required to take the 21 credit-core plus 15 additional credits as ad. vised in performance and/or production courses.

## Departmental Program

54-credits (At least 18 credits must be at the 300 level or above.) Students in the Departmental Program are required to take the 21 credit-core plus one of the two areas of concentration.

## Acting/Directing Concentration:

Thr 240, Thr 250, Thr 300, Thr 340, Thr 350, Thr 351, Thr 440, plus an additional 12 credits as advised

## Design/ Technical Theatre Concentration:

Thr 300, Thr 360, Thr 365,* Thr 370, Thr 375*, Thr 380, Thr 385,* plus an additional 14 credits as advised.

A student wishing to concentrate in Dramatic Theory, History, and Literature should enroll in the General Program and plan a Second Field to accommodate such interests.

## Thr 110 The Black Theatre in America (3)

Same as Aas 110.

## Thr 140 Acting and Directing Fundamentals (3)

Introduction to the art \& craft of acting \& the responsibilities of the director in the areas of play selection, analysis, casting, \& rehearsing. Through class projects \& exercises, emphasis is placed on the practical application of basic acting and directing principles. For non-majors \& majors with little or no performance background.

## Thr 207 Introduction to Drämatic Art (3)

The components of dramatice art; attention to the contributions of acting, script, makeup, scenery, lighting, sound, music, and architecture to the theatre as a unified creative expression.

## Thr 210 World Drama (3)

An examination of major dramas from the Greeks to the late nineteenth century, with consideration of their literary, theatrical, and socio-cultural values.

## Thr 220 Theatre History (3)

The interaction of cultural, political, economic, and scientific forces upon dramatic art during the major epochs in Western civilization and their implications for the modern movements in dramatic theory and practice. Prerequisite: Thr 207, 210.

## Thr 225 American Theatre History (3)

Development of theatre in the United States from its seventeenthcentury beginnings to the present; particular attention to theatres, plays, and players since 1850 including frontier theatre, regional repertory theatre, musical theatre, and the rise of vaudeville, burlesque, Broadway, and film.

* Two of the three courses are required.


## Thr 235 Design and Technical Elements of Theatre (3)

The function and coordination of theatre architecture, scenery, lighting, make-up, costume, and sound. In addition to three hours of lecture, this course will meet in laboratory sessions and active participation in Theatre Department Major Production activities is also required.

## Thr 240 Acting I (4)

An integrated approach to building an acting technique as an actor/actress prepares intellectually, emotionally, and physically to create characterizations. One master class and two two-hour voice, movement, and performance labs per week. Prerequisite: consent of instructor.

## Thr 250 Theatrical Make-up (1)

Study of the design and technique of theatrical make-up. Lecture/laboratory. Meets once a week for $11 / 2$ hours. Prerequisite: consent of instructor.

## Thr 300 Theatre Workshop (1)

Application of theatre study to the challenges of theatre practice through participation in the production work of the State University Theatre. May be repeated six times. Prerequisite: Thr 207.

## Thr 302 Approaches to Child Drama (3)

Script analysis and script development for children's theatre. Methods, materials, and techniques to stimulate the creative process.

## Thr 310 Reader's Theatre (3)

Study and practice in the performance techniques and materials appropriate to readers' theatre. Particular attention will be paid to the development of vocal expressiveness by the individual performer as well as readers in concert.

## Thr 330 Theories of Dramatic Production (3)

An investigation and evaluation of the precursors of the major modern movements in dramatic productions. Emphasis on Zola, Antoine, Duke George II of Saxe-Meiningen, Appia, Reinhardt, Copeau, Belasco, and Craig.

## Thr 340 Acting II (4)

A continuation of Thr 240 with increased emphasis on the development of characterization. One master class and two two-hour voice, movement and performance labs per week. Prerequisite: Thr 240 or consent of instructor.

## Thr 350 Directing I (3)

The fundamentals of directing for the theatre, with emphasis upon an organized sequence of operation, and the preparation of a prompt script. Prerequisites: Thr 235, 240, and consent of instructor.

## Thr 351 Directing II (3)

A study of style in theatre, and its practical application from the point of view of the director. Prerequisite: Thr 350.

## Thr 360 Stagecraft (4)

The basic elements of set design and construction. A study of basic shop techniques and procedures, mechanical devices used on the stage, materials used in set construction, elementary mechanical drawing for the theatre. Three hours of lecture and one threehour laboratory per week. Prerequisite: Thr 235.

## Thr 365 Scene Design (3)

The applications of the principles of design to the theatre. The analysis of the script in visual terms and the translation of this into the design for a setting. Prerequisite: Thr 360 .

## Thr 370 Lighting and Sound (3)

Introduction to the equipment used in stage lighting and sound, the principles of its operation, rigging, and proper maintenance. Subject areas will include basic optics, acoustics, electricity, and electronics. Knowledge of simple algebra necessary. Prerequisite: Thr 235.

## Thr 375 Lighting Design (3)

Light as a design element in theatrical production. The phenomena of color as applied to lighting, the various methods available for lighting the stage, advanced consideration of lighting control systems and their effect on design, and the preparation of lighting plots. Preparation of plots will require elementary mechanical drawing techniques and materials. Prerequisite: Thr 370.

## Thr 380 Costuming (3)

Introduction to basic theory, and techniques of theatrical costuming. Lectures, on costume history and design theory including laboratory on construction techniques and procedures. Prerequisite: Thr 235.

## Thr 385 Advanced Costuming (3)

Application of costume design theory to costume design and construction methods, including laboratory period. Prerequisite: Thr 380.

## Thr 397 Independent Study in Theatre (2-4)

Directed reading and conferences on selected topics. A student may take the course once as strictly research, and once as a pro-duction-related study, but not repeat one or the other. Prerequisite: consent of the instructor and department chairman.

## Thr 410 Theatre in Process (3)

An intensive study of the components of theatre in relation to production activities of State University Theatre. Prerequisites: Thr 235, 240 and consent of instructor,

## Thr 415 Summer Theatre Production and Management (6)

Intense, practical training in \& application of a full range of theatre skills-performance, production, management, public relations; prepatation of four productions during session. Full-time commitment required (morning, afternoon, evening) to State University Summer Theatre. Audition/interview required; may be repeated once for credit; only six hours applicable to requirements for major.

## Thr 430 Children's Theatre Touring Ensemble (6)

Study of the principles of play selection, production planning, and performances for young people. Participation in all aspects of production work through mounting, rehearsing, and performing of plays for touring to area schools, community centers, and other service agencies, Prerequisite: consent of instructor.

## Thr 440 Advanced Acting (3)

The application of acting principles to complex and extended character development. Prerequisite: consent of instructor.

Thr 441 Seminar in Comedy (3)
A study of comic dramas and theories of comedy from the Greeks to the present.

## Thr 442 Seminar in Tragedy (3)

A study of tragic dramas and theories of tragedy from the Greeks to the present.

## Thr 455 Seminar in Theatre History (3)

Consideration of a particular research topic in theatre history each semester. Prerequisite: consent of instructor.

## Thr 480 Drama In Production (3)

Specific projects in one or more phases of production related to current Theatre Department activity; supervised research in appropriate critical or historical background and theory. Prerequisite: consent of instructor.

## Summer Program of Theatre Study in Britain

The Department of Theatre, in cooperation with the Association for Cultural Exchange in England, offers an eightweek summer study/tour program in Great Britain. Six weeks of the period are devoted to course work in London and in other important theatre centers in Britain while two weeks are free for touring. The academic program is drawn from the following courses. The program is not offered every year.

## Thr 305 Creative Drama in England (3)

Philosophies and techniques of innovative British developments in the creative use of drama in the community generally and for young persons in particular with practical applications in schools and community theatres: Direct and filmed observations; discussions of the approaches of Slade, Way, Heathcote, and others; visits to leading studios and Theatre-in-Education units. Offered only in Great Britain in connection with the university's summer program of theatre study abroad.

## Thr 320 The British Dramatic Tradition (6)

An investigation of those social and cultural factors that have most affected the evolution of drama in Britain from its Medieval origins to the Second World War and of the impact of these forces upon the most influential British playwrights. Offered only in Great Britain in connection with the University's Junior Term of Theatre Studies in Great Britain.

## Thr 326 The Dramatic Art of Pre-Restoration England (3)

Investigation into the complex literary, aesthetic, religious, and architectural influences shaping the form of the living theatre in the important English dramatic epochs prior to 1660. Research materials drawn from major British libraries, museums, and monuments and from actual productions. Offered only in Great Britain in connection with the university's summer program of theatre study abroad.

## Thr 339 Dramatic Media in Contemporary Britain (6)

A comparative study of divergent dramatic forms-theatre, radio, television, film-examining the specific technological innovations, design concepts, conventions, and acting techniques of these forms. Offered only in Great Britain in connection with the University's Junior Term of Theatre Studies in Great Britain.

## Thr 345 Theatre Workshop (3)

Theoretical and practical training in interpretative acting techniques for the traditional and contemporary British play. Intensive work in voice, movement, improvisation, and scene study with studio productions of selected scenes. Offered only in Great Britain at the Central School of Speech and Drama, London, by members of the Central School staff in connection with the university's summer program of theatre study abroad.

## Thr 390 The Contemporary British Theatre (3)

An evaluation of current trends in British playwriting and dramatic production drawn from class discussions, lectures by leading British theatre practitioners, and direct obervation of approximately twenty significant plays currently being produced in London, Stratford, and other theatre centers in Great Britain. Offered only in Great Britain in connection with the university's summer program of theatre study abroad.

The following courses are open to qualified seniors:
Thr 500 Introduction to Graduate Research (2)

## Thr 502 The Meaning and Function of Design in the Theatre (3)

Thr 503 Children's Theatre (3)
Thr 510 The Classical Theatre (3)
Thr 520 Theatre of the Middie Ages and Renaissance (3)
Thr 529 The Dramatic Art of America (The History of Dramatic Art Series) (3)

Thr 530 Neo-Classic and Romantic Theatre (3)
Thr 540 The Modern Theatre (3)
Thr 541 Special Studies in Voice and Movement (3)
Thr 545 History of Dramatic Criticism (3)
Thr 550 Special Studies in Dramatic Direction (3)
Thr 560 a and b Scenic Design $(2,2)$
Thr 570 Masters of the Modern Drama (3)

# COLLEGE OF SCIENCES AND MATHEMATICS 

Vincent F. Cowling, Dean<br>Charlene Lewis, Assistant to the Dean

The State University at Albany offers an unusually wide variety of opportunities for study in science and mathematics.

There are seven departments in the college: Atmospheric Science, Biological Sciences, Chemistry, Computer Science, Geological Sciences, Mathematics and Physics. In addition there is a joint program in applied mathematics and computer science leading to a bachelor of science degree. With the exception of computer science each of the departments offers an undergraduate major. (The Program in Medical Technology is included in the Biological Sciences Department.)

Each department offers graduate programs leading to either a master's or doctor's degree or both. In all cases the research activity of the members of the various departments enables the undergraduate major to follow closely in the wake of recent scientific advances.

The faculty of the college is distinguished by the presence of numerous members who enjoy an international reputation for their research activities. The college has been recognized for its excellence in teaching by Chancellors' Awards to some of its members for Distinguished Teaching and Excellence in Teaching.

The College of Sciences and Mathematics welcomes inquiry from interested students and will be pleased to meet with students visiting the campus.

Specific requirements of the major for undergraduate degrees offered in each department may be found at the beginning of course listings for that department.

The College cooperates closely with some of the university research centers, notably the Atmospheric Sciences Research Center, the Center for Nuclear Radiation Studies (Physics Linear Accelerator Center) and the Neuro-biology Research Center, as well as with certain external institutions such as Dudley Observatory.

# DEPARTMENT OF ATMOSPHERIC SCIENCE 

FACULTY: G. Arnason, *D. Blanchard, L. Bosart, U. Czapski, N. Gokhale, H. Hamilton, *J. Jiusto, J. Kim, A. Loesch, *V. Mohnen, R. Orville, *V. J. Schaefer, *B. Vonnegut.

The educational aim of the department is to provide its undergraduate students with a broad background in the science of the atmosphere. The program offers both general introductory courses and advanced courses in the field of atmospheric science. Students, in conjunction with their academic advisors, may tailor their programs towards eventual graduate work in atmospheric science, a double major in other disciplines or plan for post baccalaureate employment. Atmospheric scientists typically find employment with federal, state and local governments as well as in private industry. Those students interested in academic careers should plan on ultimately earning a Ph.D.

## Degree Requirements for the Major in Atmospheric Science

## General Program

B.S.: (combined major and second field sequences) Any two of Atm 100, 101, 103 or 207, and Atm 300, 401, 404, 411 and 412; Phy 120 and Phy 121, Phy 124 and 125, and Phy 220 and Phy 221; Mat 112, 113, 212 and 213; Chm 121 a and b ; Chm 122 a and $\mathrm{b} ; 9$ additional credits in mathematics and science are advised.

Students who expect to do graduate work in atmospheric science are encouraged to acquire a skill in computer programming or a reading knowledge of French, German, or Russian. In addition, these students should complete Phy 224 , Phy 225, and Atm 400 and consider further course work in mathematics and science such as: Chm 320, Phy 321, Phy 332, Mat 363, Mat 409, Mat 410, Csi 201, and Csi 202.

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## Atm 100 The Atmosphere (3)

A non-technical survey of the atmosphere; the physical environment of man and its effects on his activities; intentional and unintentional modification of the environment; topics include radiation, clouds, severe storms, weather forecasting, climate, air pollution, weather modification, satellite meteorology, and planetary atmosphere. Two lectures, one two-hour discussion each week. Closed to students with credit for Atm 300.

## Atm 101 The Upper Atmosphere (3)

An elementary survey of the properties and geophysical phenomena of the upper atmosphere; ionosphere, magnetosphere, interplanetary space, ionospheric and magnetic storms, aurora, airglow, and various observational techniques including rockets and satellites. Two lectures, one two-hour discussion each week.

## Atm 103 Climate and Man (3)

A survey of the fundamentals of the atmosphere and their application to defining the global climate and, in particular, the United States climate. These principles are then applied to current problems in urban climatology, transportation, air pollution, housing, personal comfort, and agriculture. A discussion of climatic change, including possible ice-age producing mechanisms and an assessment of effects of passible future climatic regimes on man and his activities. Two lectures, one two-hour discussion each week.

## Atm 207 The Oceans (3)

An introductory survey of the physical, chemical, geological and biological processes in the marine environment; promises and problems of the oceans as a natural resource. Two lectures, one twohour discussion each week.

## Atm 297 Independent Study I (1-4)

By advisement only and may be repeated twice for credit.

## Atm 300 Introductory Meteorology (3)

The physical properties of the atmosphere; the distribution of temperature, pressure and humidity; solar and terrestial radiation; heat balance; thermodynamics of dry and moist air; equation of motion expressed as a balance of forces including geostrophic and gradient winds; structure and modification of air masses; introductory cloud and precipitation physics; thunderstorms and related phenomena; instrumentation. Three lectures each week. Prerequisites: Phy 124 and Phy 125. Corequisite: Mat 212.

## Atm 400 Introduction to Fluid Mechanics (3)

Basic principles and laws governing the motions of fluids. Topics include clements of vector and tensor analysis; kinematics of fluid motion; the Navier-Stokes equations of motion and the energy equation for a Newtonian fluid; ideal and viscous fluids; dimensional analysis. Three lectures per week. Prerequisites: Mat 213 and Phy 124 .

## Atm 401 Synoptic Laboratory 1 (3)

Synoptic codes; application of thermo-dynamic diagrams to selected weather situations; three dimensional analyses of synoptic scale weather systems; application of the fundamental laws of atmospheric dynamics to the observed weather patterns. Two joint class-laboratory periods each week. Prerequisite: Atm 300. Corequisite: Atm 411.

## Atm 404 Introduction to Atmospheric Physics (3)

The application of physical laws and principles including acoustics, electricity, wave-propagation, optics, and radiation to the atmosphere. Three lectures each week. Prerequisites: Phy 220 and Phy 221.

## Atm 407 (Chm 407) Atmospheric Chemistry (4)

A characterization of atmospheric matter in the particulate, liquid, and gaseous states. Includes sampling and nature of particulates; analysis of inorganic and organic, gaseous and particulate pollutants; precipitation chemistry. Chemical reactions in the atmosphere, with the under-lying principles of chemical kinetics, thermodynamics, photochemistry, and surface phenomena. Four class meetings weeldy. Prerequisites: physical chemistry, or one year of chemistry, two years of physics, and three semesters of calculus. Offered jointly with the Department of Chemistry.

## Atm 408 Hydrometeorology (3)

The role of the atmosphere in the water cycle. Two lectures and one two-hour discussion each week. Prerequisites: Mat 212 and Atm 300.

## Atm 411 Synoptic-Dynamic Meteorology (3)

Governing atmospheric physical laws; wind in relation to pressure; influence of friction; vertical structure of wind systems; atmospheric kinematics; circulation, vorticity and divergence theorems; fronts and frontogenesis; quasigeostrophic theory and application of basic atmospheric dynamics to the observed weather behavior, Three lectures each week. Prerequisities: Atm 300 and Mat 212. Corequisite: Mat 213.

## Atm 412 Atmospheric Thermodynamics (3)

Basic concepts and laws of classical thermodynamics with emphasis on application to water substance in its three phases. Various applications to the atmosphere including the thermodynamics of ascending moist air, hydrostatic stability, and rudiments of the theory of thermal convection. Three lectures each week. Prerequisites: Atm 300 and Mat 213.

## Atm 417 Physical Limnology and Oceanography (3)

Physical processes in the lakes and oceans; mixing and thermal processes; surface and internal gravity waves; seiches and tidal waves; wind driven currents; the effect of these processes on the aquatic environment and the surrounding atmosphere. Three lectures each week. Prerequisite: Atm 300 and Mat 212, or consent of instructor.

## Atm 497 Independent Study II (1-4)

By advisement only and may be repeated twice for credit.
The following courses are open to qualified seniors:

## Atm 504 b Introduction to Atmospheric Physics (3)

## Atm 513 Bioclimatology (3)

Atm 514 Air Pollution (3)
Atm 515 Aerosol Physics (3)
Atm 516 Aeronomy 1 (3)
Atm 518 Meteorological Insirumentation (3)
Atm 524 Atmospheric Electricity I (3)
Atm 526 Aeronomy II (3)
$\begin{array}{ll}\text { Atm } 528 & \begin{array}{l}\text { Basic Concepts of Atmospheric Transfer } \\ \text { Processes (3) }\end{array}\end{array}$
Atm 534 Cloud and Precipitation Physics I (3)

## DEPARTMENT OF BIOLOGICAL SCIENCES

FACULTY: K. Able, C. Baglioni, W. Baum, S. Brown, N. Dulak, G. Edwards, H. Ghiradella, J. Greco, R. Hauser, H. Hirsch, D. Holmes, C. Izzard, J. Jacklet, R. Jaeger, R. Kelly, L. Lerman, J. Mackiewicz, S. P. Marfey, J. Mascarenhas, L. Mason, S. McGee-Russell, D. McKinley, D. McNaught, A. Millis, R. Murphey, S. Newman, R. Rikmenspoel, J. Saunders, Jr., N. Seeman, D. Shub, M. Stewart, R. Stross, H. Tedeschi, S. Tieman, F. Truscott, H. Winn, R. Zitomer.

The objective of the department is to provide the undergraduate student with a broad background in the biological sciences and adequate supporting strength in the physical sciences. Accordingly, the B.S. programs listed below are structured around a combined major-second field sequence. The B.A., which specifies the major only and requires a separate second field sequence, outside science and mathematics, is designed with the aims of the liberal or fine arts students in mind and as such is not intended for the professional biologist or teacher. The B.S. programs provide a strong background for further study either in graduate school or medicine and prepare the student for secondary school teaching and a variety of careers in biology at the technical level. The B.S. program in Medical Technology is conducted in. cooperation with Albany Medical Center Hospital and is a rigidly structured program in the sciences intended to provide baccalaureate level education in the basic sciences during a three year period. The fourth year is one of clinical training spent at the hospital. Enrollment in this program is limited to the numbers of students who can be accommodated in the clinical year at Albany Medical Center Hospital.

The department also offers programs leading to the M.S. and the Ph.D., in which the graduate student is able to obtain an in-depth professional education in one of several more restricted areas of biological sciences.

## Degree Requirements for the Major in Biology

## General Program

B.A.: A minimum of 36 credits including Bio 101 a and b , Bio 201, Bio 202, and 14 additional credits of biology major electives including three courses which are partially or exclusively laboratory courses; Chm 121 a and b , Chm 122 a and b ; Bio 399 and Bio 499 may contribute up to a total of four credits of non-laboratory major elective credit. Courses which do not yield credit toward the major are indicated in the individual catalogue descriptions. Major electives must be so selected that a total of 12 credits at the 300 level or above is included in the major. The second field sequence will consist of a minimum of 18 credits in an approved area outside the College of Science and Mathematics, and must include at least 6 credits at the 300 level or courses having a prerequisite.
B.S.: Combined major and second field sequence consisting of a minimum of 66 credits including Bio 101, 201 and 25 additional credits of biology courses which must include at least THREE laboratory courses. At least one course must be selected from each of the following FOUR areas: (1) molecular/cellular biology Bio 301, 302, 303, 314, 315, 326, 406, 419; (2) Organismal biology Bio 305, 322, 324, 310, 325, 407, 415, 433; (3) Integrative biology Bio 317, $323,332,333,403,404,410,411,417,418,460 ;(3)$ Ecology/Population Biology Bio 202, 219, 316, 340, 402, 409, 432,434 . Bio 399 and 499 may contribute up to a total of four credits toward the major but cannot be used to fulfill credits as a laboratory course. Courses which do not yield credit toward the major are so indicated in the individual catalogue descriptions. Chm 121, 122, 345, 346, 347, 348 (Chm 216 and 217 may be substituted for Chm 345-348 in which case Chm 342 and 343 must be completed as part of the 25 additional credits in biology described above). Phy 105, 106; two courses in mathematics exclusive of Mat 100, 105, 107. Courses in biology must be so selected that together with the courses in chemistry a total of 18 credits at the 300 level or above is included in the major-second field sequence.
66 credits:
Mathematics ..... 6
Physics ..... 8
Chemistry ..... 16
Bio 101 ..... 8
Bio 201 ..... 3
Sub Total ..... 41 credits
Additional credits in biology ..... 25
Total ..... 66 credits
The "additional 25 " credits must be distributed as follows:
Group 1. ..... 3 minimum
3 minimum
3 minimum 3.
3 minimum
Total ..... 12

The remaining $(25-12=13)$ credits can be selected from among those courses in groups 1-4, Bio 399, 499, and Chm 342, 343. Since any course carrying fewer than 3 credits has a co-requisite course in the same group, the final distribution of credits will be as above.

## B.S. Major-Second Field Sequences in Biology

## Teacher Education Program

B.S.: Combined major and second field sequence consisting of a minimum of 65 credits: Bio 101, 201 and 18 additional credits of biology courses which must include at least THREE laboratory courses. At least one course must be selected from each of the following FOUR areas: (1) molecular/cellular biology Bio 301, 302, 303, 314, 315, 326, 406, 419; (2) Organismal biology Bio 305, 322, 324, 310, 325, 407, 415, 433; (3) Integrative biology Bio 317, $323,332,333,403,404,410,411,417,418,460$; (4) Ecology/Population Biology Bio 202, 219, 316, 340, 402, $409,432,434$. Bio 399 and 499 may contribute up to a total of four credits toward the major but cannot be used to fulfill credits as a laboratory course. Courses which do
not yield credit toward the major are so indicated in the individual catalogue descriptions. Chm 121, 122, 345, 346, 347, 348 (Chm 216 and 217 may be substituted for Chm 345-348 in which case Chm 342 and 343 must be completed as part of the 18 additional credits in biology described above). Phy 105, 106, 6 credits in Geological Science or Atmospheric Science as advised, two courses in mathematics exclusive of Mat 100, 105, 107. Courses in biology must be so selected that together with the courses in chemistry a total of 18 credits at the 300 level or above is included in the major-second field sequence.

65 credits:
Mathematics ................................... . . . 6
Physics ........................................ . . 8
Chemistry ..................................... . . . 16
Astronomy, Geological Science or Atmos.
pheric Science .............................. 6
Bio 101 .......................................... 8
Bio 201 ............................................ 3
Sub Total ................................... . . 47
Additional credits in biology .............. 18
Total ......................................... . . 65
The "additional 18 " credits must be distributed as fol. lows:

Group 1. ...................................... 3
2. ..................................... 3
3. ..................................... 3
4. ..................................... 3

Total ....................................... 12
The remaining 6 credits may be selected from any of those courses in groups 1-4, Bio 399, 499, Chm 342, 343.

## Special Program

B.S.: Medical Technology: The program in Medical Technology enables a student to obtain the B.S. degree from this university at the end of a four-year program, including three academic years here and a fourth calendar year at a school of medical technology approved by this university. Each student during the first three years fulfills the general liberal requirements and the major and second field requirements for a medical technology major. The fourth year at a school of medical technology includes both theoretical and practical work in the medical laboratory category. The B.S. degree is awarded by this university upon satisfactory completion of the requirements of both institutions. The program is presently offered in affiliation with the Albany Medical Center Hospital.
(Combined major and second field requirements) Bio 101, 314, 315, and at least six credits selected from Bio 201, 205, 213, 317, 301, 302, 325, 326, 403, 406, 407, 410, 4111; Chm 1.21, 122, 216, 217, 225, 342, and 343; a laboratory course in college physics; and six credits in mathematics exclusive of Mat 100, and 105. Students in this program also complete the fourth year in affiliation with a registered school of medical technology (Bio 400 a and b). This is considered as a special requirement for this program.

Prior to the end of the spring semester, junior year, each student in the medical technology program must receive medical clearance and approval from the director of medical technology at the Albany Medical Center Hospital in anticipation of his enrollment in Bio 400 a and $b$. This program accommodates a limited number of students.

## Bio 101 a and b General Biology (4, 4)

Fundamental principles common to all living systems at the molecular, cellular, and organismal levels; with a general survey of the plant and animal kingdom. This course is especially designed for prospective biology majors and also for other science majors and minors. Biology majors should elect Chm 121 a and b , concurrently. Not open to students with credit in Bio 102. The full year of study is recommended. Three class periods, one laboratory period each week. Prerequisite: Bio 101 a is prerequisite to Bio 101 b .

## Bio 102 a and b General Biological Science (3, 3)

Principles of life processes with consideration of the major groups of living organisms. Particular attention is devoted to the implication of biology to the problems of modern living e.g., ionizing radiation and its effects on living systems. The audio-tutorial method of instruction is emphasized to provide maximum individualization of study. Laboratory experience is integrated into the audio-tutorial format. Not open to students who have credit in Bio 101 or other equivalent introductory courses. Two lectures per week plus one audio-tutorial laboratory per week. Credit may be earned for either session ( 102 a is not a prerequisite for 102 b ) although the full year of study is recommended.

## Bio 115 Ornithology (2)

Field and laboratory study of birds; the topography, adaptive features, and classification of resident and migratory species, with emphasis on identification by sight and sound. One class period, one laboratory period each weel. Prerequisite: consent of instructor. Does not yield credit toward the major in biological sciences.

## Bio 120 Conservation of Natural Resources (2)

The scientific use and management of soil, water, forests, and wildlife with emphasis on current problems associated with environmental pollution, habitat and wildlife depletion, conservation education, and urban growth at local, national, and international levels. Does not yield credit toward the major in biological sciences. Two class periods each week.

## Bio 201 Genetics (3)

Principles of heredity and variation at all levels of biological organization and the mechanisms of replication, mutation, recombination, and gene expression which underlie these principles. Three class periods each week. Prerequisite: Bio 101; or consent of instructor. May be taken either session.

## Bio 202 (Env 202) Ecology (3)

Introduction to the study of organisms, populations, and communities in relation to their environments. The course stresses an integrated approach at all levels of biological organization. Topics considered include: the niche concept, species diversity, nutrient cycling, energy flow, population dynamics and control, biological rhythms, and other physiological mechanisms influenced by the environment. Prerequisite: Bio 101. Three class periods each week. May be taken either session.

## Bio 205 Human Genetics (3)

A survey of human genetics emphasizing the principles and mechanisms of inheritance, and including the analysis of the genetic material of man, the behavior of genes in individuals, families and populations, and the implications for human behavior and evolution, medicine, and society. Does not yield credit toward the major in biological sciences. Not open to freshmen or to students with credit in Bio 201. Three class periods each week.

## Bio 207 Effects of Biological Research on Man and Society (2)

A scientific discussion of current aspects of biological research with reference to their effects on man and society. Topics include: human reproduction (anatomy, physiology, contraception, abortion, artificial insemination), human genetics (genetic disorders and treatment, chemical and radiation-induced mutations, genetic engineering, intelligence and behavior), mechanisms of drug action, transplantation, population growth and control, chemical and biological warfare. Does not yield credit toward the major in biological sciences. Two class periods each week.

## Bio 210 Dendrology (3)

Field and laboratory study of native and ornamental trees, shrubs, and related flora. Identification, classification, natural history, and seasonal, ecological and economic aspects. Field study at area parks, preserves, and nurseries; use of keys and preparation of herbaria. Does not yield credit toward the major in biological sciences. Two class periods and one laboratory period each week. Prerequisites: Bio 101 or 102 , or consent of instructor.

## Bio 211 Plants and Human Affairs (3)

Characteristics of food, beverage, drug, industrial, and poisonous plants. Problems of their production and utilization. Discussion of important plants and plant products in the modern world with some attention given to the effects of plants on the development of civilization. Does not yield credit toward the major in bielogical sciences. Three class periods each week.

## Bio 213 Vertebrate Physiology (4)

Study of the function of organ systems in vertebrates; muscle contraction, nervous coordination, respiration, nutrition and elimination. Does not yield credit toward the major in biological sciences. Three class periods, one laboratory period each week. Prerequisites: Bio 101 or Bio 102 and Chm 121.

## Bio 219 Field Biology (3)

An introduction to those aspects of biology which are based on field study; local flora and fauna from an ecological viewpoint; selected field and laboratory techniques and related literature. Each student is required to complete an independent field investigation. Two class periods, one laboratory period each week. Prerequisite: Bio 101 or Bio 102. Not open to freshmen.

## Bio 230 (Env 230) People and Resources in Ecological Perspective (3)

Introduction to ecosystems, soils science, and the distribution of natural communities. The study of man as a global population and its social implications for resource exploitation. A historical perspective on resource-oriented behavior. Does not yield credit toward the major in biological sciences. Three class periods each week.

## Bio 240 Whales and Whaling (3)

A course in cetacean biology, with major emphasis on whales, their biology, behavior, and ecology. Emphasis will be given to the environmental stresses placed upon a group of species rapidly approaching extinction and to the impact of this phenomenon upon man and his culture. Included will be related areas of art, history, music, literature, and law. Does not yield credit toward the major in biological sciences. Three class periods each week. Prerequisite: permission of instructor.

## Bio 301 Cell Biology (3)

A study of cell biology emphasizing methods used to study living animal cells, the structural and functional significance of cellular components, and those factors which are involved in the regulation of cell proliferation. Specific areas of discussion include principles of cell culture, structure and function of cell membranes, the cell cycle, growth characteristics of isolated cells, cell hybridization and reconstruction, aging and senescense, and the genesis and biology of cancer cells. Prerequisites: Bio 201, Chm 342 or 347.

## Bio 302 Cell Biology Laboratory (2)

Experimental investigation on selected topics in cell biology, including membrane permeability, cell motility, tissue culture, isolation of subcellular particles, use of oxygen electrodes in metabolic studies, and analysis of living cells using advanced techniques in optical microscopy. One three-hour laboratory, one hour of recitation. per week. Prerequisite: Bio 301 (may be taken concurrently).

## Bio 303 Elements of Cell Physiology (3)

A consideration of selected topics in cell biology, to include: energetics of oxidative phosphorylation and its regulation, the primary processes of photosynthesis, membrane transport, excitability, contraction and motility. Prerequisites: Bio 201, Chem 342 or Chem 347.

## Bio 305 Biology of the Arthropods (3)

Form, function, systematics, and population dynamics in insects and other arthropods. Prerequisite: Bio 101 or Bio 102. Two class periods, one laboratory period each week. Given alternate years only.

## Blo 306 Development of Blological Thought (2)

Philosophic treatment of major concepts of biology; changes in interpretations are traced from earliest views of superstition to modern problems with important social, economic, hygienic, and political implications. Does not yield credit toward the major in biological sciences. Two class periods each week. Prerequisite: ten credits of biology. Restricted to juniors and seniors.

## Bio 307 Natural History in Early America (3)

The rise of natural science in America, especially as shown by early animal and plant studies in naturalists' journals, explorers' reports and biological surveys. These are interpreted for today's ecologist, taxonomist, conservationist and literary naturalist. Does not yield credit toward the major in biological sciences. Three class periods each week. Prerequisite: upperclass standing, or consent of instructor.

## Blo 308 Parasitic Diseases and Human Welfare (3)

Ecological, medical and social interrelationships of selected parasitic diseases of man and his domestic animals in temperate, semi-tropical and tropical climates; role of wild animals as reservoirs or vectors of parasitic diseases of man. Prerequisite: 10 hrs of biology or permission of instructor.

## Bio 310 Plant Taxonomy (3)

Principles and methods of systematics with emphasis on the identification and classification of angiosperms. Two class periods, one laboratory period each week. Prerequisite: Bio 101.

## Bio 314 General Bacteriology (3)

An introduction to the morphology and physiology of bacteria, and the bacterial viruses. Three class periods each week. Prerequisites: Bio 101 and a course in biochemistry. Biochemistry may be taken concurrently.

## Bio 315 General Bacteriology Laboratory (1)

Laboratory techniques for the culture and study of microorganisms. Experiments on the dynamics of bacterial growth and the physiological bases of bacterial identification and environmental influences. One laboratory period each week. Prerequisite: Bio 314 (may be taken concurrently).

## Bio 316 Blogeography (3)

Origin and differentiation of floras and faunas; biotic regions of the world, principles of distribution; migration, adaptation, evolution, and extinction. Three class periods each week. Prerequisite: Bio 101.

## Bio 317 Comparative Animal Physiology (3)

An analytical survey of the regulatory mechanisms of various animal systems. The course will emphasize similarities and differences in the adaptation of different organisms to their environment, Wherever possible the molecular basis of these adaptations will be discussed. Three class periods each week. Prerequisite: Bio 101.

## Bio 322 Plant Morphology (3)

An evolutionary survey of the plant kingdom. Structure, life cycles, relationships and phylogenetic trends of major plant groups. Principles of comparative plant morphology. Two class periods, one laboratory period each week. Prerequisite: Bio 101.

## Bio 323 Plant Physiology (3)

Life processes of plants, particularly those of the vascular plants: water, relations, translocation, mineral nutrition, metabolic pathways peculiar to plants, growth, and hormonal control. Two class periods, one laboratory period each week. Prerequisites: Bio 101, Chm 216 a and 217 a, or Chm 345 and 346.

## Bio 324 Invertebrate Zoology (4)

Functional morphology and adaptive radiation of invertebrates, with consideration of those aspects of fine structure, developmental biology, behavior and comparative physiology, particularly characteristic of invertebrate organisms, Laboratory work emphasizes living marine forms. Three class periods, one laboratory pe riod each week. Prerequisite: Bio 101 or 102. Not open to freshmen.

## Bio 325 Functional Morphology of the Vertebrates (3)

A comparative study of the anatomy, embryonic development, and evolutionary modifications of organ systems in the vertebrates. Major emphasis is placed on the physiological roles of the developing and adult organism. Two class periods, one laboratory period each week. Prerequisite: Bio 101.

## Bio 326 Molecular Biology (3)

Structure of macromolecules: nucleic acids and proteins. Biosynthesis of macromolecules: protein synthesis, RNA and DNA synthesis. Structure of chromosomes; protein/nucleic acid interactions. Molecular genetics. Three class periods each week. Prerequisites: Bio 101, 201, Chm 342 and 343 or Chm 347 and Chm 348.

## Bio 332 Experimental Plant Biology (3)

The influence of endogenous and exogenous plant growth regulators and environmental conditions on plant development. Emphasis on photomorphogenesis and the phenomena and proposed mechaisms of action of growth-regulating hormones. Three class periods per week. Prerequisites: Bio 201 and a course in organic chemistry.

## Bio 333 Experimental Plant Biology Laboratory (1-3)

Laboratory investigations of plant morphogenesis: including embryogenesis, regeneration, cellular growth and differentiation. The equivalent of one, two, or three three-hour laboratory periods per week. Corequisites: Bio 332 or consent of instructor.

## Biology 340 Aquatic Ecology (3)

A study of aquatic environments, interactions and adaptations of the organisms living there: form and functional adjustments, growth characteristios of individuals and populations, and ecology of changing environments. The course considers the fundamentals of eutrophication of lakes and estuaries, biological treatment of domestic and industrial wastes and aquaculture. Two one-hour lectures, one three-hour laboratory each week. Prerequisite: one year of introductory college biology.

Bio 350 Development of Biology Laboratory Exercises (2-4)
Design and implementation of laboratory exercises and experiments suitable for use in introductory biology. Exposure to and involvement in techniques that relate to the teaching of introductory biology. Does not yield credit toward biology major. Prerequisites: Bio 101; minimum of 30 credits in science courses; junior or senior standing; and consent of instructor.

## Bio 399 Supervised Research for Juniors (1-3)

Individual, independent research on selected topics in biology. Critical analysis of selected research papers. Junior majors in the department of biological sciences may make application for this course through the office of the department chairman. May be taken either session. May be repeated for a total of six credits.

## Bio 400 a and $b$ Medical Technology (15, 15)

This is the fourth year of the medical technology program, It is an intern year at a cooperating school of medical technology and includes course work in Micriobiology, Parasitology, Bacteriology, Clinical Chemistry, Clinical Pathology, Urinalysis, and Serology and the accompanying laboratory program. The intern year begins only in September and continues for a calendar year. To be enrolled in the program the student must have completed all required course work for the degree except for the intern year program, (Open only to students enrolled in medical technology.)

## Bio 402 Evolution (3)

Origins of life: mechanisms and processes of organic evolution, stressing evidence from population genetics, systematics, paleontology, and comparative physiology, biochemistry; the evolution of man and his culture. Three class periods each week. Prerequisites: Bio 101 and 201.

## Bio 403 Developmental Biology (3)

The development of form and function in animals and plants at the cellular, tissue, and organismal levels; the factors controlling developmental processes. Topics includes gametogenesis, fertilization, early development, and organogenesis. Concepts and processes include induction, polarity, symmetry, differentiation, morphogenetic movement, regeneration, aging and death. Three class periods each week. May be taken with or without associated laboratory course Bio 404. Prerequisites: Bio 201, and Chm 347 and 348 or Chm 342 and 343 .

## Bio 404 Developmental Biology Laboratory (1)

The experimental understanding of the basic concepts in developmental biology. Emphasis is placed on the experimental techniques and principles used to analyze the factors controlling cellular, tissue and organismal development in both plants and animals. One laboratory period each week. Corequisite: Bio 403.

## Bio 406 Animal Histology (3)

Fundamental microscopic and electron microscopic anatomy of mammalian cells, tissues and selected organs and organ systems. Practice in preparation of biological materials for examination by the light microscope, including: dissection, fixation, imbedding in paraffin and plastic, sectioning, and staining. Two class periods; one laboratory period each week. Prerequisites: Bio 101; Bio 325 or Bio 410 strongly recommended.

## Bio 407 Parasitology (3)

Biology of host-parasite systems; factors influencing evolution, distribution, and host specificity of animal parasites. Host-parasite relationships as illustrated by physiological and morphological adaptations, ecology, and life cycles of selected protozoan, helminth, and anthropod parasites. Two class periods; one laboratory period each week. Prerequisite: 14 credits in biology courses.

## Bio 409 Ecology Laboratory (3)

Laboratory and field research testing current ecological concepts. Emphasis on learning research design and techniques by intensively investigating a single concept, such as competition theory, community energy flow, or foraging strategy. Use of computers for model building. One class period and six hours of field research each week. Prerequisites: Bio 202 and consent of instructor.

## Bio 410 Systemic Physiology (3)

The function of organ systems in animals and their contribution to the functions of the body as a whole. Topics include nervous, endocrine, cardiovascular, respiratory, gastrointestinal, and urinary systems. Two one-and-one-half hour lecture periods each week. Prerequisite: Bio 301.

## Bio 411 Systemic Physiology Laboratory (1)

Experimental investigations in systemic physiology with emphasis on membrane transport, nerve excitability, muscle contraction, sensory mechanisms, cardiac activity, and special problems. One laboratory period each week. Corequisite: Bio 410.

## Bio 415 Vertebrate Biology (4)

Characteristics, systematics, distribution, adaptation, behavior, population dynamics, and ecology of the vertebrates. Appropriate field and laboratory techniques. One weekend field trip will substitute for some laboratory periods. Three class periods, one laboratory period each week. Prerequisite: Bio 202 or 219.

## Bio 417 Neurophysiology (3)

Comparative approach to the physiology of the nervous system with major emphasis on invertebrate systems. Topies include functional organization of nervous systems, sensory and central processes, synaptic mechanisms and neural correlates of learning and behavior. Three class periods each week. Prerequisites: Phy 105 and one term of biochemistry.

## Bio 418 Experimental Neurophysiology Laboratory (1)

Experimental analyses of the nervous system including stimulating and recording techniques, experimental design, and data analysis. Emphasis is placed on invertebrate nervous systems. One laboratory period each week. Corequisite: Bio 417.

## Bio 419 Cytogenetics (3)

The study of eukaryotic chromosomes; their structure, function and cycles as they relate to the replication, segregation, recombination, and transcription of the genetic material; and their role in speciation and evolution. Two class periods, one laboratory period each week. Prerequisites: Bio 201 and Bio 301, or consent of instructor.

## Bio 432 Animal Behavior (3)

The organization, causation, development and evolution of behavior in vertebrates and invertebrates. Emphasis is on a synthesis of information from both field and laboratory. Topics include stimuli and responsiveness, motivation, conflict behavior, social behavior with emphasis on ecolegical aspects, orientation and navigation, rhythmicity, learning, and the neural organization responsible for behavior. Three class periods each week. Prerequisite: 15 credits in biology including Bio 202.

## Bio 433 Mycology (3)

Introduction to the fungi: structure, function, life cycles, evolution, and ecological and economic importance. Two lectures, one laboratory period each week. Prerequisites: Bio 101, or consent of the instructor.

## Bio 434 Population-Community Ecology (3)

Major concepts in population dynamics and the structure and evolution of communities. Topics include niche partitioning, competition theory, population cycles, population regulation, optimization theory, the community matrix, species packing and species diversity. Emphasis on current research. Three class periods each week. Prerequisite: Bio 202.

## Bio 450 Fundamentals of Immunology (3)

A survey of the field of immunology encompassing topics such as the nature of immune defense; the character of the cells involved, their activities and their interactions; the immunoglobulins; control of antibody synthesis; the chemical nature of antigenicity; the antigen-antibody reaction; immunological memory; immunosuppression; autoimmunity; and the application of immunochemical techniques to biological research. Three class periods each week. Prerequisite: Bio 201 and a course in biochemistry.

## Bio 460 Neural Basis of Behavior (3)

Critical examination of the interrelationships of complex behavior with the development, structure, and function of the central nervous system in higher vertebrates. Two one-and-one-half hour lecture periods each week. Prerequisite: consent of the instructor.

Bio 499 Supervised Research for Seniors (1-4)
Individual, independent research on selected topics in biology. Critical analysis of selected papers. Senior majors in the department of biological sciences may make application for this course through the office of the department chairman. May be taken either session. May be repeated for a total of 8 credits.

The following courses are open to qualified seniors:

## Bio 502 Vertebrate Zoogeography (3)

Bio 515 Departmental Seminar in Biology (1)
Bio 515q Departmental Seminar in Biology (0)
Bio 516 Advanced Limnology (4)
Bio 520 Bioenergetics of the Cell (3)
Bio 522 Somatic Cell Genetics (3)
Bio 524 Advanced Molecular Biology (3)
Bio 526 Chemical Biology (3)
Bio 528 Physical Biology (3)
Bio 529 Chemical Biology Laboratory (2)
Bio 530 Experimental Ecology (3)
Blo 531 Physiological Plant Ecology (4)
Bio 534 Invertebrate Physiology (3)
Bio 536 Advanced Genetics Laboratory (3)
Bio 537 Molecular Genetics (3)
Bio 540 Palynology (3)
Bio 542 Blological Membranes (3)
Blo 544 The Biology of Cancer (3)
Bio 548 a and b Cellular Aspects of Neurophysiology (2, 2)
Bio 565 Advanced Vertebrate Biology (5)

## DEPARTMENT OF CHEMISTRY

FACULTY: J. Aronson, S. Bank, A. Bryan, C. H. Bushweller, W. Closson, L. Daly, G. Eadon, A. Finkelstein, H. Frisch, R. Frost, T. King, H. Kuivila, B. Laurenzi, A. Long, E. McLaren, Y. Meyer, P. Olafsson, R. Sarma, A. Saturno, A. Yencha, J. Zubieta.

The objective of the department is to prbvide students with a broad fundamental knowledge of modern theoretical and experimental chemistry that enables graduates to embark immediately on professional careers in chemistry or to continue study at an advanced level toward higher degrees. The general program in chemistry is approved by the Committee on Professional Training of the American Chemical Society.

## Degree Requirements for the Major in Chemistry

## General Program

B.S.: (Combined major requirement and second field sequencc), Chm 131, 132, 216, 218, 340, 341, 342 or 408 or 420 or 440 a , and 9 credits in advanced chemistry as advised (transfer students may satisfy the major requirement by Chm 121, 122, 216, 217, 225, 340, 341, and one of Chm 342, 408,420 or 440 a , plus 8 credits in advanced chemistry as advised) ; Mat 112, 113, 212; Phy 120, 121, 124, 125, 220, 221.

## Teacher Education Program

B.S.: (combined major requirement and second field sequence), Chm 131, 132, 216, 218, 340, 341 a, and 342 or 408 or 420 or 440 a (transfer students may satisfy the major requirement by Chm 121, 122, 216, 217, 225, 340, 341a and 342 or 408 or 420 or 440 a ) ; Mat 112, 113, 212; Phy 120, 1.21, 124, 125, 220, 221; Bio 101 or 102; three credits in astronomy, geological or atmospheric sciences as advised.

## Other Degree Requirements

Students in the general program are strongly urged to complete at least one year of German.

## Chm 121 a and b General Chemistry (3, 3)

Fundamental laws and theories of chemistry with emphasis on physical theory and quantitative relationships. Principles of equilibrium applied to aqueous solutions and the chemistry of the more common elements with emphasis on the periodic relationship and correlation with atomic properties. Three class periods each week. Prerequisite for Chm 121 b ; Chm 121 a.

## Chm 122 a and b General Chemistry Laboratory (1, 1)

Application of some of the basic techniques of chemistry with emphasis on fundamental principles. Quantitative aspects are stressed. Detailed experimental study of chemical equilibrium and an introduction to elementary analysis are included. One laboratory period each week. Prerequisite for Chm 122 b: Chm 122 a.

## Chm 131 a and b Chemical Principles (3)

Structure and reactions of atoms and molecules, nature of chemical bonds, condensed phases, chemical thermodynamics, chemical equilibrium, basic concepts of inorganic and organic chemistry. Three class periods each week. Prerequisite for Chm 131 a; one year of high school chemistry and one year of high school physios or concurrent enrollment in college physics; for Chm 131 b : Chm 131 а.

## Chm 132 a and b Experimental Chemistry $1(1,1)$

Synthesis and characterization of organic and inorganic compounds. One laboratory period each week. Corequisite for Chm 132 a and b: Chm 131 a and b.

## Chm 198 Selected Independent Reading I (1)

Independent study of a selected topic in chemistry which correlates with and supplements the formal curriculum in chemistry. Potential enrollees should consult with the department chairman in the spring regarding the topic and registration. Work normally will be carired out during the summer between the students' first and second years, with examination and credit given in the fall. Prerequisite: consent of the department chairman.

## Chm 216 a and b Organic Chemistry (3, 3)

Structure, synthesis and reactions of the principal classes of organic compounds with a stress on the underlying principles of reaction mechanisms, stereochemistry and spectroscopic techniques. Three class periods each week. Prerequisite for Chm 216 a: Chm 121 b and Chm 122 b (or Chm 131 b and Chm 132 b ); for Chm 216 b: Chm 216 a.

## Chm 217 a and b Organic Chemistry Laboratory (1, 1)

Laboratory techniques in organic chemistry, including extraction, crystallization, distillation and chromatography, exemplified by the application of these techniques to the synthesis and qualitative analysis of organic compounds. Applications of infra-red and NMR spectroscopy. One laboratory period each week. Corequisite (or prerequisite) for Chm 217 a: Chm 216 a ; for Chm 217 b: Chm 216 b. Prerequisite for Chm 217 b: Chm 217 a.

## Chm 218 a and b Experimental Chemistry II (2, 2)

Continuation of Chm 132 with emphasis on characterization of compounds by physical methods, relationship between molecular structure and physical properties. Two laboratory periods each week. Corequisite (or prerequisite) for Chm 218 a: Chm 216 a; for Chm 218 b : Chm 216 b ; prerequisite for Chm 218 b : Chm 218 а.

## Chm 225 Quantitative Analysis (3)

Theory of quantitative analysis based on modern chemical principles. Practical application to typical gravimetric, volumetric, and colorimetric analysis. Two class periods, one laboratory period each week. Prerequisite: Chm 121 b and Chm 122 b ; or Chm 132 b.

## Chm 298 Selected Independent Reading II (1)

Independent study of a selected topic in chemistry which correlates with and supplements the formal curriculum in chemistry. Potential enrollees should consult with the department chairman in the spring regarding the topic and registration. Work normally will be carried out during the summer between the students' second and third years, with examination and credit given in the fall. Prerequisite: consent of the department chairman.

## Chmi 301 (Env 301) Chemistry in Socieiy (3)

Designed to provide the non-science student with an appreciation of chemistry as a human pursuit and the nature of chemical knowledge and how it is obtained. Three class meetings each week. (Closed to students with credit in Chm 121 b or Chm 131 b.)

## Chm 320 Elementary Physical Chemistry (3)

The interpretation of the properties of chemical systems in terms of thermodynamics, electrochemistry and kinetics, and studies of surface tension and viscosity, Three class periods each week. Prerequisite: Chm 121 b , Mat 113. (Not open to majors in chemistry.)

## Chm 321 Elementary Physical Chemistry Laboratory (1)

Experiments illustrating and applying the principles developed in the topics listed in Chm 320 to the study of chemical systems. One laboratory period each week. Corequisite: Chm 320.

## Chm 340 a and b Physical Chemistry (3, 3)

The mathematical description of physiochemical systems and their interpretation in terms of thermodynamics, kinetic theory, and reaction rates. Atomic and molecular structure from the viewpoint of elementary statistical mechanics and wave mechanics, with special emphasis on bonding, spectra, and the solid state. Three class periods each weeh. Prerequisites for Chm 340 a: Chm 225, Phy 124, Mat 212, and Chm 216 (may be taken as corequisite) ; or Chm 218 b, Phy 124 and Mat 212; for Chm 340 b: Chm 340 a.

## Chm 341 a and b Physical Chemistry Laboratory (3, 3)

The experimental understanding of the basic principles of physical chemistry and development of familiarity with the instruments, experimental principles and their application toward the elucidation of the fundamentals of the physical principles of chemistry. Includes: thermodynamics, chemical kinetics, hydrodynamic, electrochemical and optical properties. Two laboratory periods each week. Corequisites: Chm 340 a and b. Prerequisite for Chm 341 b: Chm 341 a.

## Chm 342 Introduction to Biochemistry (3)

The chemistry and biochemical interrelationship of carbohydrates, lipids, proteins, and nucleic acids; enzymes and metabolic processes. Three class periods each week. Prerequisite: Chm 216 b .

Chm 343 Introduction to Biochemistry Laboratory (1)
Experiments illustrating the fundamentals of biochemistry as discussed in Chm 342. One laboratory period each week. Corequisite: Chm 342.

## Chm 345 Chemical Foundations for Biochemistry (3)

A unified course dealing with the principles of physical and organic chemistry pertinent to the understanding of biochemistry and comprehension of modern biology. Three class periods each week. Prerequisite: Chm 121 b or Chm 131 b . Corequisite: Chm 346. (Not open to majors in chemistry.)

## Chm 346 Chemical Foundations for Biochemistry Laboratory (1)

Recitation and Iaboratory to complement Chm 345. One laboratory period each week. Corequisite: Chm 345. (Not open to majors in chemistry.)

## Chm 347 Basic Principles of Biochemistry (3)

A general survey of modern topics relevant to the elucidation of structural-functional relationships, metabolic significance, dy. namics and other aspects of biological systems. Three class periods each week. Prerequisite: Chm 345. (Not open to majors in chemistry.)

## Chm 348 Basic Principles of Biochemistry Laboratory (1)

Recitation and laboratory to complement Chm 347. Corequisite: Chm 347. One laboratory period each week. (Not open to majors in chemistry.)

## Chm 398 Selected Independent Reading III (1)

Independent study of selected topic in chemistry which correlates with and supplements the formal curriculum in chemistry. Potential enrollees should consult with the department chairman in the spring regarding the topic and registration. Work normally will be carried out during the summer between the students' third and fourth years with examination and credit given in the fall. Prerequisite: consent of the department chairman.

## Chm 407 Atmospheric Chemistry (4)

Same as Atm 407; offered jointly with the Department of Atmospheric Science.

## Chm 408 Survey of Polymer Chemistry (3)

A shared resource course with Chm 508. Structure, synthesis and morphology of polymers; polymerization reactions; molecular weight determination; introduction to thermal, mechanical and electrical properties; design of polymers, graft and copolymers; processing and selected applications including adhesion and coatings and films. Three class meetings each week. Prerequisite: Chm 340 b or consent of the instructor.

Chm 410 Mathematical Methods in Theoretical Chemistry (3)
An introductory survey of the mathematical techniques that form the tools of the modern worker in theoretical chemistry with appropriate applications. Topics include vector and matrix algebra, curvilinear coordinate systems, complex function theory and contour integrals. Fourier analysis, solutions of ordinary and partial differential equations, eigen value problems and the theory of groups. Three class periods each week. Prerequisite: Mat 212; Chm 340 a ; or consent of the instructor.

## Chm 412 Organic Synthesis (4)

Synthesis of organic compounds and the separation and identification of products via fractional distillation and gas, paper, column, and thin layer chromatography. The inherent limitations of these separation methods and the type of systems to which each method would be applicable will be examined. Two class periods, two laboratory periods each week. Prerequisite: Chm 217 b or Chm 218 b.

## Chm 420 Inorganic Chemistry (3)

Extranuclear atomic structure and its relation to the properties of the elements and their compounds, description of the chemical bond with application to inorganic compounds, transition metal complexes. Three class periods each week. Prerequisite: Chm 340 $b$ (may be taken as corequisite).

## Chm 421 Inorganic Chemistry Laboratory (2)

Inorganic synthesis and application of physical measurements to the study of inorganic compounds. Two laboratory periods each week. Prerequisite: Chm 420 (may be taken as corequisite),

## Chm 423 Introduction to Organic Research (3)

The theory and practice of modern methods of handling, separation and characertization of compounds. One class period, two laboratory periods each week. Prerequisite: Chm 340 b (may be take as corequisite) or Chm 218 b .

## Chm 426 Undergraduate Research in Chemistry (3)

Original experimental and theoretical research problems. Graded S/U, may be repeated for a maximum of five sessions. Laboratory and conference hours to be arranged. Prerequisite: consent of the department chairman.

## Chm 430 Instrumental Analysis (3)

Theoretical principles and chemical applications of selected methods of instrumental analysis. Main emphasis is on electroanalytical methods; including polarography, conductance, potentiometry, and coulometric methods, and on trace methods of analysis such as spectrographic emission, flame emission, atomic absorption, and fluorometric analysis. Two class periods, one laboratory period each week.

## Chm 431 Intermediate Physical Chemistry (3)

Fundamental principles and their applications from the areas of thermodynamics, kinetics, and molecular structure. Three class periods each week. Prerequisite: Chm 340 b.

## Chm 436 Advanced Organic Chemistry (3)

Organic chemistry at an advanced level, including introduction of theoretical background and application in synthesis. Three class periods each week. Prerequisite: Chm 340 b (may be taken as a corequisite) or Chm 218 b .

## Chm 440 a and b Comprehensive Biochemistry (3, 3)

Chemical characteristics of living matter, amino acids, polypep. tides and proteins, supramolecular assembly and membrane structure; enzyme mechanisms and kinetics; bioenergetics and the chemistry of metabolism; electron transport and other transports across membranes; biosynthesis, storage and expression of genetic information. Prerequisite: Chm $216 \mathrm{~b}, \mathrm{Chm} 231 \mathrm{~b}$ or consent of instructor.

## Chm 497 Independeni Study (3)

Individual, independent study of selected topics. Open to majors in chemistry with the consent of the department chairman. May be repeated for credit.

The following courses are open to qualified seniors:

## Chm 525a Physical Organic Chemisiry I (3)

Chm 525b Physical Organic Chemistry II (3)
Chm 535 a and b Advanced Physical Chemistry (3, 3)
Chm 538 Colloidal Chemistry (3)
Chm 544 Biophysical Chemistry (3)
Chm 545 a and b Biochemical Techniques (3, 3)
Chm 555 Quantum Chemistry (3)
Chm 560 Chemical Thermodynamics (3)
Chm 561 Chemical Kinetics (3)
Chm 562 Chemical Spectroscopy (3)
Chm 570 Crystallography (3)

# DEPARTMENT OF COMPUTER SCIENCE 

FACULTY: D. N. Arden, P. Bloniarz, Y. Breitbart, E. Chy- linski, F. Federighi, S. Finkelstein, S. Greenfield, F. D. Lewis, S. Lomonaco, Jr., E. D. Reilly, Jr., D. Rosenkrantz, W. Schilling.

The objective of the department is to provide students with a broad in-depth training in computer science which will enable them to be responsive to the rapid changes taking place in the field. Our goal is to provide students with the necessary know-how to pursue careers in industry, research, and teaching.

To accomplish its objectives, the department offers a program leading to an M.S. degree in computer science and a full sequence of undergraduate courses leading to a second field.

Undergraduate courses in Computer Science are offered either as free electives or as the basis for a second field sequence of particular interest to students majoring in mathematics, natural science, business, economics, psychology, and, depending on career objectives, the humanities. Second field sequences in Computer Science should include at least Csi 201, 202, 301, and 404 or 410 . The remaining four credits may include either additional Computer Science courses or certain related courses in mathematics, logic, and linguistics offered by other departments.

In addition to electing the second field sequence in Computer Science, students preparing for graduate work in this field are encouraged to acquire a background in mathematics through differential equations and linear algebra.

## Csi 201 Introduction to Computer Sclence (4)

The use of the computer as a device for manipulating symbols and the processing of information; the concept of an algorithm and the use of flow charts to depict algorithms; programming in a machine-independent higher level procedure oriented language such as BASIC and FORTRAN.

## Csi 202 Programming Techniques (4)

Continuation of Csi 20I. Topics covered include number systems, advanced features of FORTRAN, machine language programming, magnetic tape applications, sorting algorithms, and the use of an incremental plotting device. Prerequisite: Csi 201.

## Csi 203 Data Processing Principles (3)

Programming in Common Business Oriented Language(COBOL). File maintenance techniques. Use of Report Generators. Source data automation. Information retrieval methods. Introductory systems analysis. Prerequisite: Csi 201 or Msi 215.

## Csi 301 Data Structures (3)

Internal representation in computer memory of various data structures such as lists, trees, graphs and arrays. Files and inverted files. Programming in an advanced procedure oriented language such as ALGOL or PL/1. Prerequisite: Csi 201.

## Csi 302 Discrete Structures (3)

Lattices and Boolean Algebra. Set theory, propositional logic, switching algebra. Deterministic and non-deterministic finite state machines and procedures. Regular grammars and languages. Graphs, trees and associated algorithms. Prerequisite: Csi 201 and Mat 112.

## Csi 303 Computer Programming Languages (3)

The description and application of such higher-level programming languages as ALGOL, SNOBOL, and APL. BackusNaur form. Reverse Polish notation. Decision Tables. Programs which automate the manipulation of algebraic formulas. Prerequisite: Csi 301.

## Csi 401 Numerical Methods for Digital Computers (3)

The study of practical methods for the numerical solution of a variety of problems on a digital computer. Topics covered will include roots of equations, numerical interpolation, numerical integration and differentiation; the evaluation of mathematical functions, least squares curve fitting; the solution of simultaneous linear equations, matrix inversion and linear programming. Prerequisites: Csi 301 or Csi 580, Mat 213.

## Csi 403 Algorithms and Data Structures (3)

Description of common data structures such as lists, push-down stores, queues, trees, and graphs. Definition of algorithm efficiency and efficient algorithms for integer and polynomial arithmetic, sorting, set manipulation, shortest paths, pattern matching and Fourier transforms. Prerequisite: Csi 301 and CSI 302.

## Csi 404 Computer Organization (3)

The architecture of several conventional computing systems compared and contrasted with such non-Von Neumann organizations as the Solomon and Holland machines: Other topics include data communication, associative memories, and machine features which facilitate multi-programming and time-sharing. Prerequisite: Csi 202.

## Csi 405 Introduction to Information and Coding Theory (3)

Coding to remove redundancy or to reduce errors due to noise and the fundamental limitations to these processes described by Shannon's theorems for the binary symmetric channel. An introduction to error-correcting codes. Prerequisite: Mat 362 or equivalent.

## Csi 410 Logic Design of Microcomputers (3)

Fundamentals of logic design with application to the design of basic computer elements such as counters, adders, decoders. Design of instruction timing sequences, register structure, addressing techniques, interrupts and interfaces between asynchronously operating components. Application to micro-computer design. Prerequisites: Csi 202, Csi 302.

## Csi 497 Independent Study in Computer Science (1-3)

Independent study in computer science under the guidance of faculty computer users. Students registered for this course should expect to spend approximately ten hours per week solving real computer related problems. May be repeated for credit with the consent of the department chairman. Prerequisite: departmental approval.

## Csi 498 Directed Activity in Computing (1-3)

For students interested in on-site participation in computer operations, serving as a consultant for beginning programmers or problem solving in a practical environment. Prerequisite: departmental approval.

## Csi 499 Senior Seminar in Computer Science (3)

Selection of an appropriate topic and preparation of a research or survey paper under the direction of a specific computer science faculty member. Prerequisites: Csi 303 and consent of department chairman.

The following courses are open to qualified seniors:

## Csi 500 Operating Systems (3)

## Csi 502 Computer Graphics \& Man-Machine Communications (3)

Csi 506 Modeling and Simulation (3)
Csi 507 Image Processing (3)
Csi 508 Database Systems (3)
Csi 509 Automata and Formal Languages (3)
Csi 511 Principles of Computing (3)
Csi 512 Computer Solutions for Eigenvalue, Differential, and Integral Equations (3)
Csi 513 Introduction to Compiler Design (3)
Csi 515 Combinatorial Algorithms (3)
Csi 580 Computer Science in Scientific Disciplines (3)
Csi 595 APL Programming (1)
Csi 596 SNOBOL Programming (1)
Csi 598 Computer Science Lab (1-3)
Csi 599 Seminar on Current Topics in CompulerScience (1-3)
PROGRAM IN COMPUTER SCIENCE AND APPLIED MATHEMATICS
FACULTY: Combined faculties of the Departments ofMathematics and Computer Science.

The interdisciplinary major-second field with a concentration in Computer Science and Applied Mathematics offers students the opportunity to achieve the following academic objectives:

1) the achievement of a mathematical background adequate for a large proportion of the computer applications in the engineering and business worlds; 2) the development of technical proficiency in computer programming and a basic understanding of computer structure; and 3) an introduction to those theories which have been spawned by the modern development of computation and communication.
This program addresses itself to the rapid past and prospective growth of computer software and application, and to the present and future need for persons capable of creative contributions to this area.

## Degree Requirements for the Interdisciplinary Major-Second Field with a Concentration in Computer Science and Applied Mathematics

## General Program

B.S.: ( 60 credits minimum, of which at least 12 credits must be in courses at the 300 level or above) including A Mat 112, 113, 212, 213, 362, 363, 380 ; A Csi 201, 202, 301, $302,303,401,403,405,404$ or 410 ; B Msi 434, 435. Total. credit requirements: 60 credits. See the appropriate sections of this bulletin for descriptions of the mathematics and computer science courses.

## DEPARTMENT OF GEOLOGICAL SCIENCES

FACULTY; P. Benedict, K. Burke, S. DeLong, J. Dewey, P. Fox, W. Kidd, W. Means, A. Miyashiro, G. Putman.

The department aims to provide a broad introduction to the geological sciences including geophysics and geochemistry. Within the last decade, understanding of the earth has been revolutionized through the development of plate tectonic theory. Members of our faculty have played leading roles in this revolution and teach courses aimed both at introducing students with varied backgrounds to a new dynamic picture of the world and at training future professionals. Continuing shortages of raw materials for industry and energy production and increasing interest in environmental problems are leading to a growing demand for professional geologists.

## Special Programs or Opportunities:

The department sponsors two weekly seminar series that provide students with a sampling of important topics in current geological research: (1) informal talks given by faculty and graduate students; and (2) formal seminars presented by outside speakers. The Geology Club and department sponsor field trips in New York, New England, and the Appalachians. The field mapping course attracts students from other schools.

## Degree Requirements for the Major in Geological Sciences

## General Program

## Major in Geological Sciences

General Program, B.S.: A minimum of 66 credits for the combined major and second field including: Geo 120, 210, $220,230,240,310,330$ or $470,400,410$ or 440 or 480,450 or 497, 460 ; Mat 112, 113; Phy 120, 121, 124, 125; Chm 121, 122; Chm 320, 321 or Phy 220, 221. Students are strongly urged to elect the following additional courses: Mat 212, 213; Csi 201, 202. Students are also encouraged to take electives in English.

## Major in Earth Science

Teacher Education Program, B.S.: A minimum of 59 credits for the combined major and second field including Geo 100, 200, 205, 210, 220, 230; Mat 112, 113; Chm 121, 122, 320, 321; Phy 105, 106; Atm 103; Bio 102; plus nine additional credits in Geology courses at the 300 level or above. Students are also encouraged to elect Gog 201.

## Geo 100 Planet Earth (3)

A survey of current developments in our understanding of the evolution of the earth. Major topics covered will include: composition and origin of the earth-moon system, seismoolgy and earth structure, plate tectonics, origin of continents and oceans, and the origin of life. Three lectures each week. Fall and Spring sessions.

## Geo 105 (Env 105) Environmental Geology (3)

Introduction to and survey of the geologic aspects of the environment, geologic aspects of health and disease, waste disposal, mineral resources and conservation, land reclamation, land-use planning, and geologic hazards. Three lectures each week. Spring session.

## Geo 110 Introductory Geology in the Field (2)

Basic principles of geology illustrated by field examples in the Albany area. Elementary recognition and understanding of landforms, rock types, structural features, fossils, and minerals. Rep. resentation of geological features on maps. Eight weeks only; two lectures, one four-hour field trip each week. No prerequisites. Fall session.

## Geo 120 Fundamentals of Geology (3)

Chemistry, structure, and macroscopic identification of the major groups of rock-forming silicates, classification of rocks. Surface processes, spatial and temporal relationships of rock masses. Topographic and geologic map interpretation, geologic neld work. Two lectures, one lab each week. No prerequisites. Spring session.

## Geo 200 Physical Geology (3)

The materials of the earth's crust and the processes that shape its features. Laboratory; identification and significance of common minerals and rocks, and evaluation of topographic and geologic maps. Two lectures, one lab each week. Not open to students who have completed Geo 120. Fall Session.

## Geo 205 Historical Geology (3)

The history of our planet as a logical interpretation of rock sequences, their major structure and the evolution evident in their fossils assemblages. Laboratory; an introduction to paleontology and stratigraphy. Two lectures, one lab each week. Prerequisite: Geo 200 or consent of instructor. Spring session.

## Geo 210 Mineralogy 1 (3)

The atomic structures of minerals and the thirty-two crystal classes. Introduction to x-ray crystallography and crystal chemistry. Optical erystallography, goniometry, crystallographic calculations and projections. The polarizing microscope. Two lectures, one lab each week. Prerequisite: Geo 120 or consent of instructor. Fall session.

## Geo 220 Mineralogy II (3)

Descriptive mineralogy, especially optic determination of rockforming minerals, with the polarizing microscope. Chemical and crystallographic properties of rock-forming minerals. Two Lectures, one lab each week. Prerequisite: Geo 210. Spring session.

## Geo 230 Chronology and Field Methods (4)

Analysis of the principles which lead to our understanding of the spatial and temporal relationships of rock sequences, emphasizing correlation by lithographic, biologic, and geochronologic methods. Two lectures, one lab each week, integrated with some field work. Prerequisite: Geo 120 or consent of instructor. Fall session.

## Geo 240 Structural Geology 1 (3)

Descriptive structural geology with emphasis on features seen on the outcrop and map scales. Regional structural associations. Two lectures, one lab each week including some field work. Prerequisite: Geo 120 or consent of instructor. Spring session.

## Geo 310 Igneous Petrography and Petrology (3)

Description, properties, classification, and occurrence of igneous rocks; their mineralogical and chemical relationships. Examination of major igneous rock types and series. One lecture, two labs each week. Prerequisite: Geo 220. Fall session.

## Geo 320 Metamorphic Petrography and Petrology (3)

Description, properties, classification, and occurrence of metamorphic rocks. Change of mineral assemblages with temperature and pressure. Examination of major metamorphic rock types and associations. One lecture, two labs each week. Prerequisite: Geo 220 and Geo 310. Spring session.

## Geo 330 Sedimentary Petrography and Petrology (3)

Modern continental and marine depositional environments. Provenance, dispersal, and deposition of clastic sediments. Deposition of chemical and biogenic sediments. Mineralogy and fabric of sediments, characteristics and recognition of paleo-environments. Two lectures, one lab each week. Prerequisite: Geo 220 and Geo 310. Spring session.

## Geo 340 Structural Geology II (2)

An introduction to selected topics in mechanics including stress, strain, and stress-strain relations. One two-hour lecture each week. Prerequisite: Geo 240. Fall session.

## Geo 370 Economic Geology (3)

Nature, occurrence, and origin of metallic ores, economic evaporites and chemical sediments, coal, oil and gas. Elementary hydrology. Methods used in prospecting and evaluating economic deposits. Two lectures, one lab each week. Prerequisite: Geo 220 and 240. Offered biannually, in alternation with Geo 380. Spring session.

## Geo 380 Paleontology (3)

Invertebrate fossils; their comparative anatomy, paleoccology, evolution, correlation, Two lectures, one lab each week. Prerequisite: consent of instructor. Offered biannually in alternation with Geo 370. Spring session.

## Geo 400 Field Mapping (6)

Supervised geological mapping. Three weeks of field work (camping in the field) followed by one week of independent study for preparation of report (in Albany). Starts the first Monday after spring semester final exams end. Prerequisites: Geo 230 and 240 or consent of instructor.

## Geo 410 Geochemistry (4)

Origin, abundance and distribution of elements in various media. Physiochemical concepts of geologic processes and the application of thermodynamics and phase equilibria. Study of factors controlling element dispersion, and other topics. Four lectures each week. Prerequisite: Chm 121, 320, or 340 . Fall session.

## Geo 440 Structural Geology III (4)

Structural analysis, mechanisms of rock fracture and flow, interpretation of regional stress and strain history from structural features. Four lectures each week with some field work. Prerequisite: Geo 340. Spring session.

## Geo 450 Special Topics (3)

A structured program of reading and seminars leading to an indepth understanding of a chosen topic in geology. Prerequisite: consent of instructor. Students may repeat course once for an additional three credits. Either session.

## Geo 460 Marine Geology (3)

Geology of the ocean basins with emphasis on the morphology, sediments, sedimentary processes, crustal structure, and evolution of the ocean floor. Three lectures each week. Prerequisite: Geo 240 and 330 or consent of instructor. Fall session.

## Geo 470 Tectonics (3)

Seimologic basis for plate tectonics, kinematics of plate motion, geometry and evolution of plate mosaics. Analysis of the structure and history of shields, platforms, rift valleys, plateaux, continental margins, island arcs, transcurrent fault zones, and orogenic belts. Two lectures, one lab each week. Prerequisite: Geo 460. Spring session.

## Geo 480 World Historical Geology (4)

An integrated survey of the geologic history of the earth. Four lectures each week. Prerequisite: Geo 460. Fall session.

## Geo 497 Independent Study (3)

A field or laboratory investigation of a chosen geologic problem, including the writing of a research report to be undertaken during the senior year. Prerequisite: consent of instructor. Students may repeat course once for an additional three credits. Either session.

The following courses are open to qualified seniors:

## Geo 510 Igneous Petrology I (3)

Geo 520 Sediments and Tectonics (3)
Geo 530 Metamorphic Petrology I (3)
Geo 540 Geophysics (4)

## DEPARTMENT OF MATHEMATICS

FACULTY: G. Allaud, L. Brickman, H. Brown, C. Chen, L. Childs, V. Cowling, E. Davis, M. Ellis, N. Friedman, R. Goldsteın, H. Gordon, W. Haboush, W. Hammond, B. Jamison, J. Jenkins, M. Katz, B. Korenblum, T. Lance, V. Larney, L. Lininger, R. Luippold, T. MacGregor, G. Mangano, G. Martin, J. Myers, R. Nirenberg, E. Nussbaum, H. Ogawa, R. O'Neil, M. Range, R. Regal, M. Sherman, M. Smiley, H. Stratton, J. Therrien, E. Thomas, E. Turner, N. Uy, D. Wilken.

The objective of the department is to serve the needs of students aspiring to careers that require mathematical background: physical, biological, social and management sciences, statistics, actuarial work, computer science, applied mathematics, secondary school teaching, graduate work and research in mathematics. The department also welcomes students who desire to study mathematics as part of a traditional liberal arts education.

The University awards calculus credits to the well-prepared entering student. A student who has received a score of three or higher on the AB Calculus Advanced Placement Examination will be given 4 credits for Mat 112, and will be placed into Mat 113. A student who has received a score of three or higher on the BC Calculus Advanced Placement Examination will be given 8 credits for Mat 112 and 113, and will be placed into Mat 212. A student who has not received Advanced Placement credit may take the Calculus I Proficiency Examination, which is administered by the Mathematics Department during the registration period preceding the first day of classes. A student passing this examination will be given 4 credits for Mat 112.

## DEGREE REQUIREMENTS FOR THE MAJOR IN MATHEMATICS

B.A. Degree: (combined major requirement and second field sequence)

1. A minimum of 36 credits from the Department of Mathematics in courses numbered above 110, including Mat $112,113,212,213$ and a 3 -credit course numbered above 300 in each of these four areas: algebra, analysis, geometry/topology, probability/statistics.
2. Proficiency equivalent to one year of a college-level foreign language (classical or modern) demonstrated either by satisfactory completion of the first year of the language or placement beyond the first year of that language; nine additional credits from the College of $\mathrm{Hu}-$ manities and Fine Arts.
3. Nine credits from the College of Social and Behayioral Sciences and/or the School of Criminal Jistice, Public Affairs, and Social Welfare.
B.S. Degree: (combined major requirement and second field sequence)
4. A minimum of 36 credits from the Department of Mathematics in courses numbered above Il0, including Mat I12, 113, 212, 213 and 12 credits in courses numbered above 300. Mathematios majors in the Teacher Education Program are required to take a 3 -credit course numbered above 300 in each of these four areas: algebra, analysis, geometry/topology, probability/statistics.
5. Six to eight credits in Computer Science.
6. Additional credits to complete a minimum total of 18 credits in Computer Science or 18 credits in a natural science, business or, with approval of the department, other areas which have a scientific/quantitative emphasis.

## Program Requirements for the Major in Mathematics

It is possible for a student to earn either a B.A. degree or a B.S. degree while enrolled in any one of the following programs.

## General Program

This program enables the student to explore many areas in the arts and sciences and to gain a broad background in mathematics. The student may also choose to take a concentration of mathematics courses in an area of his or her special interest. Several of the concentration options are histed below.

## Teacher Education Program

The student who is interested in a career in secondary school teaching must apply for admission to the CompetencyBased Teacher Education Program in Secondary Mathematics, which is administered by the Department of Instruction, School of Education. One of the requirements for admission is the passing of a Mathematics Entry Levél Test, which tests reasoning ability based on the mathematics of grades 7-12. This test should be taken by the end of the sophomore year.

The mathematical competency that a candidate must be able to demonstrate before graduating is to be obtained by completing each of these courses with a grade of at least C : Mat 112, 113, 212, 213, 226, 231, 312, 320, 332, 362, 363, 452, Csi 201, and two consecutive courses in one of these sciences: biology, physics, chemistry, atmospheric science, or geology. One semester in the junior or senior year will be devoted exclusively to student teaching and professional education studies.

## Honors Program

This program is designed for the serious mathematics student who wants superior undergraduate training and the accompanying recognition. Any student who hopes to do graduate work in mathematics should consider entering the Honors Program. A mathematics major may apply for admission to the program during the second semester of the sophomore year or during the junior year. Application should be made to the Chairman of the Honors Program. To be admitted the applicant must have an academic average in all university courses of at least 3.3 , and an academic average in all mathematics courses of at least 3.6.

Specific course requirements are: 18 credits in courses numbered above 400 , including Mat 411 a, $411 \mathrm{~b}, 420$ and 424 ; one course selected from Mat 440, 441, 464 a, 465 a. To be recommended for Graduation with Honors, the candidate must also write an acceptable honors thesis, pass a comprehensive examination, and maintain an academic average of at least 3.3 in all university courses and at least 3.6 in all mathematics courses numbered 400 or above.

## MATHEMATICAL AREAS OF CONCENTRATION

In addition to fulfilling the above requirements for the degree and program in which the student has enrolled, he or she is afforded the opportunity to prepare for a specific career by taking a sequence of courses that are recommended by the department.

## Actuarial Concentration

Mathematics has useful and interesting applications in the field of actuarial science. The Department of Mathematics offers a course sequence that will prepare the undergraduate to pass Parts 1 through 4 of the Associateship Examinations of the Society of Actuaries. The student is given drill on practice examinations as well as lectures on the theory. To prepare for the four parts, the student should takes these courses: Part 1: Mat 112, 113, 212, 114. Part 2: Mat 362, 363, 364. Part 3: Mat 301, 401 a, $401 \mathrm{~b}, 402$. Part 4: Mat $403 \mathrm{a}, 403 \mathrm{~b}$. Also recommended is B Acc 211.

## Statistics Concentration

Statisticians are in great demand by institutions of all types. Students interested in a career in statistics should take Mat 362, $363,464 \mathrm{a}, 464 \mathrm{~b}, 465 \mathrm{a}$, and 465 b . Also recommended are Mat $401 \mathrm{a}, 401 \mathrm{~b}, 411 \mathrm{a}, 411 \mathrm{~b}$, and 424 . Because computers have become such an essential statistical tool, the student is advised to take several Computer Science courses, including Csi 201, 301, and 401.

## Applied Mathematics Concentration

A student interested in broad areas of mathematics that are applied to the physical sciences, social sciences and engineering is advised to take courses from among the following: Mat 311, 362, 363, 372, 380, 401 a, $401 \mathrm{~b}, 409,410$, 411 a, 411 b, 412.

## RELATED PROGRAMS

## Interdisciplinary Major in Computer Science and Applied Mathematics

This major prepares a student to handle mathematicallyoriented computer applications in engineering and business. Details of the program are listed under Computer Science and Applied Mathematics.

## Combined Mathematics and Master of Business Administration Program

In this program a student is able to obtain a B.S. degree in Mathematics and an M.B.A. degree in a total of five years by taking a coordinated program in mathematics and business administration during the senior year. Application should be made during the second semester of the junior year to the Director of the M.B.A. Program, School of Business.

## Mat 100 Elements of Mathematics (3)

Reyiew of basic algebra; linear, quadratic, exponential, and logarithmic functions; cartesian coordinates and graphing; trigonometric functions, finite series. Prerequisites: Elementary algebra and plane geometry.

## Mat 105 Finite Mathematics (3)

An introduction to topics of interest to students of the social sciences; sets and logic, partitions and counting, probability, vectors and matrices, theory of games. Not open to mathematics majors. Prerequisite: Mat 100 or intermediate algebra.

## Mat 106 Elementary Calculus (3)

An intuitive approach to differentiation and integration of algebraic and transcendental functions with emphasis on applications. May not be taken for credit by students with credit in Mat 107 or Mat 112. Prerequisites: Plane geometry, intermediate algebra, and trigonometry; or Mat 100.

## Mat 107 Calculus Applied to Business and Economics (3)

Applications of differential and/integral calculus to the analysis of: marginal cost and revenue, effect of taxation, revenue from taxation, profits, inventory control, capital budgeting, producer's and consumer's surplus. May not be taken for credit by students with credit for Mat 106 or Mat 112. Prerequisites: Plane geometry and intermediate algebra; or Mat 100.

## Mat 108 Elementary Statistics (3)

Frequency distributions, measures of central tendency and dispersion, probability and sampling, estimation, testing of hypotheses, linear regression and correlation. Prerequisite: Mat 100 or intermediate algebra.

## Mat 109 Applied Matrix Algebra (3)

Matrix algebra as applied to solving systems of linear equations. Markov chains, linear programming. Calculations and applications will be emphasized rather than theory. Prerequisite: Intermediate algebra or Mat 100 .

## Mat 112 Calculus I (4)

Calculus of one variable: limits, continuity, differentiation of rational functions, the definite integral, logarithmio and exponential functions. (Not open to students with credit for Mat 106 or Mat 107 or who pass the Mat 112 Proficiency Examina* tion.) Prerequisites: Intermediate algebra and trigonometry.

## Mat 112s Calculus I (1)

A student who has completed Mat 106 or Mat 107 and decides to continue with calculus should enroll in this course in order to qualify to take Mat 113. The only requirement for receiving credit in Mat 112s is the passing of the regular Mat 112 final examination. Prerequisite: Mat 106 or Mat 107.

## Mat 113 Calculus 11 (4)

Continuation of Calculus I: the conics, trigonometric functions, techniques of integration, sequences and series. Prerequisites: Mat 112 or Mat 112s.

## Mat 114 Actuarial Calculus and General Mathematics (1)

Drill in problem solving in preparation for Part 1 of the Associateship examinations of the Society of Actuaries. Prerequisite: Mat 212 or taken concurrently with Mat 212.

## Mat 208 Topics in Statistical Inference (3)

Various statistical techniques such as chi square tests, multiple regression and correlation, non-parametric statistics and the analysis of variance as applied to physical, biological and social sciences. Prerequisite: Mat 108.

## Mat 211 Elementary Numerical Computation (2)

An introduction to the theory and techiniques in the solution of numerical computational problems: nonlinear equations, polynomial interpolation, integration, ordinary differential equations, and systems of linear equations. Prerequisites: Mat 113; Csi 201 or knowledge of BASIC.

## Mat 212 Multivariate Mathematics I (4)

Introduction to linear algebra, functions of several variables, and differential equations. Will include partial differentiation and multiple integration. Prerequisite: Mat 113.

## Mat 213 Multivariate Mathematics II (4)

Continuation of Mat 212. Further topics in linear algebra, linear and first order systems of differential equations, vector field theory. Not open to students with credit for Mat 223. Prerequisite: Mat 212.

## Mat 223 Linear Algebra and Differential Equations (4)

Linear equations, matrices, determinants, vector spaces and linear transformations: ordinary diflerential equations, with emphasis on first oder differential equations, linear differential equations, and systems of differential equations. Course covers topics that are included in Mat 212 and Mat 213 and is designed for transfer students who have not had both linear algebra and differential equations. Not open to students with credit for Mat 213. Prerequisites: Transfer credit for three semesters of calculus, or consent of instructor.

## Mat 226 Classical Algebra (3)

Topics from elementary number theory and the theory of equations, including mathematical induction, divisibility, Fundamental Theorem of Arithmetic, congruences, complex numbers, factorization of polynomials over the rational, real, and complex fields, and simple field extensions. May not be taken by students with credit for Mat 326 . Prerequisite: Mat 112 or Mat 112 s.

## Mat 231 Transformation Geometry (3)

Classical theorems of Menelaus, Ceva, Desargues and Pappus. Isometrics, similarities and affine transformations for Euclidean geometry. Prerequisite: Mat 212.

## Mat 299 Independent Study in Mathematics (1-3)

Individual, independent study of selected topics not covered in a regularly scheduled course. Open to majors in mathematics only. May be repeated for credit. Prerequisite: Consent of instructor with whom student wishes to study.

## Mat 301 Theory of Interest (3)

The basic measures of interest, annuities, sinking funds, amortization schedules, bonds, and installment loans. Recommended as partial preparation for Part 3 of the Associateship examinations of the Society of Actuaries. Prerequisite: Mat 113.

## Mat 311 Topics In Differential Equations (3)

Series solution, special functions of mathematical physics, introduction to qualitative theory. Further selected topics. Not open to students with credit for Mat 310. Prerequisite: Mat 213 or Mat 223.

## Mat 312 Basic Analysis (3)

Theoretical aspects of calculus, including construction of the real numbers, differentiation and integration of functions in one variable, continuity, convergence, sequences and series of functions. Prerequisite: Mat 213 or Mat 223.

## Mat 320 Elementary Abstract Algebra (3)

Basic concepts of groups, rings, integral domains, fields. Prerequisite: Mat 226 or consent of instructor.

## Mat 332 Foundations of Geometry (3)

Axiomatic development of absolute geometry, theory of parallels, introducton to non-Euclidean geometry, isometrics of the BolyaiLobachevsky plane. Prerequisite: Mat 213 or Mat 223.

## Mat 333 Convex Geometry (3)

An introduction to geometric ideas in Euclidean n-space with emplasis on the notion of convexity. Topics are selected from the following: basic properties of convex bodies, Helly's theorem, geometric extremal problems, Minkowski geometry, geometry of numbers, packing and covering theorems, and integral geometry. Prerequisite: Mat 113.

## Mat 342 Elementary Topology (3)

Topology of the real line and plane. Connectivity and winding numbers of curves are emphasized. Prerequisite: Mat 213 or Mat 223.

## Mat 362 Probability (3)

Introduction to probability theory and random variables. Elementary limit theorems. Prerequisite: Mat 212.

## Mat 363 Statistics (3)

Hypothesis testing, point estimation, confidence intervals. Introduction to the analysis of variance. Prerequisite: Mat 362.

## Mat 364 Actuarial Probability and Statistics (1)

Drill in problem solving in preparation for Part 2 of the Associateship examinations of the Society of Actuaries. Prerequisite: Mat 363 or taken concurrently with Mat 363.

## Mat 372 Elements of Game Theory and Linear Programming (3)

Fundamental theorem of game theory for two-person zero-sum matrix games. Games in extensive form. Equivalence of linear programming problems to matrix games. Theory and application of the simplex method of solving linear programming problems. Prerequisite: Mat 213 or Mat 223.

## Mat 380 Systems Theory (3)

Dynamical behavior of continuous and discrete systems. Observability, stability and transforms. Introduction to feedback control. Prerequisite: Mat 213 or Mat 223.

## Mat 401 a Numerical Analysis (a) (3)

Error analysis, finite differences, interpolation theory with both equal and unequal intervals (formulas of Newton, Gauss, Stirling, Besse], Everett, Lagrange), theory of summation. Recommended as partial preparation for Part 3 of the Associateship examinations of the Society of Actuaries. Prerequisite: Mat 213 or Mat 223.

## Mat 401 b Numerical Analysis (b) (3)

Approximate differentiation and integration, difference equations, numerical solution of differential equations, iterative techniques, matrix methods, numerical approaches to linear systems of equations. Recommended as partial preparation for Part 3 of the Associateship examinations of the Society of Actuaries. Prerequisite: Mat 401 a .

## Mat 402 Actuarial Numerical Analysis and Theory of Interest (1)

Drill in problem solving in preparation for Part 3 of the Associateship examinations of the Society of Actuaries. Prerequisites: Mat 301 and Mat 401 b , where 401 b may be taken concurrently with Mat 402.

## Mat 403 a Life Contingencies (a) (3)

A treatment of the contingencies of a single life, covering the following topics: Mortality functions, life annuities, life insurance functions, annual premiums, net level premium reserves, the expense factor, more complex benefits. Mat 403 (a and b) cover the required material for Part 4 of the Associateship examinations of the Society of Actuaries. Prerequisites: Mat 301 and Mat 362.

## Mat 403 b Life Contingencies (b) (3)

Expansion of the theory of Mat 403 a, with emphasis on two or more lives in combination and on multiple causes of decrement. Topics include population theory, multi-life statuses, multilife functions, reversionary annuities, multiple-decrement functions, primary and secondary decrements, applications of multiple-decrement functions. Prerequisite: Mat 403 a.

## Mat 409 Vector Analysis (3)

Classical vector analysis presented heuristically and in physical terms. Topics include the integral theorems of Gauss, Green and Stokes. Prerequisite: Mat 212.

## Mat 410 Partial Differential Equations for Applications (3)

The partial differential equations of classical mathematical physics. Topics include boundary and eigenvalue problems, Fourier series and other orthogonal expansions. Prerequisite: Mat 213 or Mat 223.

## Mat 411 a and b Advanced Calculus (3,3)

A rigorous presentation of the traditional topics in the calculus of several variables and their applications. Topics include the implicit function theorem, Taylor's theorem, Lagrange multipliers, Stieltjes integral, Stokes's theorem, infinite series, Fourier series, special functions, Laplace transforms. Prerequisite: Mat 312 or consent of instructor. Mat 411 a is prerequisite for Mat 411 b .

## Mat 412 Complex Variables for Applications (3)

The elementary functions, differentiation, conformal transformations, power series, integral theorems, Taylor's theorems, Taylor's and Lamrent's expansions, application of residues. Prerequisite: Mat 213 or Mat 223 or consent of instructor.

## Mat 420 Abstract Algebra (3)

Group theory, rings, modules, tensor products, field extensions and Calois theory, valuation rings. Prerequisite: Mat 320 or consent of instructor.

## Mat 424 Advanced Linear Algebra (3)

Duality, quadratic forms, inner product spaces, and similarity theory of linear transformations. Prerequisite: Mat 213 or Mat 223.

## Mat 425 Number Theory (3)

Divisibility, congruences, quadratic reciprocity, diophantine equations, sums of squares, cubes, etc., continued fractions, algebraic integers. Prerequisite: Mat 226.

## Mat 440 Differential Topology (3)

Manifolds, differential forms, De Rham's Theorem, duality. Prerequisite: Mat 312 or consent of instructor,

## Mat 441 Introduction to Differential Geometry (3)

An introduction to the geometry of curves and surfaces. Topics include torsion, Frenet formulae, metrics, curvature and classical theorems in these areas. Selected topics from modern differential geometry. Prequisite: Mat 213 or Mat 223.

## Mat 452 History of Mathematics (3)

History of the developinent of mathematics, emphasizing the contributions of outstanding persons and civilizations. Prerequisites: Mat 213 or 223; Mat 226 or 320 ; Mat 231 or 332.

## Mat 456 Foundations of Mathemalics (3)

Axiomatics, infinite sets, axiom of choice, Zorn's lemma, ordinal numbers, the continuum, logical calculi, Intuitionism and other viewpoints on foundations, Prerequisite: Mat 213 or Mat 223.

## Mat $464 \mathbf{a}$ and $\mathbf{b} \quad$ Probability Theory (3, 3)

Rigorous treatment of discrete probability theory, distribution theory, random walks and fluctuation theory, recurrent events and Markov chains. Prerequisites: Mat 213 or Mat 223, and consent of instructor. Mat 464 a is prerequisite for Mat 464 b .

## Mat 465 a and b Statistical Methods (3, 3)

Parametric, non-parametric and Bayesean statistical procedures, and topics in multivariate analysis. Emphasis will be placed on problems requiring the use of the computer. Prerequisites: Mat 213 or Mat 223; Mat 362 and consent of instructor. Mat 465 a is prerequisite for Mat 465 b .

## Mat 481 a and b Junior-Senior Analysis Seminar $(3,3)$

Study of topics in analysis, chosen at the discretion of the instructor. Prerequisite: consent of instructor.

## Mat 482 a and $b$ Junior-Senior Algebra Seminar (3, 3)

Study of topics in algebra, chosen at the discretion of the instructor. Prerequisite: consent of instructor.

## Mat 483 a and b Junior-Senior Geometry and Topology Seminar $(3,3)$

Study of topics in geometry and topology, chosen at the discretion of the instructor. Prerequisite: consent of instructor.

## Mat 499 Independent Study in Mathematics (1-3)

Individual, independent study of selected topics, not covered in a regularly scheduled course. Open only to majors in mathematics. May be repeated for credit. Prerequisite: consent of instructor with whom student wishes to study.

The following courses are open to qualified seniors:
Mat 510 a and b Real Analysis $(5,5)$
Mat $511 \quad$ Analysis for Teachers (4)
Mat 513 a and b Complex Analysis (5, 5)
Mat $515 \quad$ Ordinary Differential Equations (4)
Mat $516 \quad$ Partial Differential Equations (4)
Mat 520 a and b Algebra (5, 5)
Mat $521 \quad$ Algebra for Teachers (4)
Mat $526 \quad$ Algebraic Equations and Geometric Constructions (4)
Mat 530 a and b Geometries (4, 4)

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Mat 533 Complex Numbers in Geometry (4)
Mat 538 Difierential Geometry (4)
Mat 540 a and b Topology I and II (5,5)
Mat 546 Combinatorial Topology (4)
Mat 551 Set Theory and Foundations
    of Mathmetics (4)
Mat 560 Statistics Labs (2)
Mat 561 a and b Linear Models (4, 4)
Mat 562 Statistics for Teachers (4)
Mat 563 a and b Mathematical Statistics (5, 5)
Mat 570 Combinatorics (4)
Mat 572 Game Theory and Linear Programming (4)
Mat 575 Optimal Control Theory (4)
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## DEPARTMENT OF PHYSICS

FACULTY: H. Bakhru, R. Benenson, H. Chessin, B. Chi, S, Chui, J. Corbett, N. Cue, T. P. Das, J. Garg, W. Gibson, A. Inomata, R. Lanni, A. Levitas, B. Marsh, A. Oliver, K. Ratcliff, T. S. Renzema, G. W. Reynolds, Jr., L. Roth, C.

Scholes, W. Scholz, J. Smith, H. Story, C. R. Sun.

The objective of the department is to provide students a solid foundation in both classical and modern physics. Students are prepared either to undertake graduate study in physics, to apply physics principles and techniques successfully for advanced work in other disciples, to enter industry usefully, or to teach in the secondary schools. Along with courses in classical mechanics, electromagnetic theory, atomic and nuclear physics, and thermal physics, students learn modern electronic techniques, principles of quantum mechanics and applications. Elective courses in other sciences and independent study with faculty members in the active research fields of the department are encouraged as part of the practical emphasis. Courses in environmental problems, applications of nuclear physics, and physics in the arts bring physics concepts to the nonmajor.

## Special Programs or Opportunities

One-tome student faculty interaction is possible and is encouraged by the department. Computer use at all levels of instruction is afforded by means of teletype terminals in the Physics Building. Very modern equipment is available in all laboratories. Opportunities for valuable experience, training, and occasionally financial support exist in the form of undergraduate assistantships in the research and teaching laboratories. The Society of Physics Students sponsor's popular talks, tours to nearby laboratories and social events. It offers tutorial services, slide rule and computer clinios and has its own library. It conducts tours of our facilities for students and the general public. It conducts course and teacher evaluations and also supplies information on opportunities after the B.S. degree. The department has a chapter of Sigma Pi Sigma, the national physics honor society.

## Degree Requirements for the Major in Physics

## General Program

B.S.: (Combined major and second field sequences totaling 65 credits): an introductory sequence of Phy 120, 121, 124, 125, 220, 221, 224, 225; Phy 260, 315, 321, 332, 344, 403, 421, 431; Mat 112, 113, 212; Chm 121 a and b, 122 $a$ and $\mathbf{b}$ and three credits advised from the fields of science and mathematics.

The department renumbered several courses three years ago. Numbers in parentheses represent the old numbering system and are included for students' convenience.

## Teacher Education Program

B.S.: (Combined major and second field sequence total. ing 65 credits) : an introductory sequence of Phy 120, 121, $124,125,220,221,224,225$; Phy 321, Phy 250 or 315 or 403 , and eight credits of electives in physics at the 300 level or higher. Bio 101 a and $b$ or 102 a and b; Chm 121 a and b ; Chm 122 a and b ; Mat 112, 113, 212 and six credits selected from Atm 300, Atm 407, and Geo 200.

## Phy 105 a and b General Physics $(3,3)$

Mechanics, thermodynamics, electricity, magnetism, optics, relativity, atomic and nuclear phenomena. Three class periods each week. Prerequisite: Three years of high school mathematics, Corequisites: Phy 106 a and b .

Phy 106 a and b General Physics Lab (1, 1)
Laboratory experiments to complement the topics being studied in Phy 105 a and b. One laboratory period each week. Corequisites: Phy $105 a$ and $b$.

## Phy $107 \mathbf{a}$ and $b \quad$ Problem Solving: General Physics $(1,1)$

Applications of the principles and methods studied in General Physics. Assignments will be selected with the aim of aiding the student in developing a more thorough understanding of the subject matter of General Physics. Individual assignments can be ar* ranged for students with special needs or interests. Corequisites: Phy 105 a and b.

## Phy 120 (Phy 111) Introductory Physics 1 (3)

A study of fundamental physical phenomena. Topics include kinematics and dynamies of particles and rigid bodies. Three class periods each week. May be taken either session. Prerequisites: Mat 112 or concurrent registration.

## Phy 121 Introductory Physics I Lab (1)

Laboratory experiments to complement the topics being studied in Phy 120. One laboratory period each week. May be taken either session. Corequisite: Phy 120.

## Phy 122 Problem Solving: Introductory Physics I (1)

Application of the principles and methods studied in Introductory Physics I (Phy 120). The assignments will be selected with the aim of aiding the student in developing a more thorough understanding of the subject matter in Phy 120. Individual assignments can be arranged for students with special needs or interests. Offered every session. Corequisite: Phy 120.

## Phy 124 (Phy 112) Introductory Physics II (3)

A study of fundamental physical phenomena. Topics include wave motion, heat and thermodynamics, and kinetic theory of gases. Three class periods each week. May be taken either session. Prerequisites: Mat 113 or concurrent registration, Phy 120.

## Phy 125 Introductory Physics II Lab (1)

Laboratory experiments to complement the topics being studied in Phy 124. One laboratory period each week. May be taken either session. Corequisite: Phy 124.

## Phy 126 Problem Solving: Introductory Physics II (1)

Application of the principles and methods studied in Introductory Physics II (Phy 124). The assignments will be selected with the aim of aiding the student in developing a more thorough understanding of the subject matter in Phy 124. Individual assignments can be arranged for students with special needs or interests. Corequisite: Phy 124. Offered every session.
Phy 220 (Phy 213) Introductory Physics III (3)
A study of fundamental physical phenomena. Topics include electricity, magnetism, and optics. Three class periods each week. May be taken either session. Prerequisite: Phy 124.

## Phy 221 Introductory Physics II Lab (1)

Laboratory experiments to complement the topics being studied in Phy 220. One laboratory period each week. May be taken either session. Corequisite: Phy 220.

## Phy 224 (Phy 214) Introductory Physics IV (3)

A study of fundamental physical phenomena. Topics include relativity and quantum theory with applications to atomic, nuclear, and solid state physics. Three class periods each week. May be taken second session only. Prerequisite: Phy 220.

Phy 225 Introductory Physics IV Lab (1)
Laboratory experiments to complement the topics being studied in Phy 224. One laboratory period each week. May be taken second session only. Corequisite: Phy 224.

## Phy 227 Acoustics and Aural Arts (3)

Physical principles of production, transmission and reception of sound. For non-scientists. Live and reproduced sound in music, in nature, noise pollution. Fidelity; stero in multi-channel systems. Lectures/demonstration meetings and individualized learning.

## Phy 228 Acoustics: Projects (1-2)

Laboratory or other special investigation of selected topic (s) in acoustics. Activity and credit arranged with instructor. Prerequisite or corequisite: Phy 227 or introductory college physics.

## Phy 230 Physics of Light and Art (3)

Physical principles and techniques used by physicists as applied to the visual arts. Newton's Laws applied to mobiles (L), bridges, dancers, symmetry in physics and arts, optics (L) and the camera (L), waves and holography (L), color effects (L), lasers, light quanta. Techniques: surface coating and computer graphics (L). $\mathrm{L}=$ demonstrations plus laboratory. Non-mathematical course designed for non-majors.

## Phy 231 Constructive and Destructive Nuclear Energy (3)

The history of the nuclear reactor and A-bomb development, both human and technical, decisions regarding A-bomb use, principles of the H -bomb and ballistic missiles, electric power from fission reactors, prospects of controlled theromonuclear power, and medical use of nuclear particles and isotopes. Non-mathematical; for scientists and non-scientists. Two hours per week of lecture; one hour for discussion of technical or moral questions.

## Phy 250 (Phy 217) Alternating Current and Electronics (3)

Alternating currents, electron tubes, and transistors. Electronic circuits, including rectifiers, amplifiers, oscillators, and logic circuits. Theory developed and practical experience achieved by means of laboratory projects built by the student. Two classlaboratory periods per week. May be taken first session only. Prerequisite: one year of college physics or consent of instructor.

## Phy 251 Principles of Bio/Medical Electronic Instrumentation I (4)

Principles of modern electronic instrumentation techniques as applied to the bio/medical field. Topics include electrocardiography, blood pressure, respiration rate and temperature. Modules such as operational amplifiers, multivibrators, power amplifiers, etc., are studied individually and then assembled with appropriate transducers into working measuring instruments. Practical laboratory work is emphasized. Two class-laboratories per week. Prerequisite: one year of physics or permission of instructor.

Phy 260 Waves (3)
Study of basic wave concepts with emphasis on similarities and analogies between different wave phenomena. Topics include free and forced oscillations, interference, diffraction, polarization, gedmetrical optics, matter waves. Schroedinger wave equations. Three class periods each week. May be taken second session only. Prerequisite: Phy 220.

## Phy 302 (Env 302) (Phy 301) Urban and Environmental Physics Problems (3)

A physicist's approach to the collection, evaluation, and interpretation of data and opinions on selected urban and environmental problems. Topics will include mass transportation systems, comparison of various energy sources such as nuclear and fossil fuel, and effective utilization of natural resources. Three class periods each week. Prerequisite: Algebra.

## Phy 305 Physics Principles in Nuclear Medicine (3)

Basic physics in Nuclear Medicine; radioactive nuclides; radionuclide scanning; radiation chemistry; biological effects of radiation, radiopharmaceuticals; clinical radiation pathology; radia-. tion hazards and safety; waste disposal. Three class periods a week. May be taken first session only. Prerequisite: Phy 105 b or Phy 224 or equivalent.

## Phy 307 Acoustics (3)

Phenomenological and mathematical analyses of the generation, transmission and reception of sound waves. Basic principles and applications. Three class periods a week. Prerequisites: Phy 220 and Mat 212 or consent of instructor.

## Phy 315 Electronics (3)

Transistors and their characteristics; electronic circuits, field effect transistors and applications; amplifiers, low and high frequency response; operational amplifiers; consideration of controlcircuit design; fast-switching and counting devices; integrated circuits and their designs. Two class periods and one three-hour laboratory each week. May be taken first session only. Prerequisite: Phy 224 or Phy 260.

## Phy 316 Electronics: Projects (3)

Independent projects involving laboratory work in the study of electronic circuits using linear and/or digital devices. (Each student is expected to undertake a project which requires originality and broadens knowledge of the area.) Special attention is paid to counters, registers, encoding, decoders; and digital applications. May be taken second session only. Prerequisite: Phy 315.

## Phy 321 Intermediate Mechanics (4)

Fundamentals of Newtonian mechanics, conservation theorems, central force motion, gravitation, the special theory of relativity, rigid-body problems, kinematics of two-partiole collisions, motion in a non-inertial reference frame, Lagrange equations, Hamilton's equations, Four class periods each week. Prerequisites or corequisites: Phy 224 or Phy 260, Mat 212.

## Phy 332 Intermediate Electricity and Magnetism (4)

Electrostatics and magnetostatics: sources, fields in various materials and configurations. Maxwell's equations; their bases and application in induction and the behavior and propagation of fields in guides and various unbounded media. Four class periods each week. Prerequisite: Phy 321 or consent of instructor.

## Phy 344 Introductory Quantum Mechanics (3)

An introduction to the quantum mechanical descriptions of simple physical systems. Topics include the particle-wave duality of matter, the uncertainty principle, the Schroedinger equation, Herinitian operators, angular inomentum, one dimensional harmonic oscillator, the hydrogen atom and molecule, perturbation theory. Three class periods per week. Prerequisite: Phy 321.

## Phy 401 History of Physics (3)

Designed to give a perspective on the development of physics through a study of the sources, Three class periods each week. May be taken first session only. Prerequisite: 12 credits of college physics.

## Phy 403 Intermediate Physics Laboratory I (3)

Selected experiments to complement the intermediate courses; includes laboratories in the areas of electronics, electricity and magnetism, and modern physics. Methods of physical measurements and error analysis are emphasized. The student is given the opportunity and shown the need to use the computer in data analysis. Special projects can be arranged for advanced students. Two threehour laboratory periods each week. May be taken either session. Prerequisite: Phy 250 or Phy 332 or consent of instructor.

## Phy 404 Intermediate Physics Laboratory II (3)

An extension of Phy 403 in which measurements are carried out on experiments which have not been performed by the student as part of Phy 403 and for which equipment is available. A portion of the term will be devoted to project-type experiments, either in the development of a portion of a new experiment or improvement of an existing one. T'wo three-hour laboratory periods each. week. May be taken either session. Prerequisite: Phy 403.

## Phy 421 Modern Physics I (3)

Introduction to atomic, nuclear and particle physics. Topics include hyperfine structure in hydrogen, atomic structure and spectra; two nucleon system, bulk properties of nuclei, nuclear models and reactions, radioactivity, classification of elementary particles, symmetrics, conservation laws, models. Three class periods each week. May be taken first session only. Prerequisite: Phy 344.

## Phy 422 Modern Physics II (3)

Introduction to physics of molecules and solids. Topics include molecular structure, molecular spectra, quantum statistics, thermal properties of solids, band theory, magnetism, phonons in solids, masers and lasers. Three class periods each week. May be taken second session only. Prerequisite: Ply 421.

## Phy 431 Thermodynamics and Statistical Physics (3)

Thermodynamic systems and variables; the laws of thermodynamics; thermodynamic potentials and applications: ideal and real gas relations; changes of phase, introduction to probability theory; elementary kinetic theory of gases; micro- and macro-states of simple quantum-mechanical systems; Fermi-Dirac, Bose-Einstein and Maxwell-Boltzmann statistics. Three class periods each week. May be taken second session only. Prerequisites: Mat 212 and Phy 224.

## Phy 440 Projects Laboratory (3)

Measurements at the level of Phy 403 are carried out using apparatus and techniques developed as part of the course. The course is unstructured and requires considerable independence on the part of the student but allows considerable time freedom. Following suggestions of the instructor, the student carries out one or more measurements of physical quantities in fields of physics of mutual interest. Written reports are required. Nominally six hours per week. May be taken either session. Prerequisite; Phy 403 or consent of the instructor.

## Phy 460 Radiation Physics (3)

A survey of the types of nuclear reactions commonly observed including elastic scattering, fast and slow neutron-induced; different types of high energy particle reactions; heavy-ion and photonuclear reactions; the techniques and terminology of radioactive decay, absorption and attenuation measurements, dose rates, build up rates, shielding principles and biological effects of radiation; methods of producing activation and activation analysis, fission detection methods, dosimetry and health physics. Three class periods each week. May be taken second session only. Prerequisite: consent of instructor.

## Phy 497 (Phy 498) Independent Study in Physics (1-3)

The student will pursue independent study under the direction of a faculty member with whom he/she has made arrangements. After one or more hourly meetings per week, the student will read and discuss specialized material beyond that normally covered in a course, or carry out experiments and/or calculations in which independence is required. A written report will be submitted on the work of each session. Not limited to seniors. May be repeated for credit.

The following courses are open to qualified seniors:
Phy 510 a and b Mathematical Methods in Physics $(4,4)$
Phy 530 a and b X-Ray Diffraction Analysis (3, 3)
Phy 542 a and b Physical Optics $(3,3)$
Phy $545 \quad$ Topics in the Physics of Nuclear Medicine (3)

Phy 552 a and b Advanced Electronics (3, 3)

# College of Social and Behavioral Sciences 

Richard H. Kendall, Dëan<br>Anne McNamara, Assistant to the Dean

The College of Social and Behavioral Sciences offers courses and major concentrations through the following departments, studies, and programs: African and Afro American Studies, Anthropology, Asian Studies. Economics, Geography, History, Psychology, Puerto Rióan Studies, Rus* sian and East European Studies, Social Studiés, and Sociology. Specific major requirements are outlined at the beginning of the course listing for each department or studies program.

## DEPARTMENT OF AFRICAN/AFRO-AMERICAN STUDIES

FACULTY: I. Gambari, H. Ododa, F. C. Pogue, P. Royster; L. R. Salkever, S. Spellman, K. Spurlock, J. S. Uppal, P. Ward, M. M. Weston, N. Wright, Jr.

The objective of the department is to provide a multi* and an interdisciplinary education in African/Afro-American Studies and related fields. Students are expected to possess the knowledge and skills necessary to understand the social, political, economic, physchological and historical consequences of institutional arrangements as they affect the life experiences of African/Afro-American people.

Students are prepared for careers in teaching, counseling, state and local social welfare programs, urban planning, administrative program direction, and international relations.

The department offers full programs leading to the B.A. and M.A. degrees. Students may specialize in African Studies and Afro-American Studies, Sub-areas in African Studies are: the history, economics, politics, and culture of the following regions : Eastern Africa, Central Afrióa; West Africa, and Southern Africa, Subareas in AfröAmerican Studies include: Afro-American History and Culture, Uíban Economic Development, Central City Politics, añd In-
stitutions, Afro-American Literature and Criticism, and Urban Planning, Though the major concentrations are Africa and the United States, students may design pro: grams which will enhance their knowledge of other black cultures, e.g., the Caribbean, Haiti, etc.

## Special Programs or Opportunities

Undergraduate and graduate students in the department are provided an opportunity to apply theory through eommunity projects, both through formal courses and such other special programs that may be designed by the department. Students participating in the latter may work directly with New York legislators or legislative committees, Students are also provided an ongoing colloquium series featuring local and nationally known African and AfroAmerioan scholars. The senior seminar enables students and faculty to meet to explore common research interests, A number of graduate courses are available to qualified seniors.

## Degree Requirements for the Major in African/Afro-American Studies

## General Program

B.A.: A minimum of 36 credits (at least 12 credits of which must be at the 300 level or above) including Aas 142, Aas 219, Aas 221 or Aas 222, Aas 286 a and b, Aas 322, or Aas 490. The additional Department courses, as advised, must include 6 hours of credit at the 200 -level and 9 hours of credit at the 300 -level or above.

## Aas 101 Elementary Swahili (3)

Beginning course with audio-lingual approach. Fundamentals of langunge structure and sounds, with emphasis on pronunciation and oral expression. Graded readings. Classes meet four times a week plus two required periods in the language laboratory.

## Aas 110 The Black Theatre in America (3)

A study of the historio background of black involvement in the American theatre aud of the role and functioning of the Black Theatre in contemporary American society.

## Aas 142 African/Afro-American Literature (3)

A survey of black authors from diverse cultures and an analysis of their relationship to black thought.

## Aas 213 History of the Civil Rights Movement (3)

The historical development of the major civil rights movements in the United States, their linkages and disparities. The course examines the historical development and concrete manifestations of resistance movements to the institutional definitions of black people both antebellum, post civil war, and contemporary.

Aas 219 Introduction to African/Afro-American History (3)
A survey of the cultural and historical background of AfroAmericans from their African heritage to their present role in American society. Not open to students with credit for His 419.

## Aas 221 The Economic Structure of the Black Community (3)

An analysis of old and contemporary models of black entrepreneurship and formal economic organization and its effects in the community.

## Aas 222 Politics of Black Power (3)

The theories and current trends relating to the development of more extensive and effective control of those institutions that influence the lives and destinies of black people.

Aas 224 Cities as People: America in the '70's (3)
The impact of the urban environment on the individual and group life of those minorities locked into the urban situation. Census tract data, community specialists, and work projects in the inner city will be used to develop skills in predicting and understanding individual life styles.

## Aas 231 Dynamics of Racism (3)

An exploration of the socio-psychological variables involved in the production and maintenance of attitudes of bigotry and racism; their effects and means of change. Prerequisite: Psy 101 or Soc 260.

## Aas 243 Musical Traditions Among Afro-Americans (3)

The underlying concepts of forms of Afro-American musical expression.

## Aas 244 Black Women in America (3)

An interdisciplinary exploration of the role of the Black woman both in Afro-American life and in the society at large, with emphasis on the Black woman's interpretation of her own experience.

## Aas 245 African/Afro-American Art (3)

A survey of major black artists from diverse cultures and an examination of their work as a manifestation of cultural expression contemporary for their time.

## Aas 286 a and b (His 286 a and b) History of Africa (3, 3)

First session: Africa from pre-historic times to 1800 with emphasis on sub-Saharan Africa, the development of indigenous states, and their response to Western and Eastern contacts. Second session: Africa since 1800: exploration, the end of the slave trade, the development of interior states, European partition, the Colonial period, and the rise of independent $\Lambda$ frica. Either session may be taken without the other.

## Aas 301 (Prs 301) Puerto Rico and the Caribbean (3)

 (Same as Prs 301.)
## Aas 311 History of Slavery in the Western Hemisphere (3)

A study of the institution of slavery and its effects in the Western Hemispbere, its origins, bases of continuance, and contemporary residuals. Prerequisite: His 100 a and b; His 366 a and b recommended.

## Aas 320 Black Nationalism: Political Perspective in Africa (3)

A survey of the socio-political and cultural developments of contemporary African nations. Prerequisite: His 286 b or Aas 222.

## Aas 321 Black Nationalism: Political Perspective in the United States (3)

The emergence of black ideology in the United States with emphasis on current trends in socio-political and cultural unification of black Americans. Prerequisite: Aas 219.

## Aas 322 Developing African Nations (3)

A systems analysis of the contemporary social, political. cultural, and economic institutions crucial to the economic maturation of developing African nations.

## Aas 330 Crisis in Black Identification (3)

Psychodynamic analysis of the formation of self-concept and processes of identification as related to the black experience. Prerequisite: Psy 101 or Soc 260.

## Aas 331 The Afro-American Family (3)

An in-deptli study of the Afro-American family as an institution, the dynamics of intra-family relations and the effects of social institutions on black family life. Prerequisite: Soc 115.

## Aas 333 Problems in the Black Community (3)

A selective study of relevant social problems including drug addiction, prostitution, and extortion, particularly as they affect the black community. Prerequisite: Aas 231 or 221.

## Aas 340 The Black Essay (3)

A study of essays written by black American writers in the 19th and 20th ceatury.

## Aas 341 Black Religion (3)

An analysis of the relationship of the religion of the black man to black culture.

## Aas 342 (Ant 342) Sub-Saharan Africa: Peoples and Cultures (3)

Culture-areas of Africa south of the Sahara. Historical and geographic background studies of selected societies. Culture change and contact during the colonial and post-colonial periods.

## Aas 343 Black and Colored Identity Patterns (3)

An explication of identity patterns and the philosophical stance of selected contemporary black American, Latin-American, African, and Asian authors.

Aas 345 The Black Novel: Black Perspectives (3)
A systematic study of the novel written by black Americans from the Harlem Renaissance to the present. The novels studied will express the cultural, political and socio-historical consciousness of the writers to demonstrate their awareness of the struggle of black people.

## Aas 350 Black Writers' Workshop (3)

A seminar which assists writers to develop techniques that effectively convey their visions and themes.

## Aas 392 Central City Insiikutions (3)

A critical study and field investigation of black institutions in the central city including civic, social, fraternal, and religious groups.

## Aas 416 History of the Black Man in the Reconstruction Era: 1862-1876 (3)

An analysis of the political, social, cultural, and economic factors relating to the position of blacks in the Reconstruction Era. Prerequisite or corequisite: His 308.

## Aas 417 Senior Seminar in African/Afro-American Studies (3)

Prerequisite: consent of department chairman.

## Aas 419 (His 419) 'Afro-American History (3)

(Sume as His 419.)

## Aas 420 World Politics and the Black Diaspora (3)

An investigation of social, political and economic factors affecting development in the black nations of Africa and the Americas.

## Aas 421 Evaluation of Governmental Programs in the Black Community (3)

An amalysis of factors related to success and failure of governmental programs in meeting the needs of ethnic minorities, their objectives and consequences, with particular reference to black people. Prerequisite: Aas 221 or Aas 222.

## Aas 430 Black Social and Political Thought in the Americas (3)

A seminar on the social and political ideas and strategies of selected African/Afro-Americans from the late 18th century to the present.

## Aas 431 (Prs 431) The Third World Concept (3)

An investigation of the ideologies and nationalistic bonds centering on the black and colored peoples of the world. Prerequisite: Aas 219.

## Aas 432 Community Development and Organization (3)

An internship program in which students actively participate in organizational work within the community under faculty supervision. Prerequisites: Aas 221 or 222 , and 333.

## Aas 433 Pan-Africanism: Its Extension to "Afro"Americanism" (3)

A study of the development of the concept of negritude and its impact upon the emergence of black ideology. Prerequisite: His 286 b.

Aas 435 Blacks and the American Political Process (3)
An examination of the American political process as it impacts upon the Black community in the United States. Prerequisites: Aas 222.

Aas 436 History of the Black Man in Latin America and the Caribbean (3)
An appraisal of the Black man in Caribjean and Latin American History from the pre-Hispanic era to contemporary times.

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## Aas 490 Independent Study in African/Afro-American Studies (3)

Independent reading or research on a selected experimental, theoretical, or applied problem, under the direction of a faculty member. May be repeated for an additional three credits upon recommendation of the faculty supervisor and with approval of the department chairman. Prerequisite: consent of department chairman.

The following courses are open to qualified seniors:
Aas 509 Planned Social Change: Design, Structure, Control and Goals (4)

Aas 510 Seminar in Urban Affairs and Human Development (3)

Aas 520 Problems of African Economics (3)
Aas 524 Economic Development of Afro-Americans and other Minority Groups (3)

Aas 527 Financing Urban Development: Theory and Practice (3)

Aas 528 Black Political Organization (3)
Aas 530 Law and the Black Community (3)
Aas 531 The Sociology of Segregation (3)
Aas 532 Urban Life Styles (3)
Aas 535 Political Mobilization and Community Organization (3)

Aas 540 Black Urban History (3)
Aas 560 African History (3)

# DEPARTMENT OF ANTHROPOLOGY 

faculty : L. Campbell, R. Carmack, W. Fenton, P. Furst, G. Gmelch. C. Henrikson, R. Jarvenpa, G. Klima, F. Lees, D. Peterson, D. Snow. D. Wallace, R. Wilkinson, M. Williams, G. Wright, W. Zenner.

The objective of the department is to provide students witli an understanding of the broad range encompassed by antliropology in its study of human cultural behavior and its biological base, including both content and the methodological and theoretical bases involved. The subfields of ethology. biological anthropology, anthropological linguistics, and prehistoric archaeology are well represented in the course offerings.

## Special Programs or Opportunities:

Summer programs in ethnological and archaeological field work are available with the local area and Wyoming the most frequent locations. Courses in ethnological filmmaking and linguistics, using native American language informants, are special opportunities. Laboratory/research experience, both in formal courses and as independent projects, is available in archaeology, biological anthropology, and linguistics.

## Degree Requirements for the Major in Anthropology

## General Program

B.A.: A minimum of 36 credits ( 30 credits in Anthropology and six credits as advised) including one course from each of the following four groups: Biological Anthropology (Ant 210, 310-19, 410-19), Linguistics (Ant 220, 320-329, 420-429), Archaeology (Ant 230-231, 330-339, 430-439), and Ethnology (Ant 200, 340-381, 440-480) ; 18 additional credits of Anthropology (excluding Ant 100).

## Ant 100 Culture, Society, and Biology (3)

An examination of the interaction of culture, society, and biology as causative factors for behavioral patterns among human groups. A survey of the anthropological approach to human behavior, emphasizing the integrative aspects of the sub-disciplines of ethology, bio-anthropology, archacology, and anthropo-linguistics.

## Ant 200 Introduction to Culkural Anthropology (3)

A survey of the theory, methods, and goals of cultural anthropology, emphasizing the nature of culture and the varied forms in which it is expresseed among the peoples of the world.

## Ant 210 Introduction to Biological Anthropology (3)

A survey of the field of biological or physical anthropology, including human evolution, race, inheritance, and primate studies.

## Ant 220 (Lin 206/Eng 206) Introduction to Linguistics (3)

Same as Lin 206 or Eng 206.

## Ant 230 Introduction to Prehistoric Archaeology (3)

The techniques of recovering archaeological data; methods of interpreting the data and reconstructing culture history; the theory and goals of archaeology.

## Ant 231 Survey of World Prehistory (3)

Presentation and analysis of the major events in human prehistory up to the early civilizations; the role of diffusion and ecological and evelutionary theories in the explanation of the trends and regularities in these events.

## Ant 250 (Soc 250) The Family (3)

Same as Soc 250.

## Ant 260. Ethnological Method and Theory (3)

Introduction to method and theory in social and cultural anthropology. Examination of ethnological coneepts, models, and interpretive strategies in the crossecultural comparison of ethnográphic data. Evolutionism, Functionalism, and Structutalism will be stressed.

## Ant 280 (Soc 223) Introduction to Social Research (3)

Same as Soc 223.

## Ant 311 Introduction to the Primates (3)

A survey of the basic morphology and behavior of non-human primates. The prosimian and anthropoid primates will be studied in terms of their comparative morphology and behavior, with reference to these same features among humans.

## Ant 312 History of Human Evolution (3)

The development of evolutionary thought as it relates to concepts in physical anthropology, such as interpretations of the fossil record, primate behavior and racial concepts, with emphasis on 18th, 19th; and 20th century developments. Prerequisite: Ant 210.

Ant 320 (Lin 320) Introduction to Phonology (3)
An introduction to the analysis of sound systems including artioulatory and anditory phonetics, somed in structural and poststructural linguistics: analysis of the phonology of American English and of data from other languages, Prerequisite: Ant 220.

## Ant 321 (Lin 321) Morphology-Syntax (3)

This course will emphasize the techniques for the analysis and deseription of the grammatical systems of languges. The structural and tagmemic approaches will be used. Prerequisite: Ant 220.

## Ant 322 Middle American Linguistics (3)

A survey of Middle American Indian languages, their classification, deseription, and their implications for Mesoamerican zrehistory, Includes consideration of the current state of research in the several language families, ardil waracteristite, linguistic diffusion, und proposals for distant genetic relationships. Prerequisite; One previous course in linguistios of consent of instructor.

## Ant 325 Sociolinguistics (3)

Introduction to the study of language as a soctal phenomenon. Includes basic sociolinguistic concepts, fonterustional sociolinguistics, social dialects, Black English, dighossia, bilingualism and bilingual education. Prerequisite: Ant 220 or consent of instructor.

## Ant 330 Old World Prehistory (3)

The prehistory of Africa and Burasia from the Palaeolithte through the begimnings of agriculture.

## Ant 331 Early Civilization of the Old World (3)

The development of mbanism and the preindustrial city out of farming village life; an aralysis of the natire and content of the early eivilizations of the Near Bast, Eqypt, the Indus, and China; and the spread of civilization into Europe and Africa and its effects on peripheral peoptes such as the nomadic peoples of the Eurasian steppes.

## Ant 332 Eurasia and Civilization (3)

The rise of agricultural and pastoral communities and later of mixed farming and mounted nomadism ats ecologically distinct economies. Analysis of indigenous factors and those linked to contemporaneons classical urbat alltures. Persistemees in later Celtic and Viking cultare.

## Ant 333 Meso-American Prehistory (3)

Developments leading to the rise of civilization in pre-Columbian Mexico and Guatemala; ethohistory of the Maya and Aztecs, Prerequisite: Ant 230.

## Ant 334 South American Prehistory (3)

Development of the pre-Columbian hunting and farming groups of South America, with emphasis on the rise of civilization in the Andean area and ethnohistory of the Inca. Prerequisite: Ant 230 or consent of instructor.

## Ant 335 Introduction to Archaeological Field Techniques (3)

Introduction to the techniques used by archaeologists in the field, including both excavation techniques and special techniques borrowed from disciplines such as geology, palynology, geography, and zoology. Prerequisite: Ant 230 or consent of instructor.

## Ant 336 Archaeology of North America (3)

The prehistory of America north of Mexico. Prerequisite: Ant 230.

## Ant 337 Northeastern North American Prehistory (3)

An examination of the cultural complexes and sequences of Northeastern United States from time of earliest occupation to European contact.

## Ant 338 Archaeological Field Research (6)

Directed archaelogical excavation of selected sites, including experience in site location, mapping, excayation, preservation, analysis, classification, and interpretation. Ant 335 or consent of instructor.

Ant 339 Introduction to Archaeological Lab Techniques (3)
Survey and practical application of techniques for classifying and analyzing archaeological remains, including cartographic and computer based techniques. Data base includes materials recovered by preceding summer field school operations. Prerequisite: Ant 338 or consent of instructor.

Ant 340 The North American Indian (3)
The nature and distribution of North American Indian cultures from the pre-Columbian period to the present.

## Ant 341 a The Caribbean and South America: Peoples and Cultures (3)

Prehistory, cultural background, and the present economic, social and religious life of selected Indian, Mestizo, and Euro-American groups in the Caribbean and South America.

## Ant 341 b Meso-American: Peoples and Cultures (3)

Prehistory, cultural background, and the present-day economics, social and religious life of selected Indian and Mestizo groups in Mexico and Central America.

## Ant 342 (Aas 342) Sub-Saharan Africa: Peoples and Cultures (3)

Culture-areas of Africa south of the Sahara. Historical and geographic background. Studies of selected societies. Culture change and contact during the colonial and post-colonial periods.

## Ant 343 The Middie East: Peoples and Cultures (3)

The main features of the "Middle Eastern culture continent." A comparison of selected societies in Southwest Asia and North Africa. The impact of modernization on pre-industrial cities and peasantries in the area. Prerequisite: Ant 200 or His 382 a or b,

## Ant 344 South Asia: Peoples and Cultures (3)

Studies of selected peoples in the Indian sub-continent considered against the background of Hindu and Muslim civilization. Social and cultural change in the modern period.

## Ant 345 Southeast Asia: Peoples and Cultures (3)

A survey of the historical background and present-day developments of the cultures of Indonesia, mainland Southeast Asia, and the Philippines. Prerequisite: consent of instructor.

## Ant 346 East Asia: Peoples and Cultures (3)

A survey of the cultures of East Asia: civilizations and tribal cultures.

## Ant 347 Oceania: Peoples and Cultures (3)

A survey of the cultures of Micronesin, Melanesia, Polynesia, and Australia.

## Ant 360 Social Anthropology (3)

Comparative study of social systems, tribal, traditional, and modern societies. The course will deal with economic, kinship, political, and other aspects of social structure. Social systems will be studied in functionalist, evolutionary, and dialectic perspectives. Combines in one course kinship, political, economic, and stratificational anthropology. Prerequisite: Ant 200.

## Ant 361 Anthropology and Public Policy (3)

The partical applieation of anthropological theory and research, with special attention to the social impact of industrial development, environmentalism and welfare policy. The ethics of applied anthropology. Prerequisiter: A Ant 200, A Soc 115, or Pos 101, 120, or 130.

## Ant 362 Ethnology of Law (3)

A study of the form, function, and attributes of law and social control in non-Western societies. Castomary and anthoritarian law sanction, and leqal dynamics. Analytical concepts from Western jurisprudence will be examined for comparative purposes in a eross-cultural perspective. Prerequisite: Ant 200 or consent of instructor.

## Ant 363 Ethnology of Religion (3)

An examination of the form and functions of ritual systems as related to myth and world view on a cross-cultural basis. The emphasis will be on the religions of nonliterate and peasant peoples.

## Ant 364 Anthropology of Health and Health Care (3)

Cross-cultural introduction to different systems of theory and practice in health, disease and curing; Function of shaman, curandera and modern medical worker in traditional societies and ethnic groups; case studies in the integration of traditional and modern systems of medicine.

## Ant 366 Ethnology of the Arts (3)

The comparative study of selected aspects of the arts as cultural products. Aesthetic views in non-Western societies.

## Ant 367 Ethnographic Film (3)

Comparative analysis and experimental use of ethnographic film in anthropological education. A study of theory and method of data collection and communication of ethnographic field work through the medium of film.

## Ant 368 Ethnology of Pre-Columbian Art (3)

The anthropological study of prehispanic Mesoamerican and South American ceremonial arts and architecture for the reconstruction of pre-Columbian culture history, religion, symbolism and ritual. Stress is laid on interrelationships of New World cultures, art styles and world view and on ethnographic and other techniques for iconographic interpretations.

## Ant 370 Culiure Contact and Ethnicity (3)

An analysis of culture change in the contact situation; em. phasis on interaction between Euro-American culture and peoples of the non-Western world. Prerequisite: Ant 200.

## Ant 372 Urban Anthropology (3)

An introduction to urban anthropology. Emphasis on rural-urban migrations, adjustment and assimilation of urban migrants, urban kinship and family structure, poverty culture, rural-urban typologies, and the application of anthropological methods to the study of urban societies; Prerequisite: Ant 200.

## Ant 375 Psychological Anthropology (3)

A survey of the field of culture and personality; cross-cultural unalysis of the cultural factors affecting the development of the individual personality; the concept of cultural relativism as applied to social analysis. Prerequisite: Ant 100 or Ant 200 or Soc 115 or Psy 101.

## Ant 381 Ethnography of Women (3)

Female status and tole in non-industrial societies.

## Ant 411 Human Evolution (3)

An examination of the human fossil record and of the major theories dealing with fossil record. Prerequisite: Ant 210.

## Ant 412 Bioanthropology of Human Population

A study of biological variation and its causes in human populations, with emphasis on population genetics, race and adaptation. Prerequisite: Ant 210.

## Ant 413 Human Morphology (3)

A laboratory-discussion course in human gross morphology, with primary emphasis on structural and functional aspects of the human skeletul system, integument and related structures, viewed from an evolutionary standpoint. Prerequisite: Ant 210 and consent of instructor.

## Ant 414 Human Biological Variation (3)

A survey of metric and serological variables used to identify and analyze the range of human biological variation. Anthropometry and serology are discussed in terms of the analysis of biological distance and the relationships among human populations. Prerequisite: Ant 210 or consent of instructor,

## Ant 424 Syntax and Semantics (3)

A survey of formal approaches to language such as transformational grammars, generative semantics, cognitive linguistics, and montague grammar, with special emphasis on recent developments in syntax and semantics. Prerequisite; Ant 321.

## Ant 424 L.anguage and Culture (3)

A study of the nature of the interrelationships which exist between linguistics behavior and other aspects of culture. Prerequisite: Lin 206 or consent of instructor.

## Ant 438 Advanced Archaeological Field Research (3-6)

Supervised field work for students with previous experience in archaeological field research. (Summer Session only.) Prerequisite: Ant 338.

## Ant 4.40 The History of Indian-White Relations (3)

An historical suryey of Indian-white interactions in the United States and Canada, and amalysis of contemporary North American Indian cultural adaptations. Eimphases will be upon major changes in govermment policies involving Indians, revitalization, political movementr, urban and reservation life. Prerequisite: Ant 340.

## Ant 448 (Soc 448) Social Change in Latin America (3)

Same as Soc 448.

## Ant 460 Human Ecology (3)

Man's role in changing the face of the earth; man and his physical habitat; geographic correlates of culture. The role of environmental conditions in culture change. Prerequisite: Ant 200 and Ant 210 or Ant 230.

## Ant 462 Anthropology of Developing Nations (3)

An analysis of the socio-cultural content of developing mations. Focus will be on the following institutional patterns (and changes in these patterns) : kinship and marriage, economics, politics, education, and religion. In successive sessions, different areas will be discussed: Latin America, Middle East, Sub-Saharan Africa, Southeast Asia. May be repeated for credit. Prerequisite: One course in either Anthropology, History, Political Science, or Sociology dealing with the culture area under topic consideration.

## Ant 464 (Soc 446) Eastern Europe: Tradition, Change, Ethnicity (3)

Same as Soc 446.

## Ant 465 (Jst 465) Jewish Communities (3)

Ethnological and social analysis of traditional and modern Jewish communities in Europe, the Middle East, and the New World. Relationship of Jews with their non-Jewish neighbors and with other Jewish communities. Comparison of Jewish communities with other minority and majority ethnic groups (e.g., Chinese in Southeast Asia; Hindus and Pakistanis in Africa). Prerequisite: Ant 370 or Soc 282 or any Judaic Studies course in history.

## Ant 466 The Ethnology of the Maya Culture (3)

A study of the origin, development, decline, conquest, and persistence of Maya culture. Maya culture will be studied through both its social and semantic systems, based on archeological, ethnographic and ethnohistoric sources. It will be analysed as ecological adaptation, evolutionary stage, philosophical and intellectual achievement, changing socio-political system. Prerequisite: senior or graduate standing; some knowledge of Spanish (minimal reading ability); prior course on Middle American Culture; or consent of instructor.

## Ant 468 Aspects of European and North American Cultures (3)

Survey of community studies in Western Europe and North Amērica. Cultural variety in Europe and its differential influence on North America. Socio-cultural change and modernization in rural communities. Relationship between community and state. Prerequisites: Ant 200 and one upper division course in anthropology, sociology or history.

## Ant 470 Cross-cultural Problems in Education (3)

A study of anthropological concepts in edueation and a crosscultural surney of the nature of the educational process. Special reference lo situations where there are cultural differences hetween the teacher and student in the United Siates.

## Ant 480 Introduction to Ethnographic Field Research (6)

Ethnographic field work experience for qualified undergraduates. Study of field work methodology and principles together with actual field work on selected topics under faculty supervision. Prerequisite: consent of instruclor.

## Ant 481 (Prs 491) Research Projects (3-6)

An introduction to basic researeh skills required to answer questions on human behavior, with special emphasis on rross-cultural commanication and learning and dymamics of cross-cultural interaction. Students will be involved in a specific researeh project and this will provide them with the basic researel methods to include data collection, processing and analywis. Prerequisite: junior or senior" standing and "onsent of instructor.

## Ant 498 a and b Independent Study in Anthropology (1-6), (1-6)

Independent reading or research on selected topics under the direction of a faculty member. May be repeated for credit.

## Ant 499 Senior Seminar in Anthropology (3)

Seminar on selected topics in Anthropology. Open to seniors with consent of instructor. Recommended for majors planning on graduate work. May be repeated for credit.
The following courses are open to qualified seniors (see Graduate Bulletin for course descriptions):
Ant 500 Pro-Seminar in Anthropological Research (4)
Ant 502 Pro-Seminar in Physical Anthropology (4)
Ant 504 Pro-Seminar in Archaeology (4)
Ant 506 Pro-Seminar in Linguistics (4)
Ant 508 Pro-Seminar in Ethnology (4)
Ant 515 Quantitative Methods in Anthropology (4)
Ant 516 Advanced Quantitative Methods in Anthropology (4)

Ant 519 Studies in Physical Anthropology (3)
Ant 520 Language Acquisition (3)
Ant 521 Comparative and Historical Linguistics (3)

Ant 523 Linguisties and the Description of Languages (3)
Ant 527 Topics in Anthropological Linguistics (4)
Ant 539 Studies in Prehistoric Archaeology (3)
Ant 549 Ethnographic Surveys (3)
Ant 568 Peasani Society and Preindustrial Cities (3)
Ant 570 Anthropology and the Modern World (3)
Ant 572 Historioal Anthropology (3)
Ant 590 History of Anthropological Thought (3)
Ant 591 Current Anthropological Theory (3)

## ASIAN STUDIES PROGRAM

## (Interdisciplinary)

FACULTY: K. Chen, L, Chung, D. Ellinwood, L. Fields, H. Flierl, R. Garvin, C. Henrikson, H. Howes, N. Lin, J. Uppal, R, Walton, W. Wilson, T. Wright.
The interdisciplinary major with a concentration in Asian Studies offers students an opportunity to study the most highly populated continent, its rich oultures, and its place in the world. It can provide the basis for further studies in disciplines dealing with Asia, It also offers a good background for work in journalism, government service, inter-cultural activities, and business abroad.

## SPECIAL PROGRAMS FOR LANGUAGE STUDY

The university offers a year of intensive study of the Chinese language at Nanyang University in Singapore.

In addition to the regular on-campus offerings in Chinese language, other Asian languages, particularly Japanese and Hindi, can be taught on an independent study tutorial basis through Linguistics 289; these offerings are dependent upon adequate student enrollment in each particular language.

## Degree Requirements for the Interdisciplinary Major with a Concentration in Asian Studies

## General Program

B.A. East Asian Track: Core Curriculum: His 176 a and $b$; an independent study course in a field of Asian Studies, in one department, resulting in a senior essay, 3 credits. Two years of Chinese language, 16 credits. Study on Tast Asia from three disciplines other than Chinese language, 1.5 credits. Total, 40 credits.

South Asian Track: Cöre Cưrriculum: His 176 a and b; an independent study course in a field of Asian Studles, in one department, resulting in a senior essay, 3 credits. Study on South Asia in at least three disciplines, 15-18 credits: Study in other areas of Asia, 9-12 credits. Total: 36 credits. (Study of Hindi in Lin 289 is recommended.)

Asian Studies Major and Chinese Language Second Fíeld (East Asian emphasis) : Core Curriculum: His 176 a and b ; an independent study course in a field of Asian Studies, in one department, resulting in a senior essay, 3 credits. Three years of Chinese language, 22 credits. Study on East Asia in at least three disciplines, 21 credits. Study on other areas of Asia, six credits. Total: 58 credits.

## COURSE OFFERINGS

For descriptions see relevant department listings.

## A His 176 a and b Introduction to Aslan History $(3,3)$

A His 377 a and b History of South Asian Civilization (3, 3)
A His 379 a and $b$ History of China $(3,3)$
A His 380 History of Moderin Japanh, 1868-1952 (3)
A His 483 Colloquium in Non-Western History (Asian Topics) (3)

A His 485 Colloquium in Comparative and Cross Cultural History (Asian topics) (3)

A Ant 344 South Asia; Peoples and Cultures (3)
A Ant 345 Southeast Asia: Peoples and Cultures (3)
A Ant 346 East Asia: Peoples and Cultures (3)
A Gog 380 Geography of East Asia (3)
A Gog 383 Geography of South and Southeast Asia (3)
A Lin 289 Directed Study in Foreign Language (Hindi, Japanese, or other Asian languages) (4)
A Phi 214 Comparative Religion (3)
A Phi 334 Asian Philosophy (3)
A Phi 440 Topics in Philosophy (Asian topics) (3)
P Pos 358 Government and Politics of South Asia (3)
A Chi 101-102 Elementary Chinese $(4,4)$
A Chi 201-202 Intermediate Chinese (4, 4)
A Chi 210-211 Survey of Classical Chinese Literature 1 , II $(3,3)$
A Chi 220 Chinese Calligraphy (3)
A Chi 300 a and b Intermediate Conversation and Composition (3, 3)
A Chi 410 Readings in Vernacular Literature (3)
A Chi 421 Documentary Chinese (3)
A Chi 497 Independent Study in Chinese (1-6)

There also is available in some departments an inder pendent study course which may be used for work in Asian Studies.

Other courses may be approved for a major in Asian Studies by the Director of the Program, when such courses are devoted primarily or extensively to Asian topics, e.g., Eco 330, Economics of Development, or Pos 458, Minority Group Politics in the Third World.

## DEPARTMENT OF ECONOMICS

FACULTY: A. Arterburn, J. Auclair, M. Bers, K. Chen, J. Gelfand, J. Harford, H. Horowitz, M. Jerison, R. Kalish, K. Lahiri, P. Lee, T. Mirer, S. Ogura, D. Reeb, E. Renshaw, L. Salkever, J. Slocum, J. Uppal, F. Walker, J. Woodbury, G. Yohe, K. Yun.

The major in economics may be useful as training for employment in business or government agencies or as preparation for further study at the graduate level. It is also acceptable as undergraduate background for study in professional schools of law, accounting, business administration, public administration, social work and others.

## Degree Requirements for the Major in Economics General Program

B.A.: Thirty-three hours in economics including Eco 100 a and $\mathrm{b}, 300,301,320$, and 18 additional credits in economics at the 300 level or above.
B.S.: Thirty-three hours in economics including Eco 100 a and b, 300, 301, 320, and 18 additional credits in economics at the 300 level or above.

## Eco 100 a and b Principles of Economics I, II (3, 3)

An analysis of the function of an economic system in organizing economic behavior and of the role of the market and monetary and fiscal policy in determining levels of economic activity. The emphasis in the first session will be on the institutional structure and the determinants of levels of economic activity, and in the second session on price analysis and the international economy.

## Eco 181 Economics of Consumption (3)

An analysis of the economic issues of consumption and of consumer advocacy and protection. Discussion of economic institutions as they affect the consumer.

## Eco 182 Economics and Environmental Policy (3)

The economics of public policies which aim at environmental control. Emphasis is given to the concepts of resource scarcity, externalities, and common property, as they affect the role of the public sector in environmental control.

## Eco 184 Contemporary Economic Issues (3)

An introductory discussion of selected economic issues of current importance. The course will focus on different economic problems each session. May be repeated for credit when topics differ.

## Eco 300 Intermediate Theory I: Microeconomics (3)

Introduction to price theory, distribution theory and market structure analysis. Relevance of economic theory in production and consumption decision. May not be taken for credits by students with credits for Eco 310. Prerequisites: Eco 100 a and b.

## Eco 301 Intermediate Theory II: Macroeconomics (3)

Introduction to the measurement of national income and the theories of aggregate demand and supply; theoretical analysis of growth and fluctuations in production, employment and prices. May not be taken for credits by students with credits for Eco 311. Prerequisites: Eco 100 a and b.

## Eco 310 Honors Intermediate Microeconomic Theory (3)

A more rigorous and intensive coverage of the topics than is required in Eco 300. Students who are not in the Economic Honors Program may take this course with the permission of instructor. Prerequisites: Eco 100 b ; Math 112; permission of instructor. May not be taken for credit by students with credit for Eco 300.

## Eco 311 Honors Intermediate Macroeconomic Theory (3)

A more rigorous and intensive coverage of the topics than is required in Eco 301. Students who are not in the Economics Honors Program may take this course with the permission of instructor. Prerequisites: Eco 100 a; Math 112; permission of instructor. May not be taken for eredit by students with credit for Eco 301.

## Eco 312 Development of the American Economy (3)

A study of American economic institutions from the early 19th century to the present. Statistical methods and both micro and macro theoretical constructs will be employed. Prerequisites: Eco 100 a and b .

## Eco 313 Development of the European Economy (3)

Economic change in modern European societies. A comparative study of the growth of various European countries emphasizing the institutions associated with development: population, technology, capital formation, output, resources, and income distribution. Prerequisites: Eco 100 a and b.

## Eco 314 Ideas of the Greal Economists (3)

The evolution of modern economics with emphasis on the contributions of such writers as Smith, Malthus, Ricardo, Mill, Marx, Marshall and Keynes, The turn of events that motivated the construction of the main body of economic knowledge is also examined.

## Eco 320 Economic Statistics (3)

Basic statistics and their use in economic analysis will be covered. Topics will be organization and presentation of data, frequency distributions, dispersion and probability distributions applied to economics. Will also cover testing of hypothesis and simple linear regression. Prerequisites: Eco 100 a and b.

## Eco 330 Economics of Development (3)

An introduction to the analysis of economic growth of development. Historical, descriptive and analytical approaches to the problems of fostering economic growth. Consideration of alternative theories of the causes and problems of underdevelopment. Prerequisites: Eco 100 a and b.

## Eco 341 (Soc 371) Urban Economics (3)

An analysis of the city-metropolis and the economic forces which condition its growth, pattern and allocation of scarce resources. The public sector, especially the local governments is examined in its role of solving the problems of inadequate jobs, housing, education and other services. Prerequisites: Eco 100 a and b.

## Eco 350 Money and Banking (3)

The principles of money, of commercial banking, and of central banking, an elementary consideration of issues of monetary policy. Prerequisites: Eeo 100 a and b.

## Eco 355 Public Finance (3)

An introduction to the financial problems of governments: public expenditures, basic kinds of taxes and tax systems, grants-in-aid, public borrowing, debt management, and fiscal policy. Prerequisites: Eco 100 a and b.

## Eco 360 International Economic Relations (3)

The development of international trade and trade theory since mercantilism; international financial institutions, the foreign exchange market, and the problems of international balance of payments and international liquidity. Prerequisites: Eco 100 a and b.

## Eco 370 Economics of Labor (3)

A study of wage theories and wage structures; wage-cost-price interaction; and wage, supply and employment relationships. Prerequisites: Eco 100 a and b.

## Eco 410 Mathematics for Economists (3)

Techniques of differentiation, integration, differential equations, difference equations and linear algebra as used in economic analysis.

## Eco 420 Applied Econometrics (3)

Application of regression to a problem chosen by the student. Some general discussion of data sources, the derivation of index numbers and other problems which might be encountered in estimating economic relations. Emphasis will be on class presentation and analysis of student projects.

## Eco 440 Comparative Economic Systems (3)

An analysis of capitalism, the mixed economy, socialism, and communism: the ways in which economic activities are organized; the role of monetary and financial institutions; the organization of industry; of agriculture, and of trade, the allocation of resources among competing goals; consumer sovereignty compared with economic planning. Prerequisite: Eco 100 a and b.

## Eco 443 Comparative Labor Relations (3)

An examination of labor relations in various other countries as part of their political and economic systems; and a comparison with the collective bargaining process in the United States. The emphasis is on labor relations laws as they have developed within different political systems and the process of dispute settlement.

## Eco 446 International Finance (3)

The foreign exchange markel and balance of international pay. ments are described and analyzed. Emphasis is on real and monetary theories of balance of payments adjustments, and policies. Problems and proposals for reform of the international monetary systems are examined and evaluated. (shared resource course with Eco 546) Prerequisites: Eco 100 a and b.

## Eco 450 Industrial Organization and Public Control of Industry (3)

Relationship between market structure, behavior of the firm, economic performance and analysis of U.S. antitrust activities. (shared resource course with Eco 570) Prerequisite: Eco 300.

## Eco 452 Economics of Law (3)

The application of economic concepts such as efficiency, externalities, and trade-offs to the analysis of common law, crime and punishment, product safety laws, and other legal interventions in market and non-market behavior. Prerequisite: Eco 300.

## Eco 456 State and Local Finance (3)

Problems of financing state and local government within the constraints of a federal system. Relevance and limits of fiscal theory for state and local government tax and expenditure policy. Prerequisites: Eco 100 a and b.

## Eco 462 The Distribution of Income and Wealth (3)

Theoretical, empirical, and institutional analysis of the distribution of income and wealth, including policies and programs designed to affect these distributions. Prerequisite: Eco 300.

## Eco 470 History of the Labor Movement (3)

Emergence of trade umions as allocative factors in the economic systems of the United States and Western Europe. Development of trade unions and the general labor movement as part of the institutional structure.

## Eco 480 Economic Fluctuations, Forecasting and Stabilization (3)

An examination of the theory and measurement of economic fluctuations, methods of forecasting the level of economic activity; and the fiscal, monetary and other public policies used to achieve economic stabilization are explored. Prerequisite: Eco 301 or Eco 350.

## Eco 481 Environmental Economics (3)

Environmental pollution, social costs, population control, zoning, economics of public health, conservation of endangered species, natural wonders and artifacts, natural resource exhaustion, and end of progress hypothesis are examined and analyzed. (shared resource course with Eco 581) Prerequisites: Eco 100 a and b.

## Eco 489 Senior Seminar in Contemporary Economic Theory (3)

Selected topics in current economic theory. The course is designed to give the advanced undergraduate major an opportunity for intensive study in selected topics in contemporary economic theory. The course may be repeated for credit, Prerequisite: consent of instructor.

## Eco 497 Independent Study and Research (2-6)

Guided study in selected topics. Prerequisite: 12 credits in economics. Can be repeated for credit to total of six credits.

## Eco 499 Senior Honors Research Seminar (3)

A senior seminar, in which a substantial "senior thesis" is prepared by an honors candidate under the supervision of a faculty adviser. Student present oral and/or written progress reports on their ongoing research and read, discuss, and criticize each others work. Prerequisites: Admission to the honors program; Eco 410 and Eco 420.

The following courses are open to qualified seniors:
Eco 506 Economic Analysis and Policy (3)
Eco 511 Linear Economics (3)
Eco 520 Statistical Methods (3)
Eco 530 Economics of the Public Sector (3)
Eco 531 Fiscal Economics (3)
Eco 532 Metropolitan Finances (3)
Eco 533 Public Policy Analysis (3)
Eco 541 Theory and Problems of Economic Development (3)
Eco 545 International Trade (3)
Eco 550 Labor and Manpower Economics (3)
Eco 551 Theory of Collective Bargaining (3)
Eco 552 Government Employment Relations (3)
Eco 553 Government and Industrial Dispute (3)
Eco 554 Practice of Collective Bargaining (3)
Eco 560 Monetary and Financial Institutions (3)
Eco 570 Industrial Organization and Public Control of Industry (3)
Eco 582 Housing Economics (3)
Eco 585 Economic History (3)
DEPARTMENT OF GEOGRAPHY

FACULTY: S. Blount, M. Dobson, H. Fhierl, W. Heiser, F. Henderson, P. Mari, J. Pipkin, J. Vitale

The Department of Geography offers programs leading to the B.A. and M.A. degrees. The undergraduate program provides students with a broad, general background in the field of geography as preparation for work at the graduate level. Students are also able to equip themselves with various techniques and methods that are useful as training for employment in a variety of business and government occupations, particularly in the fields of planning, cartography, and resource and environmental management. Geography also provides a useful background for study in professional schools of public administration, planning, education, for* estry, and various environmental programs.

## Degree Requirements for the Major in Geography

## General Program

B.A.: $\operatorname{Gog} 101,102,290,396$, a minimum of 15 credits in systematic and regional courses in Geography, including at least 9 credits at the 300 level; up to 9 credits in supporting courses from the social sciences, the earth and atmospheric sciences and biology as advised to total 36 credíts.

## Gog 101 Introductory Physical Geography (3)

The major world climate, vegetation, soil, and landform regions and other physical patterns, and their interrelationships, causes and significance. The use of maps and other devices as interpretive tools in these studies.

## Gog 102 Introductory Cultural Geography (3)

Study of human patterns of earth occupance reflecting man's influence on the physical, social, political, and economic environ, ment and his response to these environmental factors with an em. phasis on their interrelationships,

## Gog 150 World Peoples and Regions (3)

A survey of the major political and cultural areas of the world, emphasizing regional patterns of landscapes, settlement, economy, and intercultural contacts. (Not open to majors.)

## Gog 201 Introductory Geomorphology (3)

Origin and development of landforms produced by water, wind, waves and ice action with man as an active or a passive agent in the gradation processes of his physical environment. Prerequisite: Gog 101.

## Gog 210 Introductory Economic Geography (3)

An analysis of man's role in the production, utilization, and exchange of the products of agriculture, forestry, fishing, mining, and manufacturing; of world patterns of trade and transportation; of the concepts of location theory as they are influenced by the economic, cultural, political and physical conditions that prevail on different parts of the earth. Prerequisite: Gog 101 or Gog 102 or Eco 100.

## Gog 220 Introductory Urban Geography (3)

Analysis of the distribution, size, function, and morphology of the city, emphasizing the study of the American city. Prerequisite: Gog 101 or $\operatorname{Gog} 102$ or consent of instructor.

## Gog 290 Introductory Cartography (4)

Techniques applicable to data compilation, design and construction of maps. Cartographic expression as a basic tool for analysis and presentation of spatial phenomena and statistical surfaces. Prerequisite: Gog 101 or Gog 102.

## Gog 291 Map Interpretation (3)

Survey of types and uses of maps. Topics include map elements, projections, landform analysis and cultural patterns. Prerequisite: Gog 101.

## Gog 293 Use and Interpretation of Aerial Photographs (3)

Interpretation and examination of air photos for geographic investigations. Topics include the development of the evaluation of photo keys, thematic mapping, and analysis of landscape elements.

## Gog 301 Physiography of the United States (3)

Examination of the major landform subdivisions in the United States and their development. Prerequisite: Gog 201 or consent of instructor.

## Gog 302 Landform Studies (3)

Map and air photographic techniques of landform inventory and classification by means of natural grouping, morphometric analysis and watershed evaluation. Prerequisite: Gog 201 or consent of instructor.

## Gog 310 Geography of Primary Production (3)

An analysis of world patterns in the production, utilization, and exchange of agricultural, forest, marine and mineral products. Involves the analysis of spatial variations in the impact of physical, cultural, economic, and political conditions on the development of the primary industries. Prerequisite: Gog 101 or Gog 102 or Eco 100.

## Gog 313 Geography of Manufacturing and Service Industries (3)

The study of the major manufacturing and service industries of the world. Analysis of the regional patterns of manufacturing and principles of industrial location are stressed, Prerequisite: Gog 101 or Gog 102 or Eco 100.

## Gog 314 Geography of Transportation and Trade (3)

Analysis of geographic aspects of transportation and trade. Includes the study of the bases of transportation and trade, the regional patterns of transportation facilities, and commodity flows and traffic patterns. Prerequisite: Gog 101 or Gog 102 or Eco 100.

## Gog 320 (Soc 372) Urban Planning (3)

The development of city planning, its function in urban government, basic studies for urban planning, land use zoning, the master plan, and implementation of planning programs. Prerequisite: Gog 220 or consent of instructor.

## Gog 330 Geography of Population and Settlement (3)

An analysis of demographic variations with emphasis on the economic and social characteristics of the population and population mobility. Problems of underdevelopment and population pressures on resources. Prerequisite: Gog 101 or Gog 102 or consent of instructor.

## Gog 335 Introduction to Behavioral Geography (3)

Survey of space-perception and spatial aspects of decisionmaking, with discussion of: the perception of natural hazards, mental maps, and cognitive images of the city; spatial aspects of information acquisition, learning and preference-information; learning and choice processes in urban travel and migration. Question-naire-based research techniques are introduced. Prerequisite: Gog 102 or consent of instructor.

## Gog 356 Geography of the United States (3)

A systematic treatment of the physical, economic, and cultural geography of the United States; selected regional problems of land utilization and of geographic adjustments. Prerequisite: Gog 101 or Gog 102.

## Góg 359 Geography of Middle America (3)

A critical analysis of physical and cultural environment and an evaluation of resources basic to economic and political development. Prerequisite: Gog 101 or Gog 102.

## Gog 362 Geography of South America (3)

The basic human and physical differences among regions of South America which affect economic, social, and political conditions; geographic factors in the development of South American countries. Prerequisite: Gog 101 or Gog 102 or consent of instructor.

## Gog 365 Geography of Western Europe (3)

A regional and topical geography of non-Communist Europe. Includes an analysis of the varied physical and human factors behind Western Europe's diversity; economic and political regions and the development of supranational blocs and institutions. Prerequisite: Gog 101 or Gog 102 or consent of instructor.

## Gog 368 Geography of Eastern Europe (3)

A. regional and topical geography of the Communist countries of Eastern Europe (not including the Soviet Union). Includes an analysis of the varied physical and cultural factors behind Eastern Europe's diversity; economic regions; and the development of agricultural and industrial activities since World War II. Prerequisite: Gog 101 or Gog 102 or consent of instructor.

## Gog 371 Geography of the Soviet Union (3)

A study of the physical and cultural patterns of the Soviet Union with reference to the significance of industrial and agricultural expansion in relation to the environmental resources available. Emphasis on internal diversity of cultures and capabilities and the planned attempts to overcome these differences and to reduce spatial separation. Prerequisite: Gog 101 or Gog 102 or consent of instructor.

## Gog 374 Geography of the Middle East (3)

The physical, cultural, and resource geography of south-western Asia and northern Africa. Prerequisite: Gog 101 or Gog 102 or consent of instructor.

## Gog 377 Geography of Sub-Saharan Africa (3)

The physical, economic, and cultural settings in Africa south of the Sahara which form the basis for various forms of livelihood; analysis of regions and political units. Prerequisite: Gog 101 or Gog 102 or consent of instructor,

## Gog 380 Geography of East Asia (3)

The lands, peoples, and countries of eastern Asia including China, Korea, and Japan, Geographical foundations of economic activities and population problems. Prerequisite: Gog 101 or Gog 102.

## Gog 383 Geography of South and Southeast Asia (3)

The lands, peoples, and countries of south and southeast Asia including the Himalayan countries, those of the Indian subcontinent, and of peninsular and insular southeast Asia. Geographical foundations of economic activities and cultural developments. Prerequisite: Gog 101 or Gog 102.

Gog 385 Introduction to Remote Sensing of Environment (4)
Analysis of multispectral reconnaissance techniques and instruments used to study the environment. Emphasis on principles of multispectral photography, color and color infrared photography, thermal infrared and multifrequency radar systems and their application in the investigation of cultural and biophysical phenomena. Two lectures and two hours of laboratory work per week.

## Gog 390 Intermediate Cartography (3)

Techniques of reproduction graphics with emphasis on map planning and construction. Utilization of half-tone, color-key and other production processes as modes of cartographic expression. Prerequisite: Gog 290.

## Gog 394 (Mat 394) Mathematical Techniques in Urban and Regional Analysis I (3)

Elementary mathematical applications in demographic theory, regional economic growth models, gravity models and transportation systems. No formal mathematical training necessary.

## Gog 395 (Mat 395) Mathematical Techniques in Urban and Regional Analysis II (3)

Linear programming applications in planning. Overview of urban planning processes-land use and transportation models including derivation and parameter estimation. Prerequisites: Elementary sta* tistics, Gog 394, or consent of instructor.

## Gog 396 Quantitative Methods in Geography (3)

Quantitative methods used by geographers, including sampling analyses, input-output analyses and conceptual models as these relate to investigation of data of areal distribution. Prerequisite: Gog 101 or Gog 102; Mat 108 recommended.

## Gog 397 Independent Investigations in Geography (1-6)

Reserved for highly qualified students who wish to conduct independent research in topical and regional geography. The student, subject to faculty approval, will select a research problem; the number of credits will be based on the scope and difficulty of the research proposal. The student will work independently under some degree of guidance from a member of the faculty. The student will submit a finished report at the end of the session. Prerequisite: none. Can be repeated for credit to total of six credits.

## Gog 401 Techniques in Geomorphology (3)

Techniques used by contemporary geomorphologists are reviewed with special field and laboratory emphasis placed on identification, composition, genesis of unconsolidated surface materials and essential aspects of hydrology. Prerequisite: Gog 201, Geo 210 or consent of instiuctor.

## Gog 414 Computer Map Analysis (3)

Computerized methods for displaying and analyzing spatial data. Printer and plotter mapping. Interpolation methods, power series and Fourier trend analysis, spatial filtering. Geographic base files. Introduction to pattern analysis. Prerequisite: Gog 290, Gog 396, or consent of instructor.

## Gog 416 Urban and Regional Planning Laboratory (3)

Preparation of comprehensive plan elements, zoning ordinances and subdivision regulations-study, formulation, field research, report preparation and formal presentation before professional planners or government administrators. Prerequisite: Gog 220 or Gog 320 or consent of instructor.

## Gog 417 Geography Internships (3-6)

Work in planning, cartography, remote sensing, environmental orother offices to gain pre-professional experience in applied geography. Carried out under the joint supervision of faculty and the host office. Prerequisites: advanced standing and consent of instructor.

## Gog 418 Directed Study in Topical Geography (3)

Advanced study in topical geography specialization under the direction of the geography staff. (May be repeated for credit.) Prerequisite: nine credits in geography.

## Gog 420 Urban Field Studies (3)

Application of field techniques in the study of urbanized regions. Prerequisite: consent of instructor.

## Gog 422 Intermediate Urban Geography (3)

Analysis of recent literature on urban location, external spatial relations of cities, internal differentiation of land uses, and the spatial patterns of urban population and activities. Prerequisite: $\operatorname{Gog} 220$ or consent of instructor.

## Gog 425 Rural Field Studies (3)

Application of field techniques in the study of rural regions. Prerequisite: consent of instructor.

## Gog 450 Directed Study in Regional Geography (3)

Advanced study of world regions and areas under the direction of the geography staff. (May be repeated for credit.) Prerequisite: nine credits in geography.

## Gog 455 Seminar in the Geography of a Selected Region (3)

Specific application of the regional concept to a selected area, embodying geographic analysis and synthesis of critical interdependent elements of the region. (May be foreign or domestic.) Knowledge of a language of the region is essential. Prerequisite: nine credits in geography and consent of instructor.

## Gog 457 Geography of New York State (3)

The resource base of New York State's geography; landforms, climate, water, vegetation, and soils. The historical geography of New York from Indian times to the present. Geography of economic activities today; the primary, secondary and tertiary sectors. Urban and rural landscapes, planning and development regions. The development, industrial status, and economic potential of the State's major urban system. Prerequisite: Gog 101 or Gog 102 or consent of instructor.

## Gog 460 Historical Geography of the United States (3)

A study of the human geography of the American past. Characteristics of the early settlement patterns along the Atlantic Coast, the westward movements through the Appalachians, the spread of population, and the development of the Far West. Interpretation of the regional changes in human land use patterns. Prerequisite: Gog 101 or Gog 102 or consent of instructor.

## Gog 466 Geography of Germany (3)

The physical, economic and cultural characteristics of Germany that contribute to its regional diversity and problems. The course covers both the Federal Republic and the German Democratic Republic, with some attention to areas formerly German. Prerequisite: Gog 101 or Gog 102 or consent of instructor.

## Gog 485 Intermediate Remote Sensing of the Environment (3)

Current research in geographic remote sensing of the environment with emphasis on past, present, and future applications in geography and related disciplines. Practice in planning, design, execution, and interpretation of overflights with various types of remote sensing systems. Prerequisite: Gog 385.

## Gog 490 Concepts in Modern Geography (3)

Analysis of geography's role in interpreting modern world societies; especially designed for those students interested in teaching at the secondary level. Prerequisite: six credits in geography or consent of instructor.

## Gog 495 Undergraduate Seminar in Cartography (3)

Study of a particular topic of importance in cartography, such as gencralization, perception, research, automation, landform representation, production mapping, etc. Prerequisites: Gog 290, Gog 390, and consent of instructor.

## Gog 498 Pro-Seminar in Methodology and Theory for Undergraduates (3)

Study of geographic concepts, methods and procedures. Discussion of professional geographic materials and basic bibliographic proccdures. Prerequisite: 15 credits in geography.

The following couses are open to qualified seniors:
Gog 500 Introduction to Graduate Study in Geography (4)
Gog 504 Landforms of Cold hegions (3)
Gog 506 Landforms of Tropical Regions (3)
Gog 508 Landforms of Dryland Regions (3)
Gog 510 Regional Physiographic Studies (3)
Gog 516 Advanced Urban and Regional Planning Laboratory (3)
Gog 522 Advanced Urban Geography (3)
Gog 525 Advanced Urban Planning (3)
Gog 526 Advanced Regional Planning (3)
Gog 531 Population Resources (3)
Gog 535 Spatial Decision Makìng (3)
Gog 540 Political Geography (3)
Gog 558 Case Studies in Anglo-American Geography (3)
Gog 559 Case Studles in Latin American Geography (3)
Gog 565 Case Studies in European Geography (3)
Gog 585 Advanced Remote Sensing of the Environment (3)
Gog 586 Quantitative Methods in Geographical Research (3)
Gog 590 Advanced Cartography (3)
Gog 593 Air Photo Landscape Studies (3)

## DEPARTMENT OF HISTORY

FACULTY: T. Barker, G. Barker-Benfield, T. Beck, D. Birn, K. Birr, A. Ekirch, M. Elbow, D. Ellinwood, L. Fields, J. Hahner, R. Hoffman, R. Kendall, S. Kim, H. P. Krosby, D. Liedel, J. Monfasani, C. Newbold, H. Price, W. Reedy, W. Roberts, B. Solnick, I. Steen, C. Tucker, R. Wesser, D. White, L. Wittner, J. Zacek.

The objective of the department is to provide its students with a thorough grounding in our cultural heritage seen from both social scientific and humanistic perspectives. The department prepares undergraduates for graduate work in history, professional schools such as law, secondary school teaching, and a variety of vocations which require a strong liberal education.

To accomplish its objectives, the department offers full programs leading to the B.A. and the M.A. In addition, it participates in several inter-departmental programs including Asian Studies, Social Studies, Urban Affairs, Women's Studies, Inter-American Area and Language Studies and Russian and East European Studies. Students interested in ancient history, African history, Afro-American history, Jewish history, or Puerto Rican history are referred to the Classics Department, the Department of African/AfroAmerican Studies, the Department of Judaic Studies, and the program in Puerto Rican Studies.

## Special Programs or Opportunities

The department encourages its majors to participate in those international programs relevant to their particular historical interests. For more detailed information, see heading "Office of International Programs."

## Degree Requirements for the Major in History

## General Program

B.A.: A minimum of 36 credits in history including: a minimum of 18 credits in one of the designated fields of concentration (American, Asian, Ibero-American, or European history); a minimum of six credits in courses at the 300 level or above outside the field of concentration; a minimum of 3 credits in a history colloquium or His 498 or His 4,99 .

## Teacher Education Program

B.A.: (Major in History and second field in Social Studies); 60 credits including: A major of 36 credits in history including: a minimum of 18 credits in one of the designated fields of concentration (American, Asian, Ibero-; American, or European history) ; a minimum of six credits each in American history and European history; a minimum of six credits in courses at the 300 level or above outside the field of concentration; a minimum of three credits in a history colloquium or His 498 or His 499 ; a second field of 24 credits including: Eco 100 a and b; Gog 101 or 102 , and three additional credits of Geography; Soc. 115 and three additional credits of Sociology or Anthropology; six credits of Political Science as advised.

## Other Degree Requirements

Students seriously interested in graduate work in history are strongly urged to develop a competency in at least one modern foreign language.

## INTRODUCTORY COURSES

## His 100 a and b American Political and Social History (3, 3)

A survey of American history from early times to the present with emphasis on the development of our political, constitutional, economic, social and cultural institutions. Either session may be taken without the other.

## His 131 a and b History of European Civilization (3, 3)

A survey of the political, economic, social, and cultural history of the West from the breakup of the Roman Empire to the present. This course is designed for freshmen. Either session may be taken without the other.

## His 176 a and b Introduction to Asian History (3, 3)

First session: An introduction to the cultures of South, Southeast, and East Asia, and the development of their major institutions and cultural patterns; interactions between cultures. Second session. The changing nature of Asian societies since the 18th century, in interaction with Europe and America. Either session may be taken without the other.

## His 193 Introduction to History (3)

An examination of the analytical, non-speculative, problems of historical inquiry, explanation, and argument. The topics of ques-tion-framing, verification, generalization and narration are emphasized. Selected readings, discussion and critical papers will introduce the student to an analysis of the logic of historical thought.

## His 286 a and b (Aas 286 a and b) History of Africa (3, 3)

First session: Africa from pre-historic times to 1800 with emphasis on sub-Saharan Africa, the development of indigenous states, and their response to Western and Eastern contacts.

Second session: Africa since 1800: exploration, the end of the slave trade, the development of interior states. European partition, the Colonial period, and the rise of independent Africa. Either session may be taken without the other.

## His 293 History of Women in the Americas (3)

A historical survey of the role of women in the United States, Canada, and Latin America from colonial times to the present, with emphasis on social, intellectual, political developments, and feminist movements.

## CONCENTRATION IN THE HISTORY OF THE UNITED STATES

## His 305 Colonial America to 1763 (3)

A survey of major aspects and events in the colonial period, with particular emphasis on the growth of uniquely American culture and institutions.

His 306 The Era of the American Revolution, 1763-1815 (3)
A detailed survey of the American Revolution, the making of the constitutions, and the historic experiment in federal-republicanism; the clash of ideas and interest on the rapidly changing domestic and foreign scenes; the search for unity in the new nation.

## His 307 Nationalism and Reform 1815-1848 (3)

A survey of the growth of nationalism, the emergence of a reform impulse, the age of individualism and egalitarianism, the development of the second American party system, technological, cultural, and social change.

## His 308 Division and Reunion 1848-1877 (3)

Causes of the American Civil War, the war on military and civilian fronts, and Reconstruction and its aftermath.

His 309 The Emergence of Modern America, 1877-1900 (3)
A detailed survey of the complexity and diversity of the period emphasizing the impact of industrialization, urbanization, and mass immigration upon politics, diplomacy, agriculture, labor, religion, and thought.

His 310 a and b The United States in the 20th Century (3, 3)
An intensive survey of United States history from 1900 to the present, with special emphasis on political and social developments. First session: The Progressive Era, World War l, the Twenties, and the Great Depression. Second session: F.D.R. and the New Deal,

World War II and the Cold War, McCarthyism, and politics and society since the 1950 's. Either session may be taken without the other.

## His 311 a and b History of American Foreign Policy (3, 3)

A historical survey of United States relations with other countries, emphasizing the interplay of domestic and international issues. The first session covers the period from the American Revolution to 1914. The second session examines the era from World War I to the present. Either session may be taken without the other.

His 317 a and b History of the American City (3, 3)
A chronological and topical survey of the American urban scene, with emphasis on the causes and consequences of urban growth, the similarities and differences among various cities, and the attempts to fulfill the needs of an urban environment. The first session begins in the colonial period and traces developments to the second half of the 19th century. The second session examines the urban scene from the late 19th century to the present.

## His 320 The History of American Medicine (3)

A survey of American Medicine from colonial practice through contemporary challenges to the "Modern Health Empire." Topics include domestic and folk medicine, midwifery, the establishment of medical schools, hospitals, and asylums, the professionalization of medicine, gynecology, and psychoanalysis. These subjects will be placed in the appropriate intellectual contexts.

## His 322 a and b American Social History (3, 3)

A historical survey and analysis of American society with atten. tion to immigration, ethnic groups, labor problems, changing class and family structure, population and mobility patterns. Either session may be taken without the other.

## His 325 The Quest for Equality in United States History (3)

An examination of social and political movements seeking a more egalitarian social order, among them abolitionism, communitarianism, trade unionism. Populism, anarchism, socialism, racial egalitarianism, and feminism.

## His 326 History of New York State to the Civil War (3)

A study of social, economic and political developments to the onset of the Civil War.

## His 329 History of the American South (3)

The South from the Revolutionary Period to the present with accent on the 19th century when the distinctive characteristics and institutions were developed which influenced Southern attitudes toward major questions of national policy.

His 330 a History of Canada to 1900 (3)
The history of Canada from colonial times to 1900; the development of political and constitutional institutions, imperial and 1 Inter-American relations, economic and social trends; Confederation and the Macdonald era.

## His 330 b Twentieth Century Canada (3)

The emergence of Canada as an independent nation and "Middle Power" in the world from 1896 to the present. Political, social, economic and constitutional developments topically presented. Inter-American, United Nations, Commonwealth, and United States relationships. Problems of biculturalism and bilingualism and minorities. The search for national culture and identity.
His 356 The World at War, 1939-45 (3)
For description, see listing under Concentration in European History.
His 384 Social Science Approaches to History (3)
A study of selected topics in recent history which combines the traditional historical approach with whatever is applicable from sociology, psychology, anthropology, and economics.

His 390 Topics in American History (3)
Specific topics to be examined will be announced during preregistration periods. May be repeated for credit. Prerequisites: To be determined by instructor.

## His 415 a and b American Economic History (3, 3)

The development of the American economy and its impact on American life and society. The first session carries the survey into the second half of the 19th century. The second session carries down to the present. Prerequisite: His 100 or Eco 100.

## His 419 (Aas 419) Afro-American History (3)

A survey of Negro life and history in the United States; the contributions of Negroes to the development of American cultural and economic life; recent trends and social dynamics.

## His 425 a American Intellectual History to 1860 (3)

Key ideas and significant patterns of thought in American life: Puritanism, the American Enlightenment, nationalism, transcendentalism, democracy, and reform. Prerequisite: His 100 a and b.
His 425 b American Intellectual History Since 1860 (3)
Kcy ideas and significant patterns of thought in American life: the impact of economic expansion. Darwinian evolution, pragmatism, war and changing ideologies of liberalism, progressivism and conservatism. Prerequisite: His 100 a and b.

## His 426 Political and Social History of New York State Since 1875 (3)

The interaction of state and national political forces, parties, and personalities will be examined against the background of the significant social changes of the period. Prerequisite: His 100 b , or 226 or equivalent.
The following colloquia are limited to undergraduate students and may be taken only with the consent of the instructor. Specific topics to be examined in the colloquia will be announced at the time the courses are offered, and students may obtain a list of topics from the History Department at the time of preregistration. Colloquia may be repeated for credit.

## His 480 Colloquium in American History (3)

His 484 Colloquium in Approaches to History (3)
His $485 \begin{aligned} & \text { Colloquium in Comparative and Cross Cultural } \\ & \text { History (3) }\end{aligned}$
His 497 Independent Study in History (2-4)
Directed reading and conferences on selected topics in history. Prerequisite: consent of instructor and department chairman. Can be repeated for credit.
His 498 Introduction to Historical Research (3)
Introduction to methods of historical research. Conferences, discussion, and a research paper. Prerequisite: consent of instructor.

His 499 Special Projects in History (3)
Supervised work on projects in coordination with local museums and historical agencies. Prerequisites: consent of instructor and department chairman.

## CONCENTRATION IN EUROPEAN HISTORY

His $336 a$ and $b$ The Middle Ages (3, 3)
First session: The history of Western Europe during the Early Middle Ages, from ca. 500 to ca. 1050, in all major aspects. Second session: The history of Western Europe during the High Middle ages, ca. 1050 to 1300; in all major aspects.

## His 338 a The Italian Renaissance, 1300-1530 (3)

A detailed study of Italian Renaissance culture and society up to about 1530 with special emphasis on humanism and other cultural developments.
His 338 b Renaissance and Reformation in 16th Century
A survey of continental European history in the Early Modern Period with special emphasis on theological and intellectual developments.

## His 340 Europe 1648-1789 (3)

The 17th century crisis; 18th century society and government; the origins of the French Revolution.

## His 342 a Europe in the Age of Romanticism and Revolution (3)

The history of Europe during the early 19th century with emphasis on the struggle against the Metternich system and the part played by the romantic movement in this struggle.

## His 342 b Europe During the Age of Realism (3)

The history of Europe during the late 19th century with emphasis on industralism, realism in culture. Darwinism, nationalism, and imperialism.

## His 344 a Europe, 1914-1939 (3)

The First World War and the peace treaties; reparations. war debts. inflation, and depression; the rise of social democracy, Fascism, and Communism; the international crises of the 1930's.

His 344 b Europe Since 1939 (3)
The Second World War and postwar settlements; reconstruction refugee problems; divided Europe and the Cold War; common markets and integration attempts; current social, economic, political, and security problems.

His 346 a and b The History of England (3, 3)
First session: The historical development of English society and govermment from early times to the 17th century. Second session: The history of the United Kingdom and of the British Empire and Commonwealth from the 17th century to the present. Either session may be taken without the other.

## His 347 England in the 18th Century (3)

English society and government under the first three Georges; Augustan culture; the impact of the French Revolution on England; the transition to Victorian times.

## His 349 a History of France to 1815 (3)

France from its origins to 1815 with an emphasis on the period since 1643.

## His 349 b History of France Since 1815 (3)

A survey of the history of France from 1815 to the Fifth Republic, with attention to the political, sooial, economic, and cultural developments within France during this period.

## His 350 lberia and Latin America to 1810 (3)

For description, see listing under Concentration in lberoAmerican History.

## His 351 a and b History of Germany (3, 3)

First session: Germany to 1806. The ancient Germans; the development and collapse of the Medieval Empire; the growth of princely particularism; the Reformation; the Thirty Years' War; the rise of Prussia; the Aufklärung; the end of the old order. Second session: Germany since 1806. The wars of national liberation; Bismarck, unification, and the Wilhelminian Reich; World War I; the Weimar Republic; the Third Reich and totalitarianism; the German Federal and German Democratic Republics. Either session may be taken without the other.

## His 352 History of Austria (3)

Austrian history from the time of Carolingian settlement to the Second Republic. Particular attention will be paid to territorial growth, nationality problems, and cultural development.

## His 353 a and b History of Eastern Europe (3, 3)

The history, culture, and contemporary affairs of the people of the Baltic, Danubian, and Balkan regions from earliest times to the present. The first session carries the survey to the early 19th century; the second session carries it down to the present. Either session may be taken without the other.

## His 354 a and $b$ Hisiory of Russia (3, 3)

The evolution of Russia from Kievan origins, Tartar conquests and the-emergence of the Grand Duchy of Muscovy to the Russian Empire of the 18th and 19th centuries. The Revolution of 1905 and 1917, and the foundations, development, and expansion of Soviet Russia. Either session may be taken without the other.

## His $355 \mathbf{a}$ and $\mathbf{b}$ History of Italy (3, 3)

A survey of the history of the Italian peninsula from the collapse of the Roman Empire to the present. Economic, social, and cultural topics will be stressed within the framework of political development. The first session will include the period from late Roman time until the establishment of Spanish hegemony (1559), and the second session succeeding eras.

## His 356 The World at War, 1939-45 (3)

A political, diplomatic, military, economic, and social history of the Second World War. Among the topics covered will be war and peace plans, the military campaigns in the European, Pacific, and North African theaters of war, the plight of conquered nations, the concentration camps, and the war crimes trials.

## His 357 Social and Economic History of Europe, 1760-1873 (3)

The carly industrialization of England and Western Europe and its social repercussions. Changing family life, sexual attitudes, and life styles will be covered.

## His 358 Revolution and Reaction in Modern Europe (3)

Popular and intellectual responses to the trauma of rapid social, economic, and cultural change in the 19th and 20th centuries; stress on social conflict and on revolutionary movements and ideas, especially those of socialism and fascism.

## His 360 a The Byzantine Empire, 300-1453 (3)

A survey of the donestio history and foreign relations of Byzantium, from Constantinople to the Turks.

## His 360 b The Balkans Under Ottoman Rule (3)

The domestic and foreign affairs of the Ottoman Empire in Europe from the entrance of the Turks into Europe to the outbreak of World War I.

## His 361 Culture in the Belle Epoque (3)

Cultural history of Europe in the several decades preceding World War I, when development of science, industry, and ernpires helped Europeans gain unparalleled confidence and satisfaction in their civilization. Study of the age's glories, of challenges to its conventions and institutions, and of what could come from its ruins in the post-war world.

## His 362 Intellectual and Cultural History of Eastern Europe (3)

Landmarks in the development of thought, art, music, letters in Eastern Europe (Baltic, Danubian and Balkan regions), from the earliest times to the present.

## His 363 a European Cultural and Intellectual History, 1500-1800 (3)

The course will examine the origins of the Enlightenment, study The Enlightenment itself, and see how a Counter-Enlightenment emerged in the late 18th century. Developments in art, music and literature will be related to the larger pattern of intellectual change.

## His 363 b European Cultural and Intellectual History Since the Enlightenment (3)

Major developments in European thought, art, and letters in the last two centuries, and the relation of these to the social and economic conditions of their times.

## His 365 a and b War and Society (3, 3)

The first session will cover the military history of the West from Antiquity to the death of Frederick the Great; the second will reach from 1786 to 1918. Among topics studied will be: socioeconomic developments in relationslip to war, technological change, causation of collective violence, tactics and strategy, fortifications, selected campaigns and battles.

## His 384 Social Science Approaches to History (3)

For description, see listing under Concentration in History of the United States.

## His 391 Topics in European History (3)

Specific topics to be examined will be announced during preregistration periods. May be repeated for credit. Prerequisites: consent of instructor.

## His 449 The French Revolution and Napoleon (3)

A study of the French Revolution, its causes, events, and aftermath in the Napoleonic period. Attention will be given to the basic European economic, social, political, and cultural forces in the period from the late 18th century to 1815 as they relate to the French Revolution. Prerequisite: His 131.

## His 450 History of Spain and Portugal since 1808 (3)

The heritage of the Enlightenment; revolutions and the loss of Empires; nineteenth century decay; the end of monarchies; ideological movements and war in the twentieth century.

## His 456 a Diplomatic History of Europe, 1871-1933 (3)

A study of European international politics in the age of im. perialism; European alignments and alliances in the late 19th century; the coming of World War I and wartime diplomacy; the postwar settlement, the League of Nations, and the failure of collective security.

## His 456 b Diplomatic History of Europe Since 1933 (3)

The origins of World War II; wartime diplomacy and the origins of the Cold War; postwar European security problems; the diplomacy of European integration.

## His 460 History of Nationalism (3)

The nature and development of nationalism; a study of the meaning of nationalism, nationalist theorists, nationalist leaders, and nationalist movements from the 18th century to the present.

For descriptions of the following colloquia, see the listing under Concentration in United States History.

## His 481 Colloquium in European History (3)

His 484 Colloquium in Approaches to History (3)

## His 485 Colloquium in Comparative and Cross Cultural History (3)

## His 497 Independent Study in History (2-4)

His 498 Introduction to Historical Research (3)
The following courses are open to qualified seniors (see Bulletin of College of Arts and Sciences for course descriptions):

## His 546 Tudor England (3)

His 547 British Empire Commonwealth Since 1783 (3)
His 548 England, 1042-1216 (3)
His 554 a Imperial Russia (3)
His 554 b History of the Russian Revolution, 1905-1953 (3)
CONCENTRATION IN IBERO-AMERICAN HISTORY

## His 350 Iberia and Latin America to 1810 (3)

Iberian backgrounds; the age of exploration and discovery; the conquest and settlement of America by the Spanish and the Portuguese; Iberia and America in the 16th, 17th, and 18th centuries.
His 367 Contemporary Latin America (3)
A survey of Latin American backgrounds followed by study of the social, economic, and political problems of Latin America since World War II. Particular attention to the phenomena of social change, economic nationalism, and revolution.

## His 369 Mexico, Central America, and the West Indies since 1810 (3)

The circum-Caribbean lands and islands in the 19th and 20th centuries: Independence; independent nations and colonies; foreign intrusions and interventions; social and economic change; revolutions; comparative Caribbean studies.

## His 371 South America since 1810 (3)

The political, economic, social and cultural evolution of the South American nations from the winning of independence to the present, with emphasis on Argentina, Brazil and Chile. Among topics studied will be dictatorship, democratic government, economic change, modern revolution, and social trends.

## His 384 Social Science Approaches to History (3)

For description see listing under Concentration in History of the United States.

His 450 History of Spain and Portugal since 1808 (3)
For description, see listing under Concentration in European History.

## His 469 History of Mexico (3)

Mexican civilization from its origins to the present: The Indian cultures; the Conquest, the Colonial Period, and the winning of independence. Mexico since independence: the eras of Santa Anna, Benito Jaurez, and Profirio Diaz; revolution and reform in the 20th century; current social and economic problems; MexicanAmerican relations.

## His 472 History of Brazil (3)

The development of Latin America's largest nation from discovery to the present.

For descriptions of the following colloquia, see the listing under Concentration in United States History.
His 482 Colloquium in Latin American History (3)
His 484 Colloquium in Approaches to History (3)
His 485 Colloquium in Comparative and Cross Cultural History (3)

His 497 Independent Study in History (2-4)
His 498 Introduction to Historical Research (3)
The following graduate courses are open to qualified seniors (see Bulletin of College of Arts and Sciences for course descriptions) :
His 568 Urban Radicalism in Latin America (3)
His 570 History of the West Indies and Central America (3)
His 571 History of Southern South America (3)
His 573 The United States and Latin America (3) CONCENTRATION IN ASIAN HISTORY
His 356 The World at War, 1939-45 (3)
For description, see listing under Concentration in European History.
His 360 a The Byzantine Empire 300-1453 (3)
For description, see listing under Concentration in European History.

## His 377 a and b History of South Asian Civilization (3; 3)

First session: The development of the unique civilization of the Indian subcontinent and the impact on it of invading peoples, through the Muslim period. Second session: Study of South Asia from the 18th century, with emphasis upon changes brought about by British rule and by modernization; the creation of new nation states. Either session may be taken without the other.

## His 379 a and $b \quad$ History of China (3, 3)

First session: A topical study of Chinese history from historic times to 1644 with particular emphasis on political, economic, and social developments. Second session: A topical study of modern Chinese history with emphasis on the strengths and weaknesses of the traditional state and the solutions which the Chinese developed in response to foreign aggression and internal disintegration, Either session may be taken without the other.

## His 380 History of Modern Japan 1868-1952 (3)

A problem approach to modern Japanese history, analyzing the nature of the pre-modern state and its subsequent transformation.

## His 382 a and b History of the Middle East (3, 3)

Tirst session: Mohammed, Islam as a religion and a way of life; the Umayyad, Abbasid, Byzantine, and Persian Empires, and the Ottoman Empire to 1789. Second session: The Ottoman Empire in the 19th century; European imperialism in the Middle East; the rise of nationalism; the World Wars; current political, social and economic problems. Either session may be taken without the other.

His 384 Social Science Approaches to History (3)
For description, see listing under Concentration in History of the United States.

For descriptions of the following colloquia see the listings under Concentration in United States History.

His 483 Colloquium in Non-Western History (3)
His 484 Colloquium in Approaches to History (3)

## His 485 Colloquium in Comparative and Cross Cultural History (3)

His 497 Independent Siudy in History (2-4)
His 498 Introduction to Historical Research (3)

The following courses are open to qualified seniors (see Bulletin of College of Arts and Sciences for course descriptions) :

## His 547 British Empire and Comonwealth Since 1783 (3)

His 578 Tradition and Modernization in South Asia (3)
His 579 History of the Chinese Revolutions 1911-1966 (3)
His 583 History of Nationalism in the Middle East (3)

## DEPARTMENT OF PSYCHOLOGY

FACULTY: E. Blanchard, J. Bowen, S. Brown, D. Doty, R. Eisenberger, M. Eson, G. G. Gallup, Jr., N. Greenfeld, R. Hicks, A. Israel, A. Luchins, J. Mancuso, N. B. McCutcheon, R. Oesterreich, W. Plotkin, E. Riley, R. Rosellini, G. Sanders, W. Simmons, J. Suls, J. Tedeschi, R. Teevan, H. Tennen, J. Tucker, C. Waterman, W. Whitten II, H. J. Wilkinson.

The objective of the department is to provide undergraduate students with a broad, general background in scientific psychology. The program is designed to prepare students for graduate study in psychology as well as a diversity of other fields requiring knowledge of psychological principles. The department expects its students to become well-versed in the theories, research, and applications of the discipline.

The department offers a full program leading to the B.A.; a graduate program leading to the $\mathrm{Ph} . \mathrm{D}$. with several major areas of concentration and a clinical training program; and, in cooperation with the Department of Educational Psychology and Statistics in the School of Education, the University Certificate in School Psychology.

## Special Programs or Opportunities

The department offers opportunities for independent study and research beginning in the sophomore year. Students involved in research activities have supervised access to the department's animal behavior laboratory, social psychology laboratory, and off-campus professional agencies. The department sponsors an undergraduate student association and a local chapter of Psi Chi, the national undergraduate psychology honorary.

## Degree Requirements for the Major in Psychology

## General Program

B.A.: The program in Psychology is a combined major and second field sequence requiring a minimum of 51 credits: 27 credits in Psychology including Psy 101, Psy 211, Psy 212 and 18 credits of Psychology electives including 12 credits of courses numbered 300 or above; and 24 credits in the interdepartmental second field including a minimum of six credits in Mathematics, a minimum of six credits in Natural Sciences (Biology, Chemistry, Physics), a minimum of six credits in Social Sciences (excludng Psychology) and six additional credits distributed among these three areas to yield a concentration of nine credits in a single department. Csi 201 and Phi 210 may be substituted for Mathematics credit.

## Psy 101 Introduction to Psychology (3)

The basic methods and points of view in the scientific study of human behavior. Topics include biological bases of behavior, personality organization, intelligence, motivation, emotions, learning, and social relations.

## Psy 203 Psychology of Child Development (3)

The genesis of various behavior forms; social, ennotional, and intellectual developinents in contemporary society; the relationship between childhood experience and personality development. Prerequisite: Psy 101.

## Psy 204 Applied Psychology (3)

The application of psychological principles to business, industry, and political and social institutions. Prerequisite: Psy 101.

## Psy 209 Psychology Testing (3)

The methods of psychological assessment, including their historical background and an emphasis on evaluation of the reliability and validity of psychological tests. Prerequisite: Psy 101.

## Psy 211 Introduction to Experimental Psychology (3)

The empirical study of the following psychological processes: sensation, perception, learning, emotions, and motivation. Two lectures, one lab each week. Prerequisite: Psy 101.

Psy 212 Statistical Methods In Psychology (3)
Methods of analyzing quantitative data in psychology and the behavioral sciences. The relation of each of the various methods to the design of experiments. Prerequisite: Psy 101.

## Psy 214 Biological Bases of Sensation (3)

An introduction to basic neurophysiology followed by a study of the biological bases of sensation and perception and language function. Not recommended for biology majors. Optional laboratory for one credit (Psy 315). Prerequisites: Psy 101 and Bio 101 $a$ and $b$ or consent of instructor.

## Psy 270 (Soc 260) Social Psychology (3)

The relation between the individual and the group, the influence of culture and of institutions on human personality, the nature and types of leadership, factors in the development of social attitudes, the psychology of mass movements and of social decisions. Prerequisite: Psy 101 or Soc 115.

## Psy 297 Directed Study in Psychology (3)

The course provides the opportunity for a sophomore student to work on a research project under the supervision of a faculty member. Open to majors and non-majors with consent of department chairman. May be repeated, once, for up to a total of six credits. (Majors may apply only six credits of total credits earned in 297, 397 and 497 to 27 credits required in psychology). Prerequisite: Psy 101.

## Psy 310 History of Psychology (3)

A critical analysis of basic writings which have contributed to the historical development of psychology as a science. Prerequisite: Psy 101.

## Psy 314 Biological Bases of Behavior (3)

The psychophysiology of sleep and arousal, reward and punishment, biological drives and learning and memory. Optional laboratory for one credit (Psy 315). Prerequisite: Psy 101 and Psy 214 or Bio 410 or Bio 417.

## Psy 315 Biological Bases of Behavior Laboratory (1)

Instruction in gross neuroanatomy, electrical recording and surgical techniques will be followed by student projects such as brain stimulation and lesions in animals or EEG studies in humans. Prerequisite or corequisite: Psy 214 or Psy 314.

## Psy 327 Personality (3)

Biological and social determinants of personality and its development; methods of studying personality; the various systems of psychology and their interpretations of personality structure. Prerequisite: Psy 101.

## Psy 338 Abnormal Psychology (3)

A survey of the behavior disorders, including the psychoses, psychoneuroses, mental deficiencies, and other forms of psychopathology. Prerequisites: Psy 101, and 203 or 327.

## Psy 340 The Psychology of Human Sexuality (3)

An in-depth coverage of research and theory on: biological and social causes of sex differences in behavior, attraction and love, marirage and alternatives, sexual behavior, personality variables relating to sexual responsiveness, sexual dysfunction, sexual deviations, effects of erotica, and birth control. Prerequisite: Psy 101.

## Psy 380 Learning (3)

Analysis of basic problems in learning. Consideration of data resulting from human and animal experimentation. Prerequisite: six credits in psychology.

## Psy 382 Perception (3)

A consideration of how man gains knowledge of the world through his senses, and of the organization and stability of man's perceptual world. Prerequisite: six credits in psychology.

## Psy 384 Motivation (3)

Various theories of motivation will be evaluated in the light of relevant evidence. Prerequisite: Psy 101.

## Psy 305 Evolutionary Psychology (3)

A review of the genetic, ecological, and adaptive correlates of behavior. Topics include the comparative development of highermental processes, aggression, anti-predator behaviors, biological constraints on learning, and behavior genetics, with emphasis on animal behavior and evolution as a model for understanding human behavior. Prerequisite: Psy 101.

## Psy 397 Directed Research in Psychology (3)

The course provides the opportunity for a junior student to work on a research project under the supervision of a faculty member. Open to majors and non-majors with consent of department chairman. May be repeated, once, for up to a total of six credits. (Majors may apply only six credits of total credits earned in 297, 397 and 4.97 to 27 credits required in psychology. (Prerequisite: Psy 101,

## Psy 450 Selected Topics in Psychology (3)

Selected topics from the current literature bearing on issues which define the specified fields. Specific areas to be announced at time of offering. May be repeated once for credit. Prerequisite: Psy 101 and consent of instructor.

## Psy 497 Independent Study and Research (1-6)

Survey of the research literature and/or conduct of a research project on a selected methodological, theoretical, or applied problem. Each student must have a faculty advisor. Open to majors and non-majors with consent of department chairman. May be repeated, once, for credit. (Majors may apply only six credits of
total credits earned in Psy 297, Psy 397, and Psy 497 to the 27 credits required in psychology. Prerequisites: Psy 101 and 12 additional credits in psychology. Psy 211 and Psy 212 recom. mended.

The following courses are open to qualified seniors:
Psy 501 Doctrines of the Nature of Man (3)
Psy 502 Models of Man (3)
Psy 510 Introduction to Experimental Design (3)
Psy 532 Advanced Social Psychology (3)
Psy 541 Psychology and Social Issues (3)
Psy 565 Psychology and Language (3)

## DEPARTMENT OF PUERTO RICAN STUDIES

FACULTY: E. Acosta-Belén, E. Christensen, J. A. Silén
The curriculum of the Puerto Rican Studies Department has been designed to provide students with an opportunity for intensive interdisciplinary exploration of many different areas of the Puerto Rican experience as a minority group in the United States. In addition, it provides an integrated broad-based knowledge of the island, and its relation to the Caribbean, the rest of Latin America, and the United States. Courses deal intensively with many aspects of the life of the Puerto Ricans-cultural, political, social and economic proccesses, language, literature, art, music and education. These areas will be studied from the perspective of contemporary forms: cultural pluralism, bilingualism, the immigrant's United States experience, as well as the historical attempt by the Puerto Rican people to achieve an individualized national personality.

Students majoring in Puerto Rican Studies may wish to spend a term in Puerto Rico under a program sponsored by SUNY Buffalo. This program affords qualified students an opportunity to spend a term in Puerto Rico, to engage in independent study, workshops, formal classes, and field work relating to Puerto Rican culture and institutions. The program is staffed by leading Puerto Rican writers, artists, and scholars. Prior permission of the chairperson is required.

## Degree Requirements for the Major in Puerto Rican Studies

## General Program

B.A.: A total of 33 credits in Puerto Rican Studies: 18 credits of required course work to include Prs 101, Prs 143, Prs 150, Prs 329, Prs 346, Prs 490, plus at least 3 additional credits 300 level or above. Twelve additional credits in Puerto Rican Studies as advised by the faculty of the department. Courses that are offered by other departments that have been officially cross-listed with Puerto Rican Studies Department will be accepted to fulfill this requirement.

## Other Degree Requirements

A second major or second field as advised by the faculty of the department.

Upon completion of the program requirements, candidates should possess a reading and writing knowledge of Spanish.

## Rrs 101 History of Puerto Rico (3)

A survey of Puerto Rican history from the pre-Hispanic era to the present. Emphasis on transition from domination by Spain to present status.

## Prs 143 Survey of Puerto Rican Literature (3)

A study of the major literary trends in Puerto Rico. The course deals with literature written in both Spanish and English. Prerequisite: reading knowledge of Spanish.

## Prs 150 Puerto Rican Culture (3)

A survey of contemporary Puerto Rican culture. Problems of Puerto Rican identity on the U.S. mainland as well as patterns of Puerto Rican migrations to urban centers. Prerequisite: An introductory course in either Anthropology, Sociology, Psychology, or History, and consent of instructor.

## Prs 200 Puerto Rican Political and Social Writers (3)

Study of major Puerto Rican essay writers; special consideration of the political and social realities of Puerto Rico reflected in their thought. This course will be conducted in Spanish.

## Prs 201 Puerto Rican Art (3)

A survey of Puerto Rican art from pre-columbian times to the present. Emphasis will be placed on the Taino and African elements of Puerto Rican art and on contemporary art of protest.

## Prs 231 (Aas 231) Dynamics of Racism (3)

(Same as Aas 231)

## Prs 250 Puerto Rican Politics and Power Structure (3)

An examination of Puerto Rican political parties. The emergence of power groups in Puerto Rico and the U.S. and their effects on political change. Prerequisite: Prs 150 or Pos 120.

Prs 282 (Soc 282) Minority Groups (3)
Same as Soc 282.

## Prs 289 (Soc 289) Special Topics in Ethnicity (3)

Same as Soc 289.

## Prs 301 (Aas 301) Puerto Rico and the Caribbean (3)

A comparative study of the socio-historic development of Puerto Rico and the major Caribbean islands from the colonial period to the present, with special reference to the slavery systems, plantation societies, colonial policies, and the rise of nationalism in the Caribbean basin.

## Prs 329 (Soc 379) Urban Puerto Rican Family (3)

An in-depth study of the Puerto Rican family as an institution, the dynamics of intra-family relations and the effects of social institutions on Puerto Rican family life. Concentration will be on comparative study of the Puerto Rican family in the urban areas of New York and Puerto Rico. Prerequisite: Prs 150 or Soc 115.

## Prs 330 Puerto Rican Immigration to the U.S. (3)

An examination of the nature and causes for the Puerto Rican immigration to the U. S. Comparative study of the Puerto Rican immigration and the immigration of other minority groups into American society. Prerequisites: Prs 101 or Prs 150.

## Prs 346 Crisis in Puerto Rican Identity (3)

A psychodynamic analysis of the formation of self-concept and processes of identification as related to the Puerto Rican experience and the anthropological make up of the Puerto Rican people. Prerequisites: Prs 150 and Prs 329.

## Prs 380 (Soc 380) Sociology of Poverty

Same as Soc 380.
Prs 400 (las 400) Current Latin American Ideas (3)
Same as las 400 .

## Prs 401 History of the Puerto Rican Labor Movement (3)

A study of the development of the Puerto Rican labor movement from its 19th century origins to the present. Prerequisite: Prs 101 or Prs 150.

Prs 414 (Spn 414) Literature of the Hispanic Caribbean (3)
A study of selected major writers of Cuba, the Dominican Republic, and Puerto Rico of the 19th and 20th centuries. Special consideration of literature as a reflection of situations and problems peculiar to the hispanic Caribbean. Conducted in Spanish. Prerequisite: Spn 123.

## Prs 415 Puerto Rican Literature of the 20th Century: Prose (3)

A study of modern and contemporary Puerto Rican prose writers with emphasis on the short story and the novel. Prerequisite: Prs 143.

## Prs 429 The Puerto Rican Community in the

## United States (3)

An examination of internal structures of the Puerto Rican community in the U.S. and their relationship to structures outside the community. Current problems concerning the Puerto Rican com-
munity will be studied and analyzed. Special emphasis on housing, public education, welfare, community health and race relations. Prerequisite: Prs 150 or Soc 115.

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Prs 431 (Aas 431) Third World Concept (3)
    Same as Aas 431.
Prs 448 (Soc 448) Social Change in Latin America (3)
    Same as Soc 448.
Prs 450 (Aas 450) Minority Children in the U.S. School
System (3)
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A study of the effects of the U.S. school system on the cultural, ppsychological, and linguistic make-up of minority children, with lemphasis on the Puerto Rican child. An analysis of bilingualism, bidialectalism, and cultural pluralism as a means of dealing with the conflicts created within the present school system. Prerequisite: Prs 150.
Prs 490 Senior Seminar in Puerto Rican Studies (3-6)
Critical examination and discussion of major contemporary :topics in the area of Puerto Rican Studies. Emphasis on the development of research and bibliographical techniques. Prerequisite: majors in senior year. Can be repeated by seniors only, for up to six credits.

## Prs 491 (Ant 481) Research Projects (3-6)

An introduction to basic research skills required to answer questions on human behavior, with special emphasis on cross-cultural interaction. Students will be involved in a specific research project and this will provide them with the basic research methods to include data collection, processing, and analysis. Prerequisite: Junior or Senior standing or consent of the instructor.

## Prs 497 Independent Study (3-6)

Independent study in an area of special interest to the student under the supervision of the sponsoring faculty member. May be repeated for up to six credits. Prerequisites: the consent of instructor and department chairperson.

The following courses are open to qualified seniors:
Prs 501 Cultural History of Puerto Rico (3)

## Prs 514 Literature of the Hispanic Caribbean (3)

# RUSSIAN AND EAST EUROPEAN STUDIES PROGRAM 

(Interdisciplinary)

FACULTY: A. Andreyewsky, H. Baran, T. Barker, J. Bur- ian, K. Chen, T. Clyman, L. Fields, G. Frangos, M. Frinta, W. Heiser, E. Hoffman, A. Iwanska, S. Katz, N. Kisseleff, R. Patterson, K. Shaffer, A. Shane, J. Symons, J. Szoverffy, S. Temkin, C. Tucker, J. Zacek, W. Zenner, M. Zych.

The interdisciplinary major-second field with a concentration in Russian and East European Studies offers students the opportunity to receive expert guidance in acquiring a broad, relevant experience in this field, to develop necessary language skills for this field, to choose between a concentration in literature and one in history and civilization, and, finally, to acquire a comprehensive view of Russan and East European civilization instead of the narrower perspective of A single discipline.

## Degree Requirements for the Interdisciplinary Major-Second Field with a Concentration in Russian and East European Studies

## B.A. History Track

Rus 253; 24 credits in history including His 353 a and b , His 354 a and b, His 48 I and 9 elective credits in history including one course chosen from His 352, His 360 a and b , His 554 a or $\mathrm{b} ; 18$ credits in language. Students beginning a language at the 100 or 200 level must take all 18 credits in one Slavic language. Students certified by the department of Slavic Languages and Literatures as having achieved proficiency in a Slavic language before having completed 18 credits may elect the remainder of the requirement from a second language; 6 credits of approved related courses from disciplines other than history; and Res 498. Total credit requirements: 54 credits.

## B.A. Language and Literature Track

Rus 253; 27 credits of language and literature including 14 credits in Russian language above Rus 201, Rus 311, and 3 credits in Russian literature, and 7 credits in electives offered by the Department of Slavic Languages and Litera-
tures (preferably in courses other than Russian) ; 15 credits in History including His 353 a or His 353 b, His 354 a or His 354 b, His 481, 6 credits of approved history electives; 6 credits of approved related courses from disciplines other than Slavic Languages and Literatures; and Res 498. Total credit requirements: 54 credits.

## Res 498 Senior Seminar in Russian and East European Studies (3)

Senior research project done under the direction of a faculty member participating in the Russian and East European study program. Project must be approved by the Committee on Slavic and East European Studies. Prerequisite: Reading knowledge of $a_{r}$ Slavic language,

## SOCIAL STUDIES PROGRAM

## Kendall Birr, Director

The Social Studies Program offers two plans leading to provisional certification as a Social Studies teacher in the secondary schools of New York State. Both plans require the same basic 42 credit program in Social Studies, but differ in the choice of a second field. The first program (Second Field in other than Social Studies) permits the development of a second field in any approved subject offered by the university. The second program (Combined Major and Second Field in Social Studies) permits a concentration in one of the Social Studies. An M.A. program leading to permanent certification is available to provisionally certified teachers.

## Degree Requirements for the Major in Social Studies

## Teacher Education Program

B.A.: (Major in Social Studies) (Second Field in other than Social Studies ): 42 credits including 6 credits in American History, 6 credits in European History, and 6 additonal credits of History; Eco 100 a and b; Gog 101 or 102, and 3 additional credits of Geography; Soc 115 and 3 additional credits of Sociology or Anthropology; and 6 credits of Political Science as advised.
(Combined Major and Second Field in Social Studies) : 54 credits including 6 credits in American History, 6 credits in European History, and 6 additional credits of History; Eco 100 a and b; Gog 101 or 102 and 3 additional credits of Geography; Soc 115 and 3 additional credits of Sociology or Anthropology; 6 credits of Political Science as advised; and 12 additional credits in one of the following Social Studies: Anthropology, Economics, Geography, Political Science or Sociology.

Students with a Second Field in History should complete the requirements through the Teacher Education Major offered by that department.

This program also requires 21 credits in Education courses of which 3 credits are in Teaching Methods for Social Studies (E Sst 401) and 9 credits are in Student Teaching (E Sst 490).
All majors must include 12 credits in courses numbered. 300 and above.

## Sst 400 Selected Problems in the Social Studies (3)

A critical analysis of selected problems of concern to historians and social scientists. The approach is historical, with an attempt to integrate the major theories and techniques of the social studies as applied to some of the problems of the modern world. For seniors in the Teacher Education Program during their professional session.

## DEPARTMENT OF SOCIOLOGY

FACULTY: M. Brown, R. Farrell, R. Felson, R. Forer, A. Foster, R. Hall, A. Hayes, A. Higgins, A. Iwanska, M. La Gory, M. Levy, N. Lin, A. Liska, P. Meadows, J. Nelson, A. Richardson, M. Richter, Jr., H. Steadman, R. Ward, P. Wheeler.

The undergraduate program offers students a broad, diversified set of courses in the various substantive areas of the discipline. These curricular areas are listed below, and courses falling within each area may be identified by the middle number which corresponds with the appropriate curricular area number (e.g., Soc 430, Origins of Sociology, from curricular area \#3, Theory and Systems). Students may use the area and course designations to select a program most suitable for their own personal and vocational goals.

Number Curricular Area Content
1 General
2 Research Methods and Methodology
$3 \quad$ Theory and Systems
$4 . \quad$ Social Organization and Change
5 Institutions
6 Social Psychology
$7 \quad$ Urban Sociology
8 Social Deviance and Disorganization
9 Special Courses

## Special Programs or Opportunities

The department provides for graduate and undergraduate students both research and small group laboratories, a colloquia series with both locally and nationally known sociologists, and a local chapter of the national sociology honorary, Alpha Kappa Delta.

## Degree Requirements for the Major in Sociology General Program

B.A.: A minimum of 36 credits including Soc 115, 221, 223 , and either $330,333,335$, or 430 ; 18 additional credits of sociology as advised; 6 credits of supporting courses as advised. A minimum of 12 credits in sociology must be at the 300 level or above. Mat 108 or 362 may be substituted for Soc 221.

## Soc 115 Introduction to Sociology (3)

The nature of culture and of human society, personality development, groups and group structure, social institutions, the processes of social change. (Seniors should take Soc 417 instead of Soc 115.)

## Soc 180 Social Problems (3)

The application of the concepts, methods and ethics of sociology to the analysis of "social problems." Prerequisite: Soc 115.

## Soc 221 Statistics for Sociologists (3)

An introduction to quantitative analysis of sociological data: Methods of summarizing and describing univariate distributions including the use of tables and graphs; methods of examining relationships between two or more measures; statistical inference and hypothesis testing. Prerequisite: major in department.

## Soc 223 (Ant 280) Introduction to Social Research (3)

An examination of the assumptions and techniques of social research : problems of design, data collection, quantitative and qualitative analysis; review of current research in professional journals; the uses of survey research; application of concepts through individual and class projects. Prerequisite: Soc 115 and Mat 108 or Mat 362, or Soc 221 is required.

## Soc 240 Social Institutions (3)

An introduction to the internal organization and operation of various social institutions (religious, political, economic), and the influence of one institution upon another. Prerequisite: Soc 115.

## Soc 241 Social Class (3)

An examination of the antecedents, consequences, and measures of social class including the principal theoretical and empirical literature on social stratification. Prerequisite: Soc 115.

## Soc 250 (Ant 250) The Family (3)

The family as a social institution, types of family organization, the family as a socializing agency and its interrelations with other institutions, the impact of social change on the Anerican family with particular reference to the transition from a rural-agricultural to a predominantly urban-industrial society. Prerequisite: Soc 115.

## Soc 255 Mass Media (3)

The role of the newspaper, radio, television and motion pictures in American society; changes in these media and their functional relationship to education, the economy, the political process, and public opinion. Prerequisite: Soc 115.

## Soc 260 (Psy 270) Social Psychology (3)

The relation between the individual and the group, the influence of culture and of institutions on human personality, the nature and types of leadership, factors in the development of social attitudes, the psychology of mass movements and of social decisions. Prerequisite: Soc 115 or Psy 101.

## Soc 270 The Community (3)

The nature of the community and approaches to community study. The impact of urbanization and other changes on the physical and social structure of communities; community planning. Prerequisite: Soc 115.

## Soc 281 (Crj 300) Criminology (3)

An introduction to the study of crime, including the development of criminal law, the relationship between crime and social structure, and the individual and social causes of crime. Analysis of the criminal justice system: police, courts, and correctional systems. Prerequisite: Soc 115.

## Soc 282 (Prs 282) Minority Groups (3)

A study of various racial, ethnic, and religious groups. The processes of conflict, accommodation, and assimilation; problems arising from increasing mobility and current efforts to modify traditional patterns of segregation. Prerequisite: Soc 115.

## Soc 289 (Prs 289) Special Topics in Ethnicity (3)

An intensive examination of the culture and lifestyle of a single ethnic group within American society. The specific ethnic group to be studied will vary from session to session and will be indicated by course subtitle; e.g., Ethnicity: Italian Americans. Repeatable for up to six credits under different subtitles. Departmental permission required for more than six credits. Prerequisite: Soc 115.

## Soc 300 (E Soc 300) Introduction to the Sociology of Education (3)

An intoduction to the sociology of education. An emphasis on the impact of institutions and various educational problems.

## Soc 330 History of Social Thought to 1800 (3)

A review of the theories of the nature of society preceding the foundation of sociology as a special discipline. The material includes selected works of Chinese and Greek philosophers and historians; Church theologians; Renaissance humanists; British, French, Scottish, and Italian reformers, critics, political and economic writers. Prerequisite: Soc 115.

## Soc 333 Hisiory of Social Thought-19th Century (3)

The diverse theories that have shaped modern sociology are reviewed. Attention is given to evolutionary, conflict, reform, organic, analytic, and utopian orientations of the period. Prerequisite: Soc 115.

## Soc 335 Contemporary Sociological Theory (3)

An overview of the major systems of schools of theory influencing twentieth-century sociology. Evaluation of the role of theory in the growth of the discipline. Special emphasis on the influencing of modern theorists beginning with Durkheim. Prerequisite: nine credits in sociology or consent of instructor.

## Soc 342 Complex Organizations (3)

A comparative sociological analysis of the structures and processes characterizing different types of large organizations (e.g., school, prison, hospital) ; alternatives to the bureaucratic model; inter and intra-organizational relations, and organizational change. Prerequisite: Soc 115.

## Soc 346 Social Organization (3)

An intensive, analytic coverage of basic sociological concepts relating to societal organization. Prerequisite: Soc 115.

## Soc 352 Sociology of Religion (3)

Religion in society: the social sources of religion; religious institutions in America; the relation between religion and the social, economic, and political forces in society. Prerequisite: Soc 115.

## Soc 353 Sociology of Economic Behavior (3)

A sociological analysis of economic institutions, using crosscultural, historical, and contemporary data; the inter-relations of economic behavior and other institutionalized behavior; special problems arising from change in economic systems in modern societies. Prerequisite: Soc 115.

## Soc 354 Polltical Sociology (3)

An analysis of the social bases of political power and the origin, course of development, and duration of social movements; the role of propaganda, communication, and public opinion in political behavior; the structure of political organizations. Prerequisite: Soc 115.

## Soc 356 Sociology of the Arts (3)

The social organization of art activity; the roles of artists, patrons, critics, and the various publics; art as communication and as an indicator of social change; the uses of art in religion, government, and business. Prerequisite: Soc 115.

## Soc 357 Industrial Sociology (3)

Analysis of industrialization; institutional and interpersonal aspects of the industrial work place. Prerequisite: Soc 115.

## Soc 359 Medical Sociology (3)

A comprehensive introduction to sociological factors in disease etiology and illness behavior and to the sociology of the organization of medical practice and the health professions. Prerequisite: Soc 115.

## Soc 360 Processes of Socialization (3)

Exploration of socialization processes with similarities and differences in occurrence in various social institutions; aspects of socialization in the life cycle of the individual. Prerequisite: Soc 115, Soc 260 or equivalent.

## Soc 363 Small Groups (3)

An introduction to small group theory and research. Analysis of interaction processes and group structures through laboratory observation and experimentation. Prerequisite: Soc 115, Soc 223, and Soc 260.

## Soc 365 Collective Behavior (3)

A sociological analysis of forms of collective action, including panics, crazes, fads, fashions, demonstrations, publics, movements; theory of collective behavior as social action. Prerequisite: Soc 115 and an additional three credits of sociology or psychology.

## Soc 370 Social Demography (3)

The analysis of population processes with special emphasis on the effects of population on social organization and change. Prerequisite: Soc 115.

## Soc 371 Urban Economics (3)

Same as Economics 341.

## Soc 372 Urban Planning (3)

Same as Geography 320.

## Soc 379 (Prs 329) The Urban Puerto Rican Family

Same as Prs 329.

## Soc 380 (Prs 380) Sociology of Poverty (3)

Analysis of structural conditions leading to the formation and maintenance of low-income populations; interplay between economic, demographic, and cultural factors; poverty and social policy. Prerequisite: Soc 115.

## Soc 383 (Crj 304) Juvenile Delinquency (3)

The characteristics and distribution of delinquency in society; a critical review of etiological theory and an analysis and critique of correctional processes. Prerequisite: Soc 115.

## Soc 384 Sociology of Aging (3)

Aging as a cultural phenomenon; a comparative study of age structure in society; the nature of age strata; relationships of age strata; the consequence of social change for age definition. Prerequisite: Soc 115.

## Soc 417 American Social Institutions (3)

Analysis of the structure and function of contemporary American social institutions, with emphasis on the problems created by a rapidly changing social order. (Restricted to non-sociology majors.)

## Soc 429 Special Topics in Social Research (3)

An intensive examination of a specialized topic in the area of social research. The special topic to be studied will vary from term to term and will be indicated by course subtitle. Course repeatable for up to nine credits under different subtitles. Departmental permission required for more than nine credits. Prerequisite: six credits in sociology and consent of instructor.

## Soc 430 Origins of Sociology (3)

The beginnings of sociology as a distinct discipline in Europe and in the United States. The emergence of sociology from a background of social philosophy and social reform. Prerequisite: nine credits in sociology or consent of instructor.

## Soc 439 Special Topics in Sociological Theory (3)

An intensive examination of a specialized topic in the area of sociological theory. The special topic to be studied will vary from term to term and will be indicated by course subtitle. Course repeatable for up to nine credits under different subtitles. Departmental permission required for more than nine credits. Prerequisite: six credits in sociology and consent of instructor.

## Soc 440 Social Control (3)

The factors involved in the maintenance of the social order and the making of group decisions. The nature of custom, ideology, leadership, public opinion, and the other types of control. Prerequisite: Soc 115.

## Soc 443 Social and Cultural Change (3)

The nature, sources and interrelationship of social and cultural changes; theories of change; analysis of factors making for equilibrium and disequilibrium in human societies. Prerequisite: Soc 115.

## Soc 445 Comparative Sociology (3)

A comparison of societies and sub-cultures utilizing the historical and cross-cultural approaches. Prerequisite: six credits of sociology.

## Soc 446 (Ant 464) Eastern Europe: Tradition, Change, Ethnicity (3)

Cultural background, world view, and social structure of selected Eastern European countries. Cultural persistence and change under the impact of economic and political transformations. Eastern European Ethnic Groups. Prerequisite: Soc 115 or Ant 200.

## Soc 447 South-East Europe: Conflict of Cultures (3)

A comparative analysis of civilization which flourished in SouthEast Europe from antiquity to the present, illustrated by the history of conflict and interpretation between them. Prerequisite: consent of instructor.

## Soc 448 (Ant 448) (Prs 448) Social Change in Latin America (3)

Changing class structure, ethnic composition and culture of con. temporary Latin American nations. Prerequisite: reading knowledge of Spanish or Portuguese and consent of instructor.

## Soc 449 Special Topics in Social Organization and Change (3)

An intensive examination of a specialized topic in the area of social organization and change. The special topic to be studied will vary from term to term and will be indicated by course subtitle. Course repeatable for up to nine credits under different subtitles. Departmental permission required for more than nine credits, Prerequisite: six credits in sociology and consent of instructor.

## Soc 451 Sociology of Law (3)

A sociological analysis of the emergence, implementation, and social impact of legal codes and the organization of the legal system. Prerequisite: Soc 115.

## Soc 457 Sociology of Science (3)

Characteristics of scientific belief systems; social background of the development of science; the social organization of scientific acm tivity; the impact of science on society. Prerequisite: consent of instructor.

## Soc 459 Special Topics in Social Instifutions (3)

An intensive examination of a specialized topic in the area of social institutions. The special topics to be studied will vary from term to term and will be indicated by course subtitle. Course repeatable for $u p$ to nine credits under different subtitles. Departmental permission required for more than nine credits. Prerequisite: six credits in sociology and consent of instructor.

## Soc 460 Human Communication (3)

The communication process, how communication generates social and psychological effects; the role of communications in social interaction, both directly and through mass media. Emphasizes information theory, social exchange, nonverbal communication, persuasion, control and variations of the source, message, channel, and sociopsychological state of the receiver. Prerequisite: Soc 115 or Psy 101.

## Soc 469 Special Topics in Social Psychology (3)

An intensive examination of a specialized topic in the area of social psychology. The special topic to be studied will vary from term to term and will be indicated by course subtitle. Course repeatable for up to nine credits under different subtitles. Departmental permission required for more than nine credits. Prerequisite: six credits in sociology and consent of instructor.

## Soc 470 Urban Sociology (3)

Approaches to the study of urban form and process: The city as a crescive product and as a social artifact; impact of the urban setting upon social institutions; city, metropolis, and megalopolis; the future of cities: Prerequisite: Soc 115.

## Soc 472 Urban Ecology (3)

A study of the adaptation of human social systems to environmental conditions, with a focus on the urban ecological system. Prerequisite: Soc 115 or Soc 417.

## Soc 479 Special Topics in Urban Sociology (3)

An intensive examination of a specialized topic in the area of urban sociology. The special topic to be studied will vary from term to term and will be indicated by course subtitle. Course repeatable for up to nine credits under different subtitles. Departmental permission required for more than nine credits. Prerequisite: six credits in sociology and consent of instructor.

## Soc 480 Sociology of Deviant Behavior (3)

Exploration of various aspects of deviance: causes of deviant behavior; sources and nature of reactions to deviants; impact of social reaction on deviants; relationships between deviance and social structure. Theories of deviance and selected areas of deviant behavior are discussed. Prerequisite: Soc 115.

## Soc 489 Special Topics in Social Disorganization and Deviance (3)

An intensive examination of a specialized topic in the area of social disorganization and deviance. The special topic to be studied will vary from term to term and will be indicated by course subtitle. Course repeatable for up to nine credits under different subtitles. Departmental permission required for more than nine credits. Prerequisite: six credits in sociology and consent of instructor.

## Soc 497 a and b Independent Study in Sociology (3, 3)

Independent reading or research on a selected experimental, theoretical, or applied problem, under the direction of a faculty member. May be taken a second time for an additional three credits upon recommendation of the faculty supervisor and with approval of the department chairperson. Prerequisites: consent of department chairperson and instructor.

## Soc 499 a and b Senior Seminar in Sociology (3, 3)

Selection of topic and preparation of a paper under the direction of a faculty member. Prerequisite: senior standing, a major in Sociology, and consent of department chairman.

The following courses are open to qualified seniors:

## Soc 509 Research Methods (4)

Soc 510 Theories and Systems in Sociology (4)
Soc 522 Intermediate Statistics for Sociologists (4)
Soc 526 Survey Design and Analysis (3)
Soc 535 Historical Sociology (3)
Soc 551 Demography (3)
Soc 553 Social Stratification (3)
Soc 554 Sociology of Knowledge (3)
Soc 555 Small Group Research (3)
Soc 598 Directed Study in Sociology (4)

# School of Business 

William K. Holstein, Dean

Donald D. Bourque, Associate Dean
Gerald W. Parker, Assistant Dean
Helen T. Pelersi, Assistant to the Dean
FACULTY: T. Anderson, D. Arnold, D. Ballou, D. Bishko, I. Bonawitz, D. Bourque, W. Bray, G. Brooker, C. Buss, H. Cannon, T. Dandridge, W. Danko, W. Diamond, R. Dillon, H. Farley, J. Fisk, J. Fonseca, R. Forbes, A. Frankle, N. Hegner, J. Hoagland, W. Holstein, B. Ismail, F. Jorden, R. Kaiser, H. Kahalas, S. Kauffman, R. Klages, F. Kolmin, H. Lee, U. Lim, J. Meehan, R. Minch, L. Mohan, W. Nemeroff, J. O'Connor, B. Oliver, H. Pazer, E. Petri, I. Sabghir, J. Seagle, M. Sewall, W. Sheehan, L. Solnick, A. Sweetser, R. Windsor, L. Wright, G. Yukl.

The School of Business offers degree programs at the undergraduate and graduate level which prepare students to enter managerial and professional careers. All programs are accredited by the American Assembly of Collegiate Schools of Business.

At the undergraduate level, the School offers Bachelor of Science degrees in Accounting and in Business Administration. Admission to the school at the undergraduate level is by formal application and is open to the best qualified students who have completed 56 or more degree ap? plicable credits with five of the following courses or their equivalent (1) Acc 211, (2) Eco 100 a, (3) Eco 100 b, (4) Msi 215, (5) Msi 220, (6) Psy 101 or Soc 115. Contact the Office of the Associate Dean for information and forms necessary for application.

At the graduate level, the school offers a Master of Business Administration (M.B.A.) and Master of Science in Accounting (MS). The M.B.A. is a two year program open primarily to non-business undergraduates. A combined BS/MBA program (five years) is available to business students (Preprofessional Program) and a similar program is available to selected non-business undergraduate majors. The M.S. program is a one year program for those students with undergraduate degrees in accounting and a two year program for those with non-accounting undergraduate degrees. Consult the School of Business graduate bulletin for details on graduate programs and courses.

The following undergraduate courses offered by the School of Business are considered liberal arts and sciences courses for purposes of degree requirements for the B.A. or B.S. degrees: Law 200, 220, 320, 427; Mgt 341, 343, 354; Msi 215, 220, 435; Mkt 351. Only six credits from these courses may be treated as liberal arts credits by accounting or business majors.

In the School of Business, course grading is based upon comprehension of specific course content as well as the ability to effectively communicate orally and in writing. Junior standing is normally required to take courses numbered 300 and above. Business core courses numbered 200 are a general prerequisite for courses in the School num. bered 300 or above.

All courses listed in this section are preceded by the school's letter ' $B$ '.

## ACCOUNTING PROGRAMS

Two accounting programs prepare students for careers in professional accounting. The accounting major is open to juniors entering the School of Business. The Departmental Program is a very selective program open only to a small number of freshmen. Both programs are registered with the Division of Professional Education, State Education Department and meet the educational requirements to become a Certified Public Accountant.

## Degree Requirements for the Major in Accounting

## Bachelor of Science

| Liberal Arts Requirements; |  | Gredits |
| :---: | :---: | :---: |
| English |  |  |
| Eng 100 | English Composition for Freshmen | 3 |
| $\begin{array}{cc} \text { Eng } & 112, \\ \text { or } & 113 \end{array}$ | Reading in Prose or <br> Drama | 3 |
| $\begin{array}{r} \text { Reo } 203, \\ \text { or } 212 \end{array}$ | Speech, Argumentation, <br> Debate | .. 3 |

Social and Behavioral Sciences
Psy 101 Introduction to Psyehology .. 3
Soc 115 Introduction to Sociology ... 3
Eco $100 \mathrm{a} \& \mathrm{~b}$ Principles of Economics .... $\overline{6}$
Eco 300 Intermediate Theory I:
Eco $300 \quad$ Microeconomics .......... 3
Elective three credits from:
Eco 301 Intermediate
Theory II:
Macroeconomics .... 3
Eco 350 Money and Banking ..... 3
Eco 355 Public Finance ........... $3 \underset{3}{3}$
Mathematics and Computer Science
Calculus (Mat 106, 107, 112, or 116) .............. 3
Csi 203 Data Processing $\ldots \ldots \ldots$....... 3
Mgt $341 \quad$ Behavioral Science for Organizations .............. 33
Liberal Arts Electives ..... 24
Total Liberal Arts Credits ..... 60
Business Core Requirements:
Acc 211-222 Financial and Managerial
Accounting ..... 6
Msi 215* Computer Applications in Business ..... 3
Law 220 Business Law ..... 3
Msi 220* Introduction to Business Statistics ..... 3
Fin 300 Financial Management ..... 3
Fin Elective in Finance ..... 3Marketing Principles andPolicies ................... 3
Law 321 Law of Business Organization ............. 3
Msi 330* Operations Research Applications .............. 3
Mgt $481 \quad$ Problems in Business Policy 3 Msi $322 \quad$ Statistics for Business

$$
\text { Research } \ldots \ldots . . . . . . . . .
$$

[^7]Additional Accounting Requirements:
Acc 311-312 Financial Accounting
Theory ................... 6
Acc 331 Cost Accounting ........... 3

Acc 411 Advanced Accounting ...... 3
Acc 441 Income Tax Accounting .... 3
Ace 461 Auditing ................... 3
Electives in Accounting .... 6

Total Business Credits ................................ 60
Total credits (minimum) ........................... 120
DEPARTMENTAL PROGRAM IN ACCOUNTING
A program open to selected students wishing to concen. trate in professional accounting starting in their freshman year.

## Degree Requirements for the Departmental Program in Accounting

## Bachelor of Science

Liberal Arts Requirements:
Credits
Eng 100 English Composition ....... 3
Eng 200 Intermediate Composition ... 3
Rco 203 Public Speaking or
or 212 Argumentation \& Debate . 3
Philosophy, logic, or ethics ..................... 3
Mat 112 Calculus I..................... 4
Mat 113 Calculus II .................... 4
Mat 108 Statistics ..................... 3
Mat 109 Applied Matrix Algebra .... 3
Csi 201 Computer Science ........... 4
Csi 203 Data Processing ........... 3
Eco $100 \mathrm{a}-\mathrm{b} \quad$ Principles of Economics .... 6
Eco 300, 301 Intermediate Economics .... 6
Eco $350 \quad$ Money and Banking ........ 3
Eco 355 Public Finance ............. 3
Psy 101 or Introduction to Psy or Soc .. 3
Soc 115
Additional Psy, Soc, or Anthro ................ 3
Elective ............................................... 3
Total Liberal Arts Credits

Business Core Requirements: Credits
Acc 211-222 Financial and Managerial Accounting ............... 6
Mkt $310 \quad$ Principles of Marketing .... 3
Mgt $341 \quad$ Behavioral Science for Organization .............. 3
Fin $300 \quad$ Financial Management ...... 3
Fin - Finance Elective ............ 3
Law 220 Business Law ................ 3
Law 321 Law of Organizations ...... 3
Mgt 48I Problems in Business Policy . 3
Msi 322 Statistics for Business ...... 3

Accounting Requirements:
Acc 311-312 Financial Accounting Theory .................... 6
Acc 33I Cost Accounting ............ 3
Acc 411 Advanced Accounting ...... 3
Aco 441-442 Taxation ....................... 6
Acc 461 Auditing ...................... 3

Unrestricted Electives .............................................. 9
Total Business and Accounting Credits ............ 60
Total credits (minimum) ........................... 120

## BUSINESS ADMINISTRATION PROGRAM

The programs in Business Administration, combining a major-second field sequence, are designed for students planning careers in general management, management science, marketing, and finance.

## Degree Requirements for the Major in Business Administration

Liberal Arts Requirements: Credits
Electives ..... 42
Required as part of major:
Calculus* (Mat 106, 107, 112, or 116) ..... 3
A Psy 101 Introduction to Psychology, or
A Soc 115 Introduction to Sociology ..... 3
English (Report Writing) ..... 3
A Eco 100 a \& b Principles of Economics ..... 6
Economics Elective at the 300 level orabove where Eco 100 a and $b$ areprerequisites ....................................... 318
Total Liberal Arts Credits ..... 60
Business Core Requirements: ..... Credits
Mkt 310 Marketing Principles and Policies ..... 3
Law 200** Legal Environment of Business ..... 3
Msi 215*** Computer Applications inBusiness ................... 3Msi 220*** Introduction to BusinessStatistics ................. 3
Acc 211 Financial Accounting ..... 3
Fin 300 Financial Management ..... 3
Acc 222 Managerial Accounting ..... 3
Msi 330*** Operations ResearchApplications ............. 3
Mgt 341 Behavioral Science forOrganizations ............. 3
Mgt 481 Problems in Business Policy ..... 3
Approved Concentration:
Management, Marketing, Finance, Management Science,or Combined$.15-18$
Business Elective .....  3
Unxestricted Electives ..... 9-12
Total credits (minimum) ..... 6 ..... 120

[^8]Minors in Business and Legal Studies. Students interested in a business or legal studies minor must provide the School of Business adviser with a detailed proposal signed by their major academic adviser. A legal studies minor consists of Law 200, 220, 321, 421, 422, 427. Suggested courses for the business minor are available in Room BA 361. Business and legal studies minors are admitted to upper division School of Business courses on a space available basis and only during the program adjustment period.

## PREPROFESSIONAL PROGRAM

This program is designed for outstanding students who wish to obtain the M.B.A. degree in five years. A formal application to the coordinated senior year should be submitted during the second term of the junior year. Students must submit a Graduate Management Admission Test score as a part of their application. Those interested in this program should consult with the Director of the M.B.A. Program concerning their eligibility for the program. A similar program has been developed for those in Mathematics interested in obtaining a B.S. and M.B.A. in 5 years.

Liberal Arts Requirement:

Students should complete the following Liberal Arts courses to be considered for admission to the program: A Eco 100 a and b (6), A Mat 107 (3), A Psy 101 or A Soc 115 (3).
Business Core Requirements: Credits
Msi $322 \quad \begin{gathered}\text { Statistics for Business } \\ \text { Research } \ldots . . . . . . . . . . . . .\end{gathered}$
Mkt 310 Marketing Principles and Policies ................... 3
Law 200 Legal Environment of Business .................. 3
Msi 215* Computer Applications in Business ................... 3
$\begin{array}{ll}\text { Msi } 220^{*} \quad \text { Introduction to Business } \\ \text { Statistics } \ldots \ldots . . . . . . . . . . . . . . . . & 3\end{array}$
Acc 211 Financial Accounting ....... 3
Fin $300 \quad$ Financial Management ...... 3
Acc 222 Managerial Accounting ...... 3
Msi 330* Operations Research Applications .............. 3
Mgt 341 Behavioral Science for Organizations ............. 3

[^9]Additional Business Requirements:
Bus 527 Labor Relations ............ 1
Bus 522 Organizational Decision
Making ................... 1
Bus 511 Organization Theory ........ 1
Bus 515 Bayesian Statistics .......... 1
Bus 523 Forecasting .................. 1
Bus $582 \quad$ Business Stimulation Methods 1

Total .................................................. 36
Unrestricted Electives** .............................. 9

Second Term of M.B.A. Program ............ 15
Second Year of M.B.A. Program ............. 30
45
Total credits (minimum) ........................... 150

## Accounting

Acc 211 Financial Accounting (3)
Basic principles of accounting theory and practice, nature of assets and equity; income measurement and statement preparation.

## Acc 222 Managerial Accounting (3)

Emphasis on the uses of accounting data by management. Budgeting, cost concepts and analysis, accounting systems, price level changes, cost-volume-profit relationships and funds flow analysis. Prerequisite: Acc 211.

## Acc 311 Financial Accounting Theory I(3)

An intensive study of basic accounting theory and practices with emphasis on balance sheet accounts and their interrelationship with income statement accounts with appropriate reference to applicable APB and FASB opinions. Prerequisite: Acc 222.

## Acc 312 Financial Accounting Theory II (3)

Accounting theory relating to the measurement of assets, liabilities, and capital structure; their presentation in statements of financial position and their interrelationship with income statement accounts. Analysis of changes in financial position and review of applicable APB and FASB opinions. Prerequisite: Acc 311.

[^10]
## Acc 331 Cost Accounting (3)

Cost accounting theory and practice including job order, process and standard cost systems. Joint and by-product costing. Prerequisite: Acc 222, Msi 215 and 220.

## Acc 411 Advanced Accounting (3)

Problems in accounting for price-level changes, estate adminis. tration and trusts, statement of affairs, receivership accounting, and partnerships; introduction to consolidations. Prerequisite: Aco 312.

## Acc 413 Advanced Accounting-Consolidations (3)

Problems involving intercompany profits, changes in equity, reciprocal affliations, international accounting, and alternative treatments of acquisitions (purchase vs. pooling). The impact of SEC reporting and financial disclosure of multientity corporations. Prerequisite: Acc 411.

## Acc 415 Selecied Topics in Accounting Theory (3)

A critical examination of selected topics in accounting theory through intensive study of current literature and official releases of professional and regulatory bodies. Prerequisite: Acc 312.

## Acc 441 Income Tax Accounting I (3)

Concepts of taxation and of taxable income. Interpretation and application of present tax laws as they pertain to taxpayers, Tax savings and planning. Prerequisite: Acc 211 and Senior Standing or permission of instructor.

## Acc 442 Income Tax Accounting II (3)

Theory and practice of taxation as applied to partnership, corporate entities, and fiduciaries. Prerequisite: Acc 441.

## Acc 451 Governmental Accounting (3)

A study of accounting for all levels of government and related institutions; application of basic principles and modern concepts of double entry; incorporation of budget accounts into the accounting system, Prerequisite: Acc 211.

## Acc 461 Auditing (3)

A fundamental analysis of auditing and its contribution to financial reporting, with primary emphasis upon the independent public accountant's attest function. The application of audit tools, i.e., systems flowcharting, statistical sampling, and EDP, is integrated with the coverage of audit working papers. Problems of legal liability are introduced and analyzed. Prerequisite: 12 credits of accounting and senior standing.

## Acc 481 Financial Information Systems (3)

Analyzing, designing, implementing and evaluating computerbased and noncomputer-based financial information systems. Blending and combining accounting, computers, information, management and organization and the systems approach into a unified body of knowledge and practice. Prerequisite: Acc 222 and Msi 215 or equivalent.

## Finance

## Fin 300 Financial Management (3)

Emphasis on the management of funds flow within the corporate framework. Topics include the management of working capital and the evaluation of long-term investment decisions including mergers and acquisitions. Course provides a comprehensive introduction to managerial finance. Prerequisite: Acc 222.

## Fin 301 Corporate Financial Policy and Strategy (3)

The overall orientation of Fin 300 is continued with this course but the focus is on the long-term operation of the firm and on episodic events. Topics include a continuation of capital budgeting with added emphasis of financing for growth, bargaining for funds, and the capital struoture. This is a case course supplemented with readings, decision analysis, and computer simulation. Prerequisites: Fin 300 and Msi 330.

## Fin 333 Investment Management (3)

The prineiples and techniques of security analysis and investment timing; the formulation of investment policies for individuals and institutions. Prerequisite: Fin 300.

## Fin 375 Money and Cupital Markets (3)

This counse provides an analytical framework for understanding the dynamics of financial markets and the role of financial intermediaries in allocating funds in these markets. The use of flow-offunds analysis in interest-rate determination is developed, and some emphasis is placed upon the structure and impact of the monetary process, including the role of the Federal Reserve, Managerial aspects of commercial banking will be introduced through case studies and a bank-simulation model. Prerequisites: Fin 300 and A Eco 100 b.

## Fin 436 Securities Analysis and Portfolio Management (3)

Intensive study of the methods, standards, and techniques of appraising stocks and bonds, Principles governing the management of investment funds and portfolios are developed through case studies. Prerequisite: Fin 333 or permission of instructor.

## Fin 455 Corporate Risks and Responsibilities (3)

A study of the preventive mitigation of losses resulting from asset destruction, devaluation, and obsolescence, and from exposures arising from long-term performance contracts. Identification of and protection against wholly or partly transferable risks such as casualties; defalcations; and public, product, and service liabilities. Methods of assuring survival and growth of the organization and development of policies to implement the corporation's social responsibilities.

## Fin 475 Management oí Financial Institutions (3)

Attention is devoted to a managerial approach to the problems of various financial intermediaries, including savings and loan associations, insurance companies, mutual funds, and investment banking firms. The interrelationship between these intermediaries and the nature and structure of specific markets, such as the bond market, the stock market, and the mortgage market, are considered in depth. Prerequisite: Fin 375.

## Law

## Law 200 Legal Environment of Business (3)

The basic legal concepts around which our society is structured will be stressed. The primary objective of the course is to acquaint students with legal concepts and their applications in modern business society. Students should become familiar with concepts, legal procedures, terminology and legal principles in operation.

## Law 220 Busỉness Law (3)

The legal principles underlying business relations, including contracts, commercial paper, significant articles of the Uniform Commercial Code and government and business.

## Law 320 Environmental Law (3)

An overview of legal problems in environmental management with emphasis on principles of effective resource management in an industrial society. Prerequisite: Law 200 or Law 220 or con. sent of instructor.

## Law 321 Law of Business Organization (3)

The legal concept of agency, partnership, corporations and bankruptcy, Uniform Partnership Act and Business Corporation Law.

## Law 421 Law of Property (3)

The law of real and personal propety, including motgages and conveyances, landlord and tenant relationships. Prerequisite: Law 220.

## Law 422 Trust and Estate Law (3)

Covers presentation of material concerning living and testamentary trusts; analysis of the requirements of a will, including its "preparation, execution, and probate; administration of estates of individuals dying with and without wills.

## Law 427 Seminar in Business Law (3)

Basic legal reports used in New York State are analyzed. Landmark cases are examined and topics of major interest are discussed.

## Management

## Mgt 341 Behavioral Sciences for Organizational Administration (3)

A theoretical and experiential foundation for constructive administration and leadership is developed through an improved understanding and application of the behavioral sciences. Individual, dyadic group and inter-group behavior are explored within the contest of organizational structure, change and development. Prerequisite: A Psy 101 or A Soc 115. Students with backgrounds in Organizational Psychology or Organizational Behavior admitted only with the consent of the instructor.

## Mgt 343 Human Resources Management (3)

Study of human resources in work organizations, emphasizing social psychological perspective. Manpower planning, personnel selection, management development, and compensation processes. Related theories of individual and group motivation and behavior. Prerequisite: Mgt 341.

## Mgt. 354 Labor Relations in American Society (3)

A broad study of American labor-management relations aimed at developing the ability to understand and interpret contemporary labor developments. Patticular emphasis on: the growth of labor organizations; comparison of craft and industrial unions; and governmental policy as expressed through legislation as well as administrative and judicial actions.

## Mgt 380 Comparative Administration (3)

Study of management processes in various types of organizations, including manufacturing, public and service institutions. Organizational design, planning, control, human resources management and decision-making with comparable approaches in an intraand cross-cultural framework. Prerequisite: Mgt 341.

Mgt 441 Rewards and Motivation Systems (3)
An examination of processes for relating organizational membership, productivity and rewards both extrinsic and intrinsic This course will focus on methods for evaluation and comparison of employees at all organizational Ievels. Prerequisite: Mgt 343.

## Mgi 443 Manpower Planning (3)

Study of the quality, quantity and utilization of human resources in the public and private sectors of the economy, relating the human resources within organizations to external work force characteristics, manpower forecasting and organizational planning. Prerequisites: Mgt 343 and Mgt 354.

## Mgt 455 Collective Bargaining (3)

Analysis of the collective bargaining process through the study of cases dealing with contemporary developments and basic issues such as adjustment to technological change, promotion of labormanagement cooperation, discipline, job assignment and senority. Prerequisite: Mgt 354.

## Mgt 480 Contemporary Problems in Management (3)

Intensive study of contemporary problems. Topics are drawn from managerial problems of technology, organizational design and change, analysis of organizational effectiveness, conflict resolution, management of professional and multinational organizations, and current issues in individual, group and organizational behavior. Prerequisite: Mgt 343.

## Mgt 481 Problems in Business Policy (3)

Development of an overall madragement viewpoint, integrating various specialized functions of internal organization with the external economic, social, political and technological environment. Case analysis in strategy formulation and implementation. Business Game. Prerequisite: senior standing required.

## Management Science

## Msi 215 Computer Applications in Business (3)

Concepts of computer systems; hardware and software; the role of computers in business. Systems and program floweharting; matrix algebra operations; the use of canned programs. Emphasis on programming business-oriented applications in the BASIC language. Not open to students with credit in a Csi 201 or equivalent.

## Msi 220 Introduction to Business Statistics (3)

Fundamentals of statistical analysis oriented toward business problems. Elementary probability theory, frequency distributions, central measures and dispersion, sampling distributions. Classical and Bayesian decision-making, estimation and tests of hypotheses. Prerequisites: Intermediate Algebra or a Mat 100. Not open to students with credit for A Eco 320 or A Mat 108.

## Msi 230 a buantitative Foundations for Business (3, 3)

An accelerated course encompassing all the materials covered in Msi 215, 220 and 330. Prerequisite: permission of the instructor based on satisfactory mathematics SAT score or grade in calculus. Msi 230 a is a prerequisite for Msi 230 b .

## Msi 322 Statistics for Business Research (3)

A survey of many statistical techniques in a business setting. Probability and sampling distributions. Tests for multiple means and variances. Regression and correlation. Non-parametric methods. Prerequisites: A Mat 107, Msi 220, and Msi. 215 or their equivalents.

## Msi 330 Operations Research Applications I (3)

Use of operations research models to solve problems in production and distribution. Included will be linear programming, transportation methods, scheduling algorithms, network models, inventory models and forecasting models. Computer based solutions will be employed. Prerequisites: A Mat 107 and Msi 215 or their equivalent.

## Msi 331 Operations Research Applications II (3)

Use of analytic models in selected functional areas-finance, marketing, human resources. Topics include calculus-based techniques, simulation, decision-making under uncertainty, heuristic and dynamic models. Prerequisites: Msi 220 an 330 or their equivalent.

## Msi 361 Economics of Business Decisions (3)

A study of the application of economic analysis to problems of business decisions. The topics include cost and demand functions, prouction functions, market structure, price determination, capital bugeting and optimization of operations under conditions of uncertainty. Special attention is given business forecasts and their relation to policy development and change. Prerequisites: A Eco 100, Msi 220 and Msi 330.

## Msi 412 Operations Management (3)

Description and study of the methods of planning and controlling operations. The general applicability of the principles of management science to production and service organizations. Prerequisites: Msi 220, Msi 330 and A Mat 107 or equivalent.

## Msi 434 Advanced Deterministic Models (3)

Special topics in linear programming, nonlinear programming, dynamic programming and deterministic inventory theory with applications in the functional desciplines. Prerequisites: Msi 330 and Msi 331.

## Msi 435 Advanced Probabilistic Models (3)

Special topics in queuing theory, replacement theory, probabilistic inventory theory, Makov chains, simulation an stochastic programming with applications in the functional disciplines. Prerequisites: Msi 322, Msi 330 and Msi 331.

## Marketing

## Mkt 310 Marketing Principles and Policies (3)

An analytical survey of problems encountered by firms in marketing goods and services; takes a marketing management approach to the solving of problems related to the structure and operation of our marketing mechanism and the functioning of its various parts. Prerequisite: A Eco 100 a.

## Mkt 312 Marketing Research (3)

Research process as an aid in decision-making in marketing management. Specific attention is paid to the planning of research and gathering and interpretation of data. Prerequisite: Mkt 310 and Msi 220.

## Mkt 351 Buyer Behavior (3)

Analysis of the theoretical foundations of buyer behavior. Emphasis on decisiou-making processes incorporating fundamental psychological functions, sociological interactions, and consideration of consumer and industrial buyer decision-making as it applies to marketing management. Should be taken concurrently with Mkt 312. Prerequisites: Mkt 310 and A Psy 101 or A Soc 115.

## Mkt 411 Marketing Management (3)

Marketing policies and strategies with special emphasis placed on the integration of product planning, pricing, distribution, promotion, and service ill management decisions. The case approach is utilized extensively. Prerequisite: Mkt 351.

## Mkt 430 Sales Management (3)

Organization of the sales department, developing and training a sales force, sales planning and forecasting, quotas, territories, performance standards, and analysis and control of selling costs. Prerequisite: Mkt 312.

## Mkt 432 Advertising Management and Strategy (3)

The development of mass communication strategy. Emphasis on integration of advertising and public relations activities with the firm's over-all marketing efforts. Prerequisites: Mkt 312 and Mkt 351 or consent of instructor.

## Mk! 436 Channels of Distribution (3)

Provides an integrated overview of alternative linkups of producers and middlemen, the institutions involved, and the strategies and control of their relationships and key functions performed by them in their role as chamel members. Both theory of channel structure and relationships and management decisions necessary for effective organization are stressed. Prerequisite: Mkt 312.

## Mkt 442 Marketing Research Design (3)

Exploration in depth of the application of experimental designs to the explanation of marketing phenomena. Topics covered proceed from simple classical design of proof through Latin square and factorial experiments. Associated data analysis methods are considered. Student design of research is emphasized. Prerequisites: Mkt 312 and Mkt 351 or consent of instructor.

## Mkt 446 Models in Marketing (3)

Applications of analytic models and decision-sciences techniques to marketing management problems. The design and application of models are examined through case examples and conversational computer programs. Programming language skills are not a prerequisite. Prerequisite: Mkt 312.

## Mkt 452 Topics in Consumer Behavior (3)

An in-depth study of several areas of contemporary consumer behavior research. The course involves analysis and comparison of related field and laboratory research : the price-quality controversy, attitude measurement and change, physiological measurement, personality, diffusion and communication theories, consumer dynamics. Prerequisite: Mkt 351.

## Mkt 476 International Marketing (3)

Extension of business activities into international markets, cultural, economic and political influences on global business operations. Prerequisite: Mkt 310.

## Special Courses

## Bus 495 Independent Study in Business I (1-3)

An individual study plan in a selected area as approved by the instructor and the dean in conference with the student. Written and oral progress reports required. Open only to qualified students.

## Bus 496 Independent Study in Business II (1-3)

An advanced or expanded individual study plan in a selected area as approved by the instructor and the dean in conference with the student. Written and oral progress reports required. Successful completion of Bus 495 required.

# School of Criminal Justice 

Donald J. Newman, Acting Dean<br>John E. Morgan, Assistant Dean

FACULTY: W. Brown, F. Cohen, D. Georges, M. Gottfredson (visiting), T. Hirschi, R. Har̊dt, M. Hindelang, J. Kress, D. Newman, G. Newman, L. Sherman, H. Toch, R. Warren, L. Wilkins.

All aspects of crime and societys reaction to crime are the concern of the School of Criminal Justice. Considered are the nature of crime and the social or personal patterns that produce or define it; the logic behind the choice of the conduct that will be handled by criminal justice process as only one of the many social control mechanisms; organization and operation of criminal justice system agencies (police, prosecution, courts, correction and rehabilitation, and the special purpose control agencies) ; and the strategies and personal and technical skills required to implement change in the criminal justice system. Not only are criminal justice systems studied as entities, but emphasis is placed on the relationships between the various elements of the systems.

In addition to filling the ever-increasing demand for persons qualified to do research on and to teach about crime and the criminal justice system, graduates will find positions in all of the operating agencies of the system. Some will prefer line responsibilities, and others staff positions, either in the agencies themselves or with federal officials, governors, mayors, and others having frequent contact with elements of the criminal justice system. Private agencies will also find useful persons with a thorough knowledge of how the system operates.

The School of Criminal Justice offers graduate programs leading to the degree of Master of Arts and Doctor of Philosophy.

A graduate student in the School of Criminal Justice must meet the requirements and standards of the school and of the Office of Graduate Studies of the State Univer. sity of New York at Albany and be governed by their reg. ulations.

For a complete description of the programs and courses leading to the master's and doctor's degree, see the current School of Criminal Justice Bulletin.

In response to student demand, the School of Criminal Justice is offering the following five undergraduate courses,

All undergraduate courses offered by the School of Criminal Justice are considereed liberal arts and sciences courses for purposes of degree requirements for the B.A. or B.S. degrees.

Courses listed in this section are preceded by the school's letter " $C$ ".

## Crj 300 (Soc 281) Introduction to the Nature of Crime and its Control (3)

A multi-disciplinary analysis of criminal and delinquent behavior. Special attention will be given to the definition, nature and scope of crime and delinquency in the United States and the explanations which evolved to account for these phenomena; the course will include historical analysis of criminological thought and strategies of social control, with special emphasis on the law, which underpin current (and past) penal codes and correctional practices.

## Crj 301 Introduction to the Criminal Justice Process (3)

An analysis of the decisions made in the process whereby citizens become suspects, suspects becoming defendants, some de, fendants are convicted and in turn become probationers, inmates and parolees. This is done by analysis of operational practices at the major criminal justice decision stages. Innovative programs and the dilemmas of change in policing, diversion, court administration, sentencing and community correctional programs will also be analyzed.

## Crj 304 (Soc 383) Juvenile Delinquency and Juvenile Justice (3)

A description of the distribution of delinquency, stressing both official and unofficial data as well as a multi-disciplinary overview of major theories of delinquency control. Against this background, the course will analyze the justice system's response to delinquency. A major point of emphasis will be police, courts, and correctional practices in dealing with youthful offenders as well as proposals for the reform of those practices.

## Crj 401 The Correctional Process, Prisons and Community Alternatives (3)

An interdisciplinary analysis of trends in the functions and administration of institutional and community processing of the convicted offender. Special attention will be given to current corrections alternatives, issues of screening and classification, and the legal norms and constraints effecting correctional practice. Contemporary reform proposals will be examined. Prerequisites: Cj 300 or 301.

## Crj 499 Seminar in Criminal Justice (3)

Seminar will cover a variety of topics in the criminal justice system. Contents of this course will vary at each offering.
The following courses are open to qualified seniors:
Crj 500 Pro-seminar on the Nature of Crime (4)
Crj 520 Pro-Seminar on Law and Social Control (4)
Crj 540 Pro-seminar on the Administration of Criminal Justice (4)

Crj 560 Pro-seminar on Planned Change and Innovation (4)

## School of Education

Gilbert D. Moore, Dean

In cooperation with the Colleges of Humanities and Fine Arts, Science and Mathematics, and Social and Behavioral Science, the School of Education offers an undergraduate Teacher Education Program leading to provisional certification as a teacher in the secondary schools of New York State.

The school also offers a major in business teacher education, as well as a number of professional elective courses appropriate for undergraduates who are not preparing for teaching.

The following undergraduate courses offered by the School of Education are considered liberal arts and sciences courses of degree requirements for the B.A. and B.S. degrees: Bus 351; Che 350, 353, 356; Pec 360; Fdn 300, 301, 405, 497; His 419, 420; Phl 330; Sau 202, 205, 210, 420; Soc 410, 411.

## DEPARTMENT OF TEACHER EDUCATION

## Mauritz Johnson, Chairman

FACULTY: Business and Distributive Education: B. Wakin, Coordinator; R. Blodgett, R. Knouse, D. Mulkerne, C. Petitjean, H. Safford, M. Tavarozzi. English Education: M. Finder, Coordinator; W. Kraus, M. Robinson, D. Schenck. Languages and Culture in Education: C. Hancock, Coordinator; R. Light, S. Losee, G. Melendez, C. Perez, W. Whitney. Mathematics and Science Education: W. Farmer, Coordinator; M. Farrell, R. Gardner, C. Sipe. Social Studies Education: G. Snyder, Coordinator; J. Crowley, M. Huffmire, J. Kiepper. Field Experiences: R. Anderson, Coordinator of Student Teaching; M. Lamanna, A. Lento, E. Sargent.

The Department of Teacher Education administers programs leading to provisional and permanent certification to teach academic and business subjects in secondary schools in New York State.

Students who wish to enter the Teacher Education Program normally enroll in one or more professional courses during the sophomore year. However, formal application to the School of Education should be made as soon as the student has decided to prepare for teaching. Students whose applications are not accepted will not be permitted to register for "methods" and student teaching.

Because it has been necessary to establish enrollment ceilings for certain teaching majors, satisfying the minimum requirements does not guarantee admission to the program. Students are encouraged to inform the appropriate subject area coordinator of their tentative intentions to prepare for teaching as early as the Freshman year.

Students who wish to defer teacher education until completion of the baccalaureate may wish to consider a Masters program in Basic Classroom Teaching (BCT). The appropriate subject area coordinator can provide information about the program and prospects for admission, as well as about the possibility of designing an integrated five-year program leading to both degrees.

## Undergraduate Professional Requirements*

Undergraduate students completing a program in Teacher Education must complete their major requirements and the following professional sequence:

1. A course identified with the TeachingLearning Process

3 credits
2. A course identified with the study of School and Society

3 credits
3. Professional elective (s) [may be additional course from (1) or (2) $]^{* *} \ldots . .3$ credits
4. The Teaching of Secondary School (subject) (the 401 series-commonly referred to as "methods") ***

3 credits
5. Student Teaching in (subject) (490 series, including a concomitant seminar) ${ }^{* * *}$

9 credits
Minimum-Total ................................... . 21 credits
An added requirement for certification is a course in Drug Abuse Education (E Tch 402) ................... 2 credits

The "methods" course ( 401 series or E Bus 321) is normally taken during the junior year. It cannot be scheduled later than the first session of the senior year.

One term of the senior year is called the "Professional Session." One half of that session is devoted to full-time student teaching. The other half of the session is given over to professional courses and may include a special course in the major field of study.

[^11]This program permits students, with advisement, to plan a professional sequence which meet their particular needs and interests. At the same time it preserves a structure of preparation which assures the student of the opportunity to master the knowledge and skills requisite to effective performance as a teacher in the secondary schools.

To assist the student in making appropriate selections the following explanations are offered:

1. The Teaching-Learning Process--includes courses contributing to the student's understanding of adolescent development, the process of learning, appropriate instructional objectives and strategies for achieving them.
Examples of current offerings: E Psy 200 Psychological Foundations of Education; E Psy 440 Evaluation; E Tch 305 Directed Activities in Teaching; E C \& I 405 Individualizing Instruction in the Secondary School; E Cmu 401 Educational Communications Concepts I (See Note 1).
2. School and Society-includes courses contributing to the student's understanding of the American educational system-its development, purposes, organization, and services.
Examples of current offerings: E Fdn 300 Social Foundations of Education; E Fdn 301 Issues in American Education; E C \& I 400 The Program of the Secondary School; His 420 Vocation in American Society; E Soc 411 Education and Social Stratification (See Note 1.)
3. Professional Elective (s)-includes courses which extend the student's knowledge and skills in specific areas related to his proficiency as a teacher.
The student may expect to choose from offerings concerned with reading instruction, counseling and personnel services, educational communications, education of exceptional and disadvantaged, school administration, and psychology of learning.

Note 1. An official listing of all acceptable courses, by category, will be included in an annual advisement bulletin available to advisers and students.

## Student Teaching

The placement of all student teachers is done by the Coordinator of Student Teaching.

The majority of student teaching assignments take place in the schools of the greater Capital District area although at times centers are arranged in other parts of New York State.

Students expecting to do student teaching should consult with the Coordinator's office in the first session of the junior year. Teacher Education students in the Junior Year Abroad programs should inform the Coordinator of Student Teaching of their plans during the second session of their sophomore year. Most undergraduate students will enroll in one of the 490 Series of Student Teaching. Undergraduate students in mathematics and science must apply for the Albany Mathematics-Science Teaching Project (AMST). Those who are accepted will enroll in the E 492 Series Methods and Student Teaching. Students wishing more in* formation should contact the coordinator of their teaching field.

The Coordinator of Student Teaching tries to place applicants in schools where they can perform most effectively. This requires close attention to the academic preparation and personality of applicants as well as to their wishes for grade levels and type of school. Once students are assigned, the staff provides frequent and critical supervision. Housing and transportation during student teaching remain the responsibility of the student.

Registration for Student Teaching during the academic year 1978-79 will take place on the following dates in the School of Education rooms 332 and 333, during the Fall session 1977:

## Major

Business Education
English
Mathematics
Languages
Sciences
Social Studies
Speech Pathology

## Dates

November 17 and 18
November 28 and 29
November 30
December 1 and 2
December 5
December 6 and 7
December 8 and 9

## Education Courses

All courses listed are preceded by the school's Letter E unless otherwise noted.

## SPECIALIZED METHODS COURSES

Objectives, motivation, selection of content and materials, organization of classroom procedures, and evaluation of instruction. Observation of, and participation in, a secondary school arranged. Prerequisite: acceptance in teacher education program.

## Bus 321 The Teaching of Distributive Education (3)

Required of all distributive sequence business education majors.

## Bus 401 The Teaching of Business Education (3)

Required of all office and accounting sequence business education majors.

## Eng. 401 The Teaching of Secondary-School English (3)

## Fit 401 The Teaching of Secondary-School Foreign Languages (3)

## Sst 401 The Teaching of Secondary-School Social Studies (3)

## Tch 402 Teaching about the Nature and Abuse of Drugs, Alcohol and Tobacco (2)

Methods of Teaching about Drugs, Alcohol and Tobacco Abuse including an examination of the nature of these addictives with special emphasis on the hazards and implications for the teenagers and the secondary school.

## 492 Series

A field-centered, performance-based practicum in teaching. Combines theoretical inquiry, demonstration of knowledge skills, performance skills, and experience related to teaching in appropriate school settings. Normally requires the equivalent of eight to ten weeks of full-time work in the schools. Prerequisites: Admission to teacher education program and permission of instructor.

Mat 492 Methods and Student Teaching (Mathematics) (12)
Sci 492 Methods and Student Teaching (Science) (12)
Sst 492 Methods and Student Teaching (Social Studies) (12)

## STUDENT TEACHING COURSES

## 490 Student Teaching (9)

Student teaching is a practicum in professional education "wherein the student learns by practicing under supervision the theoretical bases of the discipline and the teaching of that discipline. Student teaching is the culminating course for the undergraduate student seeking state provisional certification. Courses in the student teaching series are listed below. Prerequisites: acceptance by the School of Education to the Teacher Education Program, an acceptable grade (minimum of "C" or " $S$ ") in the appropriate 401 series course, an average of " C " or equivalent in all education courses taken prior to student teaching, and registration with the Coordinator of Student Teaching.

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Bus 490 Student Teaching (Business)
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Eng 490 Student Teaching (English)
Fre 490 Student Teaching (French)
Ger 490 Student Teaching (German)
Ita 490 Student Teaching (Italian)
Lat 490 Student Teaching (Latin)
Rus 490 Student Teaching (Russian)
Sau 490 Student Teaching (Speech Pathology and Audiology)

Spn 490 Student Teaching (Spanish)
Sst 490 Student Teaching (Social Studies)
Mat 490 Methods and Student Teaching (Mathematics) (12)
Sci 492 Methods and Student Teaching (Science) (12)
Sst 492 Methods and Student Teaching (Social
Studies) (12)

## Education Elective Courses

## (Acceptable in the Professional Sequence)

## Adm 422 School Organization for the Classroom Teacher (3)

Principles and problems of school organization and function. Processes and methods of local leadership and participation by the classroom teacher, including an understanding of human relations. The relationship of the classroom teacher to professional personnel and others.

## C\&1 400 The Program of the Secondary School (3)

Origins and present status, analysis of curriculum problems and trends. Process of curriculum change and the teacher's role in it. Students study patterns and materials in their fields of teaching and construct teaching units. Open only to students during the professional term of the senior year.

## C\&I 405 Problems and Procedures for Individualization in the Secondary School Classroom (3)

Ways of individualizing instruction and encouraging independent study in the secondary school with an emphasis on instructional planning, strategies and techniques for directed study, tutoring, and independent study. One classroom session per week plus completion of modules, laboratory work, and independent study required. Prerequisite: educational psychology and methods of instruction in specific subject area or equivalent.

## C\&l 411 Programs and Resources for Teaching Exceptional Children (3)

An examination of current programs and instructional techniques focusing on the gifted, retarded, auditory handicapped, visually handicapped, special health problems, emotionally disturbed and the speech handicapped. Definitions and characteristics, development of resources and teaching materials, field study.

## C\&l 414 Aesthetic Development in the Secondary School (3)

Consideration of the aesthctic dimension of the secondary-school curriculum, intended as an aid to non-specialists in the arts. Development of instructional materials and exploration of appropriate teaching procedures for promoting adolescents' aesthetic development.

## C\&I 423 Group Procedures and Techniques in Teaching (3)

An experience-based exploration of ways to promote learning through an application of group process theory and techniques. Emphasis on such skills as: communication, cooperation, discussion, feedback, decision-making, problem solving, self-evaluation. Provision for creative designing of teaching strategies.

## C\&I 425 Major Issues in Teaching the Disadvantaged (3)

Antecedents of the present status of disadvantaged students. Analysis of current programs and materials. Design of teachable material for classroom use.

## C\&I 431 Common Goals of School Subjects (3)

Study of certain curricular aspects which are common to various secondary-school subjects. Such topics as creativity, values, mental health, and moral development will be considered. Topics may change from quarter to quarter.

## C\&I 450 Principles and Procedures in School Program Development (3)

Teachers' role in curriculum decisions and instructional proccdures in program selection, initiation, conduct and evaluation.

## Cmu 401 Educational Communications Concepts I (3)

Educational communication via media; taxonomy, characteristics, sources, selection and evaluation of media.

## Cmu 402 Educational Communications Concepts II (3)

Introduction to design of messages and simple graphic production techniques. Preparation and production of a variety of media.

## Cmu 425 Educational Motion Picture Productions: Fundamentals (3)

Theory, principles, and techniques of producing and evaluating cducational motion pictures for specified audiences. Prerequisite: consent of department.

## Cmu 435 Educational Television: Production and Direction (3)

Techniques involved in the production of educational television programs. Prerequisite: consent of department.

## Cmu 450 Mass Communication and Education (3)

Implications of mass communication for education; communication revolution; mass media, propaganda; effects of technology on education. Prerequisite: consent of the department.

## Cps 421 Introduction to Counseling and Personnel Services (3)

Aims, philosophy, scope and organization of guidance roles of non-specialists and specialists in pupil-personnel; pupil needs in the contest of economic and cultural influences.

## Fdn 300 Social Foundations of Education (3)

Inquiry into educational policies, purposes and ideas based upon the resources and insights of the humanities and the social sciences. Not open to students with credit for Fdn 200 or Fdn 301.

## Fdn 301 Issues in American Education (3)

Study of the structure and function of American education in the light of contemporary problems. Not open to students with credit for Fdn 200 or Fdn 300.

## Fdn 405 Women and Education (3)

A study of women and education using sociological and his. torical sources. An examination of the relationship of women to institutions of education and the new criticisms of the conventional roles of women in education.

## Fdn 497 Independent Study in Foundations (3-6)

Independent reading, study, and research in foundations of education. Prerequisite: consent of department.

## His 419 A Social History of Childhood and Childcaring Institutions in America (3)

A socio-historical examination of the changing status of children and young people in American society with a critical evaluation of the social institutions and legitimating ideologies which serve to socialize the young for entry into adult society. Intended for juniors and seniors in the teacher education program and for other students interested in the social sciences or in careers in the helping professions.

His 420 The Meaning of Vocation in American Society (3)
A study of the ways in which the meaning of vocation and/or profession is comprehended in different historical eras. Emphasis is on the social definition of vocation and its effects on educational methods and goals. Several vocations will be siudied with special attention to the role of the teacher as a profession. Intended as an elective for juniors and seniors in the teacher education program and for students generally in the university interested in the historical study of education.

## Phl 330 Classics in Philosophy of Education (3)

A study of the classical works that have been written in philosophy of education. Close analysis will be used to examine these major books to see how they express significant and persistent viewpoints about philosophy of education. Intended as an elective for juniors and seniors in the teacher education program and for students in the university interested in philosophy and education.

## Psy 200 Introduction to the Psychological Process of Schooling (3)

A critical analysis of the psychological process of schooling. An interpretive survey of the literature and research in learning, motivation, development, and intelligence and their impact on

American education and society, Observation and participation in school and community agencies are required. Two class periods. Two laboratory diseussion periods. Intended for sophomores and juniors.

## Psy 360 Behavior Problems in the Classroom (3)

Practical techniques and materials for handling the child in the "regular" classroom and in other group settings who has some degree of learning and/or emotional and/or social problems.

## Psy 400 Instructional Psychology (3)

An intensive investigation of theories and research in learning and motivation as they apply to classroom instruction, Open to students in the teacher education program. Others by permission of the department.

## Psy 420 Child and Adolescent Development (3)

Theory and research in sacial, emotional, physical, and intellec. it tual development and its application to instruction. Emphasis on the late childhood through middle adolescence. Open to students in teacher-education. Others by permission of the department.

## Psy 440 Evaluation (3)

Selection, construction, interpretation of tests and reports. Open only to students during the professional term of the senior year.

## Psy 460 Seminar in Educational Psychology (3)

Selected topics and issues in human learning, motivation, development and instruction. Open to seniors with permission of the department.

## Psy 480 Educational Psychology: Independent Study (3-6)

Designed for students who wish to complete E Psy 400 and/or E Psy 420 as a competency-based, self-instructional program. Regular evaluation and conferences, with mentor required, Open to students in teacher-education. Others permission of the department.

## Rdg 402 Reading in Secondary Schools (3)

An introductory study of the theory and practice of reading instruction in secondary schools. Examination of the contexts in which reading occurs, of the various philosophical approaches to secondary reading instruction, and of the major practices and procedures typically employed in reading instruction. There will be opportunities to observe secondary reading programs in the Albany area.

## Soc 300 Introduction to the Sociology of Education (3)

An introduction to the sociology of education. An emphasis on the impact of institutions and various educational problems.

## Soc 410 Problems of Urban Education (3)

A critical study of selected classical and modern sociological writings on urbanism and an exploration of the impact of the city setting on educational institutions. Intended as an elective for juniors and seniors in the teacher education program and for other students in the university interested in the study of sociology and education.

## Soc 411 Education and Social Stratification (3)

An historical and sociological examination of social inequality with particular emphasis on the effect of educational institutions in the creation, maintenance, or attenuation of social stratification. Prerequisite: A three hundred level foundations of education course or consent of the instructor.

## Tch 305 Directed Activities in Teaching (3)

For students interested in on-site participation as a teacher's assistant. Seminar on activities of teaching. Requires two half-day sessions each week. Open to students prior to student teaching. Permission of chairperson required for students who have completed student teaching. Prerequisite: consent of Department of Teacher Education.

## BUSINESS AND DISTRIBUTIVE EDUCATION

The Business Education area of the Department of Teacher Education administers undergraduate and graduate programs for the preparation of business and distributive educators and offers professional and content courses in business, office and distributive subjects.

The undergraduate programs lead to a Bachelor of Science degree and provisional certification to teach either business or business and distributive education subjects in secondary schools of New York State. The programs fear ture a major sequence in business subjects with a second field in education.

## Degree Requirements for the Major in Business Education

## Admission

Qualified students may be admitted upon the satisfactory completion of a minimum of 56 credits of appropriate undergraduate study at SUNY at Albany, a two-year college, or other college. The student is expected to have completed at least 18 high school units, including at least two years of mathematics (elementary algebra and plane geometry, or equivalents). At least two units of laboratory science are desirable.

A lower-division student at SUNY-Albany who is adpancing to a business education program is expected to have completed a substantial portion of the liberal arts and sciences requirements and to have started study in business with appropriate lower-division courses, especially in accounting and office subjects.

Students should be aware that as of September 1977, typewriting and shorthand will not be offered through the Business Education Program.

There are alternatives by which the requirements may be fulfilled. Questions regarding the alternatives should be directed to the Business Education Coordinator.

A two-year college transfer student is generally limited to a maximum of 64 hours of transfer credit in courses appropriate to the teacher-education program. To minimize scheduling problems, at least 30 credits of transfer course work in the liberal arts and sciences is desirable, including a term each of English composition, literature, speech, natural science, psychology, and sociology, and two terms of economics. Deficiencies in high school preparation in subjects such as science and mathematics should be made up at the two-year college. Lower-division courses in business appropriate to teacher education programs should be completed at the two-year college in subjects such as accounting, business statistics, data processing or computer science, finance, law, marketing, retailing, communication, shorthand, and typewriting. Study in professional education (e.g., student teaching, methods, foundations) should be deferred to the upper-division level.

Appropriate experience in business is required for certification and may be completed either before or after admission to the program.

## Requirements

All B.S. degree programs require a minimum of 120credits, distributed as follows:
Liberal arts and sciences:
Electives* ..... 45
Required as part of major:
Eoonomics ..... 6
Communications (E Bus 351) ..... 3
Law (B Law 200 or 220) ..... 3
Statistics (B Msi 220 or A Mat 108) ..... 15
Total liberal arts and sciences ..... 60
Major requirements:
Core:
Accounting ..... 6
Advanced Typing ..... $3^{* *}$
Data Processing (E Bus 360) ..... 3
Data Processing (E Bus 462) ..... 3
An additional business course, as advised ..... 318
and an
Approved concentration such as the following:
Accounting
Accounting ..... 6-9
Law ..... 3-6
As advised ..... 3-6
Distribution
Marketing and Distribution ..... 12
As advised ..... 6
Office
Shorthand and Transcription ..... 9**
Secretarial Administration ..... 3
Office Administration ..... 3
As advised ..... 18
Total major requirements ..... 36
Professional Education *** (second field)Education as advised, including methodsand student teaching18
Free electives ..... 6
Total degree credits (minimum) $\ddagger$ ..... 120

[^12]The department offers a variety of courses in business and office subjects and in professional business and distributive education.

## Business and Office*

## E Bus 319 Administrative Secretarial Problems (3)

Development of the high level of competency in the administrative aspects of secretarial careers needed by business teachers through advanced case problems and simulated office situations. Designed for business education majors.

## E Bus 351 Business Communication (3)

Theory, principles, and practices of effective written and oral communications: correspondence, formal and informal reports. Required for all business education majors.

## E Bus 360 Data Processing I (3)

Concepts of processing data for the business teacher, including analysis of principles and current practices in utilizing manually operated business equipment and record management systems. Required for all business education majors, Prerequisite: typewriting proficiency.

## E Bus 424 Experience in Office and Distributive Occupations (3)

Cooperative on-the-job training. Part-time work under university supervision, and class meetings twice weekly. Open only to business education majors to meet certification requirements. Prerequisite: consent of department.

## E Bus 440 Office Administration (3)

An overview of the administrative service functions of the modern offce in relation to the total organization; managerial principles, concepts, and guidelines applicable for planning, organizing, staffing, controlling, and implementing the office service function. Designed for business education majors.

[^13]** This requirement must be met by transfer credit or may be waived by proficiency examinations. If the professional education requirements are fulfilled, a second field other than education may be selected.
*** In addition to the 18 credit professional sequence, New York State certification requirements mandate competency in drug abuse education. Students must, therefore, include Tch 402 as part of their total undergraduate experience.
$\ddagger$ A minimum of one year of appropriate work experience, or equivalent lesser amount of college-supervised work experience, is also required for State certification.

## E Bus 462 Data Processing II (3)

Essential knowledge for the business teacher in processing data by means of the computer and unit record equipment. Flowcharting; preparation of input data; operational characteristics of equipment; introduction to programming. Required for all business education majors.

## E Bus 495 Independent Study in Business, Office, and Distributive Occupations (1-3)

Individualized bibliography and study plan for intensive reading in a selected area approved by the instructor. Written and oral progress reports required. Open to superior seniors in the business education program only, with consent of the department.

## PROFESSIONAL BUSINESS EDUCATION

## E Bus 321 The Teaching of Distributive Education (3)

E Bus 401 The Teaching of Business Education (3)
E Bus 402 The Teaching of Stenography, Typewriting, Office Practice, and Data Processing (3)
Prerequisite: E Bus 401 or 321.
E Bus 403 The Teaching of Bookkeeping, Business Mathematics, and Data Processing (3)
Prerequisite: E Bus 401 or 321 .
E Bus 490 Student Teaching in Business Education (9)

## Undergraduate Elective Courses

(Not to be applied to the Professional Sequence)

## C\&I 301 Methods and Procedures in Instructions (3)

Review, analyses, demonstration tryout, appraisal of instructional techniques. Application of theories and research in teaching. Organization, techniques and technology, lesson planning, instructional system management, diagnosis, individualization, evaluation. May be used in the professional sequence if taken before the specialized methods course.

## Cps 301 Methods-Resident Assistants (2)

Resident Assistants often find, as a result of their position on the residence staff, that they develop stronger motivation to explore theoretical constructs and to develop a broader base of skills in the areas defined below. This motivation reaches beyond typical job expectations, and is, instead related to the R.A.'s own desire for self development. Optimally, this R.A. seeks to bring his own motivations into congruence with his future growth. This course is intended to provide a more specialized program for these R.A.'s beyond the in-service program currently offered to all R.A.'s.

## Cps 302 Methods-Resident Assistants (2)

The student is involved in a group work situation where he will experience his inter-personal relationships, how they affect others, and how he can be more effective in dormitory groups. Emphasis is placed on self-awareness and skill development. Readings deal with group skill, personal development, and awareness of differing values and behaviors that can be seen in students. Student projects focus on research that stimulate knowledge primarily in the following areas: values, attitudes, behaviors, campus crime, conflict resolution, pregnancy and abortion, conflict management. No prerequisite.

## Cps 303 Methods-Resident Assistants (2)

The student continues skill development in dealing with student life in the dormitories. The goal is expansion of personal characteristics and acquiring skills not covered in Cps 301 or Cps 302. The student is able to choose from a number of options that are presented in seminar form. Relevant reading of the literature along with a experiential format during class time can be expected for most options. Prerequisites: Cps 301, 302.

## Edu 300 Independent Study (1-4)

An independent study course with variable credit. Contingent upon the consent of instructor(s) willingness to function as adviser(s) and the Dean, School of Education or his designate(s). The credits may be apportioned in whole or in part as major credit, second field credit, or elective credit as appropriate and as determined by the student's major department.

## Edu 301 Independent Study (5-15)

An independent study course with variable credit designed to provide large blocks of time for independent study projects. Contingent upon the consent of instructor(s) willing to function as adviser(s), and the Dean, School of Education or his designate(s). The credits may be apportioned in whole or in part as major credit, second field credit, or elective credit as appropriate and as determined by the student's major department.

## Edu 390 Community Service Projects (1-15)

Special projects involving community activities an collateral study, to be approved as designated by the Dean, School of Education.

## Tch 403 Drug Use In Our Society (1-2)

An examination of the nature of drug use/abuse in the context of American society. Independent study of programmed instructional material is featured. Comprehensive examination required. Students opting for two credits must prepare a formal paper on an appropriate topic. Does not satisfy the certification requirement in teacher education programs. Gredit not granted for both E Tch 402 and E Tch 403.

The following courses are open to qualified seniors. See School of Education Bulletin for course descriptions.

Bll 521 Methods in Bilingual Education (3)
Bus 524 Experience in Office \& Distributive Occupations (3)

Bus 526 Supervision and Coordination in Diversified Cooperative Occupational Education: I (3)

Bus 527 Supervision and Coordination in Diversified Cooperative Occupational Education: II (3)
Bus 531 Retailing Procedures (3)
Bus 532 Methods of Teaching Retall Store Operations (3)
Bus 564 Business Data Processing Programming Language (3)

C\&l 501 Extra Class Activities (3)
C\&I 503 Instruction in the Elementary School (3)
C\&I 505 Problems \& Procedures in Independent Study (3)
C\&I 509 Instructional Analysis (3)
C\&l 511 Education of the Slower Learner (3)
C\&l 512 Education of the Gifted (3)
C\&I 513 Planning for Aesthetic Development of Children (3)

C\&I 514 Planning for Aesthetic Development of Adolescents (3)

C\&I 515 Laboratory \& Field Work in Aesthetic Development (3)

C\&1 523 Group Process: Theory \& Practice in Instruction (3)

C\&l 525 Programs \& Resources for Teaching the Disadyantaged (3)

C\&I 530 Problems \& Principles of Education in Secondary Schools (3)

C\&l 532 Development, Scope, Patterns of the Elementary School (3)

C\&I 535 Methods in Content Analysis of Curriculum \& Instruction Materials (3)
C\&I 540 Educational Problems at the Early Secondary Level (Jr. H.S.) (3)

C\&1 545 Foundations of Contnuing \& Adult Education (3)
C\&I 547 Curriculum Planning in Continuing \& Adult Education (3)

C\&I 551 Fundamentals of Curriculum Development (3).
C\&1 555 Curriculum Development in Early Childhood Education (3)

Cmu 526 Educational Motion Picture Production: Il (3)
Cmu 536 Educational Television: Teaching \& Utilization (3)
Cmu 540 Programming and Systems Technology: I (3)
Eng 512 Instructional Materials and Design: English (3)
EsI 521 The Teaching of English as a Second Language: Theory \& Practice (3)

Fidn 500 Introduction to American Education (3)
Fdn 505 Women \& Education (3)
Fit 512 Instructional Materials and Design: Foreign Languages (3)

His 511 History of Student Movements in American Education (3)

Mat 512 Instructional Materials and Design: Mathematics (3)

Mat 514 Recent Advances in Mathematics Education: Elementary (3)

Mat 515 Recent Advances in Mathematics Education: Secondary (3)

Mat 516 Instruments for Teachers of Mathematics (1-6)
Psy 501 Behavioral Adaptation to School and Society (3)
Psy 502 Educational Psychology (3)
Psy 520 Growth \& Development: Adolescent (3)

Psy 521 Growth \& Development: Child (3)
Psy 530 Statistical Methods: I (3)
Psy 540 Evaluation in Education (3)
Psy 560 Psychology \& Education of Exceptional Children \& Youth (3)

Sci 512
Instructional Materials and Design: Science (3)
Sci 515 Recent Advances in the Teaching of Science (2-6)

Sst 512 Instructional Materials and Design: Social Studies (3)

## DEPARTMENT OF HEALTH, PHYSICAL EDUCATION, AND RECREATION

faculty : M. Baum, R. Burlingame, E. Cobane, C. De- Lamater, R. Ellis, R. Ford, J. Garcia, L. Holler, J. Koelmel, R. Lewis, P. Mann, R. Motta, K. Munsey, B. Palm, L. Rhenish, P. Rogers, R. Sauers, W. Schieffelin, A. Werner, R. White.

## Physical Education Program

The programs in physical education, intramurals, clubs, and inter-collegiate athletics provide a broad experience of instruction, recreation, and competition in a variety of activities. It does not offer a major.

Activity courses are one credit ( 30 instructional-activity hours), and may meet for a part of a term or for the full term. A student may apply six credits of physical education, 100 and 200 level courses, for credit towards graduation. Courses at the 300 and 400 level are counted without limit.

Program offerings emphasize individual sports, aquatics, and rhythmic activities. In many activities, instruction is offered at both the beginning and intermediate levels. The appropriativeness of the student's skill level is judged by the instructor.

Coaching registration courses are offered to all prospective teachers wishing to coach in secondary schools.

## ACTIVITY COURSES

## Pec 120-299 Physical Education Activity (1)

Skills, knowledge and appreciation of the particular activity.
Pec 120-129 Aquatics: Beginning
Pec 130-139 Goal Centered Activities
Pec 140-159 Individual Sports: Beginning
Pec 160-169 Dance: Beginning
Pec 170-179 Team Sports
Pec 200-299 Intermediate, Advanced and Special Skills

## THEORY COURSES

## Pec 300 Recreation Leadership (3)

Use of leisure, the nature of play and its value, and program planning for activities in varied recreational organizations.

Officiating Courses (1)
Theory and practice in officiating each sport.
Pec 301 Basketball-Men
Pec 302 Basketball-Women
Pec 303 Baseball
Pec 304 Soccer
Pec 305 Softball
Pec 306 Volleyball
Pec 307 Track \& Field
Pec 308 Swimming
Pec 309 Football
Pec 330 Lacrosse
Pec 356 Personal Safety and Emergency Care (1)
Study of causes of accidents and practice and procedures for handling sick and injured.

Pec 360 Introduction to Dance (2)
The basic evolution of dance, the types of dance, important personalities in the field of dance and their philosophies of dance.

## Pec 362 Modern Dance Technique and Composition (2)

Analysis and practice of form, rhythm and movement composition. Practice and development of skill in the construction of various dance forms; solo and group.

## Pec 393 Assistant Instructor (1)

Assist in instruction of activity course, including planning, instruction and evaluation.

## Pec 400 Principles and Problems of Coaching (3)

Study of the philosophy and psychology of contemporary sport as it relates to coaching responsibilities in secondary education.

## Pec 402 Prevention and Care of Athletic Injuries (3)

Accepted procedures in recognizing, preventing, and caring for common injuries-with laboratory experience. Prerequisite: consent of instructor.

## Coaching Courses (3)

Theory and practice in coaching each sport.

## Pec 410 Football <br> Pec 411 Soccer

Pec 412 Basketball
Pec 413 Wrestling
Pec 414 Swimming
Pec 415 Track
Pec 416 Baseball
Pec 417 Lacrosse
Pec 418 Softball
Pec 419 Volleyball
Pec 420 Women's Gymnastics
Pec 422 Tennis

## Pec 430 Adult Fitness (2)

Evaluation and analysis of a person's physical fitnèss. The development of program options and understandings for personal adult fitness assignments, written reports and class discussions.
Pec 450 Women and Sport (3)
Historical and current perspective on women's role in sport; cultural, ethnic and economic factors; past and present leaders, societal attitudes.

## HEALTH EDUCATION PROGRAM

## Che 350 Crucial Health Problems (2)

Accidents, drugs, emotional problems, sexuality, social diseases.

## Che 353 Family Health Problems (2)

Family planning, pregnancy, nutrition, compatibility, diseases, geriatrics.

## Che 356 Personal Safety and Emergency Care (1)

Study of causes of accidents and practice and procedures for handling sick and injured.

## LOSS PREVENTION EDUCATION PROGRAMS

Richard D. Ellis, Director

## System Failure and Loss Prevention

Tsp 350 Principles of Accident Prevention (3)
History and development of the interdisciplinary derived factors and theories of accident causation and prevention; including the areas of motor vehicles, home, work, recreational and consumer product safety.

## TRAFFIC SAFETY EDUCATION PROGRAMS

Richard D. Ellis, Director
The Education and Motor Vehicle Departments require that all applicants to teach driver education (1) have completed Tsp 450 and Tsp 451, (2) have an acceptable driving record, and (3) be certified in or eligible for secondary school teaching. Recommended prerequisite: Tsp 350, Principles of System Failure and Loss Prevention.

## Traffic Safety Education Courses

Tsp 051 Driver and Traffic Safety Education (0)
A complete program of classroom and laboratory instruction for students without drivers' licenses; taught by students enrolled in Tsp 451.

Tsp 450 Traffic Safety Education (3)
Analysis of the traffic accident problem; knowledge, attitudes and skill factors essential for safe and efficient operation of motor vehicles; survey of materials and methods in both classroom and laboratory instruction.

## Tsp 451 Trafic Safety Education (3)

Classroom and laboratory teaching techniques for the driver and traffic safety educational program; supervised student teaching. Prerequisite: Tsp 450 and consent of department.

## DEPARTMENT OF SPEECH PATHOLOGY AND AUDIOLOGY

FACULTY: P. Bianchi, P. Boomsliter, E. Brayton, E. Crabill, R. Ferguson, C. Harris, S. Hart, R. Hewitt, J. Liebman, C. Marchewka, C. Pelone, C. Rosenthal, M. G. Ross, J. Muller-Vogt, C. Westby, J. Wood.

The purpose of the Department of Speech Pathology and Audiology at the State University of New York at Albany is to prepare students to effectively serve people with communication handicaps. The department offers two programs leading to a B.S. degree in Speech Pathology and Audiology. The Teacher Education Program provides the opportunity for one session of clinical practice and one quarter of student teaching and yields provisional New York State Certification as Teacher of the Speech and Hearing Handicapped. The General Program requires two sessions of work in the clinical setting; it does not yield State certification. Both programs provide the basic preparation for the fifth year degree program necessary for American Speech and Hearing Association certification.* The undergraduate curriculum is an integrated and sequential program which is designed to be completed in four academic years. Transfer students or students electing the program in their junior year must plan on five sessions to complete the program.

Since the department's main focus is in the development of the outstanding clinicians, the academic and clinical aspects of the program are rigorous. Clinical placements are made in the University Clinic, which services the SUNYA community; Northeastern New York Speech Center, which

[^14]serves children and adults with speech, language, voice, and hearing disorders; and in local hospitals and centers of the handicapped. Student teachers are placed in public schools in the Albany area and other areas of New York State. Due to the location of these placements and the itinerant nature of the public school speech and language clinician, students require the use of a car during their student teaching quarter.

Students interested in majoring in Speech Pathology and Audiology should understand that clinical and student teaching placements and supervisory staff are limited and that it may not be possible to accommodate all who wish to enter the major. Students whose overall qualifications appear to offer greatest promise of success in the professional opinion of the department will be selected. Students seeking admission to the department will be asked to demonstrate basic competencies in reading, writing, and speaking skills. A personal interview with faculty of the department is also required.

## Degree Requirements for the Major in Speech Pathology and Audiology*

## General Program

B.S.: A minimum of 65 credits, 47 credits for the major and a second field of 18 credits as advised by the department or in Psychology to include: A Psy 101, A Psy 203 or E Psy 420, A Psy 214 and nine credits as advised (sug. gested courses A Psy 270, 327, 338, 380, 382; E Psy 360, 520, 521, 560).

Sau 201, 202, 205, 210, 250, 321 a and b, 327, 351, 420; four credits of Sau 370; two credits of Sau 371; Rco 203; six additional credits as advised in Speech Pathology and Audiology; a professional sequence consisting of Sau 470 and 427.

* No degree will be awarded in this program after August, 1979.


## Teacher Education Program (Teaching the Speech and Hearing Handicapped)

B.S. Degree: 40 credits in the major to include: Sau 201, $202,210,250,321$ a and $b, 327,351,420$; two credits of Sau 370; one credit of Sau 371; two of the following: Rco 203, Rco 204, Rco 208, Thr 207 (or 302) ; six additional credits as advised in Speech Pathology and Audiology; a second field of 18 credits as advised by the department or in Psychology to include: A Psy 101, A Psy 203 or E Psy 420, A Psy 214 and nine credits as advised (suggested courses A Psy 270, 327, 338, 380, 382; E Psy 360, 520, 521,560 ) ; and a professional sequence of 19 credits consisting of: an educational course identified with the Teach-ing-Learning Process (3), an education course identified with the study of school and society (3), and a professional term which includes E Sau 470, 427 and 490.

## Sau 003 Spoken English for Foreign Students (0)

Instruction and practice in the sounds and patterns of conversational American English for the foreign student; intensive work in ear training and in such features of spoken English as juncture, stress, sequence, and the dialogue patterns of the language in connected speech. Admission only by permission of the instructor. Does not carry degree credit.

## Sau 201 Structure and Functioning of the Speech Mechanism (3)

The basic anatomy of the ear, the larynx, and the other bodily organs subserving speech. The principles of vital functions as they are modified to make speech possible.

## Sau 202 The Phonetics of American English (3)

Basic principles of descriptive phonetic study, non-instrumental phonetic investigation and representation of pronunciation using the International Phonetic Alphabet; ear training; practice in phonetic transcription.

## Sau 205 Voice and Diction (3)

A study of the principles of voice and speech production, including breath control, resonance, variety and expressiveness, articulation, and pronunciation. Emphasis on the improvement of the student's voice and speech.

## Sau 210 The Linguistic Study of Speech Development (3)

Linguistic analysis and interpretation of the normal learning sequence underlying individual speech. Stress upon acoustic differentiation as exemplified in American-English dialect patterns, in intonation, and in disordered speech.

## Sau 250 Audiometric Testing (3)

Principles of measurement in psychoacoustics. The equipment, techniques and interpretation of auditory measurement, including practice with pure tone, speech, and other audiometric testing methods.

## Sau 320 Essentials of Speech Correction (4)

Sensory and motor factors in speech learning: characteristics of disordered speech; appropriate remediation techniques. Prerequisite: Sau 201. Not open to majors in Speech Pathology and Audiology.

## Sau 321 a Speech Correction (3)

The study of developmental processes affecting acquisition and development of language and the effect of deviations in producing disordered language. Prerequisites: Sau 201, Sau 202, and Sau 210. Students must earn a grade of C or better to be eligible for clinical practice.

## Sau 321 b Speech Correction (3)

The diagnostic and therapeutic aspects involved in devising programs for a variety of speech and language disorders; special emphasis on the developmental processes of behavior, the therapeutic process and application of appropriate methodology; ob. servation of clinical procedures in the Albany area. Prerequisite: Sau 321. Students must earn a grade of C or better to be eligible for clinical practice.

## Sau 327 Clinical Methods I (2)

Method of evaluation of articulation, language, motor coordination and social development. Opportunities for observation and evaluation of therapy sessions, preparation of lesson plans and case summaries, and the establishment of short range goals will be provided. Activities for articulation and language remediation will be discussed and demonstrated. This course is a prerequisite to E Sau 370. Prerequisites: 201, 202, 210, 321 a-taken concurrently with 321 b . Students must earn a grade of C or better to be eligible for clinical practice.

## Sau 351 Auditory Training and Speech Reading (3)

The equipment and methods which contribute to the improvement of receptive skills of speech and hearing of handicapped persons; relation to the type and severity of the handicap and to the age, language level, and linguistic capacity of the individual. Prerequisite: Sau 202 and 250.

## Sau 355 Hearing Loss and Problems of Hearing (3)

The function of the ear in normal and abnormal states. Differential diagnosis in hearing loss; personality and hearing deficit; speech difficulties associated with hearing loss. Prerequisite: Sau 250.

## Sau 370 Clinical Practice in Speech Pathology and Audiology (2-8)

Supervised therapy with functional and organic voice, articulation, hearing, and language disorders in the University Speech Clinic and in other area agencies; weekly group discussions and conferences with the instructor. Sau 371 must be taken concurrently. Open only to majors. Prerequisites: Sau 321 a and b, Sau 327. An acceptable grade, minimum of C , is required and an overall of C in all Speech Pathology and Audiology courses taken prior to clinical practice.

## Sau 371 Seminar in Clinical Relationships in Speech Pathology and Audiology (1)

Discussions of therapist-client behavior and related topics central to the processes of clinical improvement in speech, hearing, and language. Must be taken concurrently with Sau 370. Open only to majors. May be repeated for credit.

## Sau 397 (Sau 390) Independent Study in Speech Pathology and Audiology (2-4)

Individual study on a topic of special interest not treated in courses currently offered. May be repeated for a total of six credits. Prerequisite: plan of study approved by chosen professor and department chairman.

## Sau 420 Theory of Speech Improvement (2)

The relations of speech performance to social and linguistic factors in the child's environment. Methods for compensating for environmental deprivations. Techniques and methods for improving speech development in and through school and community situations.

## Sau 440 Elementary Psycho-Acoustics (3)

Topics from psycho-acoustics and allied fields which explain and exemplify the special conditions of language perception. The approach is instrumental and experimental but not mathematical. Prerequisites: Sau 201 (or equivalent study) and one course in descriptive phonetics.

## Sau 470 Program Organization in Speech Correction and Audiology (2)

A consideration of the organization and administration of clinical and public school programs in speech correction and audiology. Open only to seniors majoring in Speech Pathology and Audiology.

Sau 471 Clinical Methods II (2)
An advanced study of clinical methods used in the treatment of communication disorders in children in the clinical and school settings. Open only to seniors majoring in Speech Pathology and Audiology.

Sau $490 \begin{aligned} & \text { STUDENT TEACHING (see Student Teaching } \\ & \text { courses). }\end{aligned}$
The following courses are open to qualified seniors:

## E Sau 501 Advanced Phonetics (3)

E Sau 502 Articulatory Phonetics (3)
E Sau 505 Basic Techniques of Speech Improvement (3)
E Sau 508 Social Aspects of Communication (3)
E Sau 520 Stuttering and Allied Speech Problems (3)
E Sau 525 Psychological Aspects of Speech (3)
E Sau 530 Organic Disorders of Speech (3)
E Sau 531 Language and Language Disorders (3)
E Sau 532 Peripheral Oral Defects Affecting Speech (3)
E Sau 551 Acoustic Dysfunction and Its Implications (3)
E Sau 559 The Practice of Audiological Assessments (3)

# College of General Studies 

Hilton M. Power, Dean<br>Kay C. Hotaling, Assistant Dean

The College of General Studies provides continuing education opportunities for adults in the Capital District who wish to develop their cultural and intellectual horizons or their professional and occupational competency. Professionals, semi-professionals, tradespeople, craftspeople, former dropouts and retired people are among the more than 5,000 adults who attend the college's credit and noncredit programs. Credit and noncredit courses, seminars, conferences and workshops are offered during the days, evenings and Saturdays on both the Uptown and Downtown Campuses.

Noncredit programs are open to all adults. No grades are awarded, no academic records compiled, and no examinations are given.

The College of General Studies work directly wtih community, professional and cultural organizations, business, industry, and units of local and state government to make available the full resources of the university through cooperative development of courses, conferences, workshops, institutes and seminars to meet their specialized educational needs.

## Credit Program

Through simple procedures adults are admitted and assited in registering for undergraduate day, evening, and Saturday credit courses offered by the University. Individual academic advisement is available through the counseling staff of the College of General Studies. Anyone with a high school or equivalency diploma may take courses for credit. Adults who have attended college previously may register as well as those who have not yet attempted college level courses.

Students who hold the bachelor's degree may also register through the College of General Studies in undergraduate credit courses, but these courses may not be applied for graduate credit. No graduate courses are offered in the College of General Studies. Students who wish to enroll in graduate courses must apply through the graduate admissions office of the appropriate school or college of the university.

A student on academic probation at a previous college or university or one who was academically dismissed, may not enroll in courses through the College of General Studies until one year has elapsed. In addition, any former State University of New York at Albany degree candidate who has not received a baccalaureate degree, is not permitted to enroll in the College of General Studies and should refer to the section in this bulletin on "Readmission Procedure."

College of General Studies students are non-matriculated (non-degree). This means they have not been formally admitted to the University as a candidate for a degree. All the course credits earned while as a General Studies student may be applied to a Bachelor of Arts or Bachelor of Science program once the student has been accepted as a degree candidate. The course credits may also be transferred to other institutions according to their transfer credit policies.

A student who wishes to earn a degree at the university should refer to the procedures described in this bulletin in the section on Undergraduate Admissions. Once accepted as a degree candidate, a student may continue to pursue the degree program on a part-time basis.

Students not holding a bachelor's degree enrolled in the College of General Studies are permitted to pursue a maximum of three courses. Students who wish to register for more than a three course load must petition the Dean of the College of General Studies. Those holding a bachelor's degree are not limited in the number of courses which they may take. A veteran may enroll in a full load of 12 credits upon approval by a member of the counseling staff of the College of General Studies.

Individuals may formally or informally audit undergraduate courses on a space available basis through the College of General Studies. Persons over sixty are encouraged and assisted by the College of General Studies to audit courses. Please see "Undergraduate Regulations" in this bulletin for further description of auditing courses.

The offices of the College of General Studies are located in Draper Hall, Room 101, on the downtown campus, 135 Western Avenue in Albany. Most credit classes are held on the new campus, 1400 Washington Avenue.

Members of the counseling staff of the College of General Studies are available throughout each session to advise and counsel adult students. Interviews are arranged between 9:00 a.m. and 4:00 p.m. Monday through Friday. During registration periods the counselors are also available in the evening and on Saturday. The evening and Saturday hours are announced in the College of General Studies bulletin of late afternoon, evening and Saturday credit courses.

Descriptive brochures and detailed information about offerings are available from the College of General Studies, SUNY at Albany, 135 Western Avenue, Albany, N.Y. 12222. For credit course information telephone (518) 472-8495; for noncredit information telephone (518) 472-8494.

# Office of International Programs 

Charles W. Colman, Director

## Study Abroad Programs

International programs complementing on-campus academic programs are open to students at all levels. As all regions of the world become more independent, it is imperaative that a liberal education include an intimate knowledge of other cultures both as a preparation for responsible citizenship and as a way to broaden the scope of career options.

The State University of New York offers opportunities to study in most of the major cultural or geographical regions of the world. Students at Albany register for Albany residence credit for any of the study abroad programs administered by any of the SUNY campuses. A complete listing of the programs and detailed information about them are available in the Office of International Programs, Social Sciences 110. Students in the academic year programs will normally register for $15-18$ credits per session. Registration for the courses is through the College of General Studies.

The Summer Intensive Language Program Abroad, designed primarily for freshmen, offers an innovative orientation to university study. Entering freshmen may begin their university studies abroad in France, Germany, Italy, and Spain. During the summer's intensive studies of language and culture, a student may earn an average of three to seven credits. Conducted during July and August, the program will allow for a short period of orientation and travel. It also prepares the student for entrance into academic year study abroad programs during later years at the university.

Listed below are the programs administered by State University of New York at Albany on behalf of the State University of New York system.

## SUMMER INTENSIVE LANGUAGE PROGRAM ABROAD

Summer study in French, German, or Spanish is offered at schools located in countries where the language is spoken natively. It is open to university students at all levels who have completed at least one year of language at the college level or two years at the high school level or the equivalent and who wish to increase their language skills in the four to six weeks of immersion in the language and culture of another country. Students register for $3-7$ credits. Additional credits may be earned if students can justify them by means of a proficiency examination.

Each summer, several of the regular language courses are offered at overseas sites and taught by local instructors of these countries who are familiar with the needs of the American students.

Please refer to the respective language departments in the summer sessions bulletin for course descriptions, etc.

## ACADEMIC YEAR PROGRAMS ABROAD

The academic year programs administered by State University of New York at Albany offer students a wide variety of disciplines. Undergraduates normally register for 30-36 credits during the academic year. Open to advanced undergraduates.

Current program sites are: Jerusalem/Tel Aviv, Israel; Madrid, Spain; Moscow, USSR; Nanyang, Singapore*; Nice, France; Würzburg, Germany.

## G Ins 304 a and b Albany-Madrid (15 or 30)

Students may enroll for any of the courses offered by the program at the International Institute. Courses are offered in Spanish language, literature, art, history, geography and philosophy. Prerequisites: junior standing, two years of Spanish at the college level, above average scholastic record, and survey course of Spanish literature. Exceptionally well qualified sophomores may also participate. Students are strongly urged to enroll for the academic year but may register for either term alone.

[^15]
## G Ins 305 a and b Albany-Nanyang* (up to 30)

Students may enroll for Chinese or Malay language courses, Southeast Asian Studies or Chinese Studies. No prior knowledge of the language is required except for Chinese Studies. Prerequisite for Chinese Studies: three years of Mandarin Chinese. Students enroll for full academic year: July-March.

## G Ins 306 a and $b \quad$ Albany-Nice (36)

Qualified students may choose any courses offered at the University of Nice. Prerequisites: junior standing, and above average seholastic record. Students must have completed an advanced grammar course or the equivalent. Students who are planning to take courses in French literature must also have taken a two semester survey course in French literature. SUNYA French majors will obtain information concerning additional prerequisites from the French Department. Program includes pre-session and academic year.

## G Ins 309 a and b Albany-Würzburg (36)

Qualified students may enroll in any course offered at the University of Würzburg. Prerequisites: junior standing, above average scholastic record, two years of college German or equivalent. German majors must also have completed a survey of German literature. Program includes a pre-session and academic year.

## G Ins 311 a and b Albany-Israel (36)

Study is offered at the Hebrew University in Jerusalem or Tel Aviv University in Tel Aviv. Three tracks are offered at both universities including one which pernits a program tailored to the needs of the student. Prerequisites: sophomore standing or above (Because of prerequisites, sophomores may not qualify for Tracks 1 and 2 of the program at the Hebrew University), above average scholastic aptitude. Proficiency requirement in Hebrew language will depend on the program chosen. Progran includes summer Ulpan and entire academic year ( $111 / 2$ months of study).

## G Ins 312 Albany-Moscow (15)

A one term exchange program with the Institute of Foreign Languages in Moscow offers qualified students the opportunity to study Russian language and literature intensively, Enrollment will be limited to ten students per session. Prerequisite: junior standing, above average scholastic record, three years of college level Russian or the equivalent.

Other State University of New York units offer many additional programs for which State University of New York students are eligible. Students wishing to participate in a program offered by one of the other campuses of the State University of New York will register on the Albany campus if the program is supported by state monies. Students participating in non-funded programs are required to take a leave of absence from the SUNYA campus for the duration of the program. For information on any of these programs and details about registration procedures, inquire at the Office of International Programs, Social Science 110.

# School of Library and Information Science 

Robert S. Burgess, Acting Dean<br>Lucille Whalen, Associate Dean<br>Alfred F. Dascher, Jr., Assistant to the Dean

FACULTY: V. Aceto, R. Burgess, J. Farley, R. Halsey, N. Hoyle, W. Katz, I. Klempner, J. Llinas, D. Mitchell, J. Morehead, Jr., L. Orsini, A. Prentice, W. Saffady, G. Stevenson, P. Vaillancourt, L. Whalen.

Since the basic preparation for librarians requires five years of study leading to a master's degree, professional courses in Library and Information Science are usually taken on the graduate level. However, as a means of providing undergraduate students with certain library skills which may be of value in their studies or for the purpose of providing an Introduction to the field of Library and Information Science, a number of courses are available to undergraduates.

The School of Library and Information Science offers a broad program of study which prepares students for careers in school, public, college, and special libraries. Undergraduate students contemplating a career in librarianship are encouraged to consult with personnel of the School of Library and Information Science concerning career opportunities and concerning undergraduate preparation for admission to graduate study in library and information science. Such students should also consult the current bulletin of the School of Library and Information Science.

No undergraduate courses offered by the School of Library and Information Science are considered liberal arts and sciences courses for purposes of degree requirements.

## Lib 203 Introduction to Library Resources (3)

Productive and creative use of library resources; developing bibliographic skills, using general and specialized reference sources, searching scholarly literatures, organizing the undergraduate research paper.

## Lib 206 Library Research for Public Policy Issues (1)

A short course designed to assist students in identifying and locating information available in libraries on selected public policy issues.

## Lib 301 Introduction to Librarianship (3)

An introduction to types of libraries and library services; the concept of the librarian as a mediator between materials and people. The operation of various types of libraries are studied through planned field visits.

## Lib 350 Library Research (1)

A short course to acquaint students with the physical layout of the library, the Library of Congress classification scheme, subject headings, reference tools, periodical indexes and indexes and abstracts, government documents, information retrieval, search strategy processes, and compiling and annotating bibliographies.

## Graduate Courses

The following graduate courses are open to qualified seniors.

## Lib 501 History of Books and Printing (3)

Lib 503 The Book in America (3)
Lib 510 Statistical Concepts for Librarians (1)
Lib 550 Film and Libraries (3)
Lib 571 Literature for Children (3)
Lib 573 The History of Children's Literature (3)
Lib 578 Library Materials for Young Adults (3)

## School of Nursing*

Marjorie A. Meyer, Dean

FACULTY: L. Bonser, G. Cardinali, A. Cioppa, S. Daly, K. Doyle, C. Francis, K. Graber, M. Hayner, P. Hemmings, S. Kane, D. Major, M. Meyer, N. Moore, A. Rudolph, M. Shipp, E. Simpson, J. Whitaker.

The school aims to prepare students for the practice of nursing, supplying the educational background which can serve as the basis for advanced study in nursing and for professional growth and advancement through experience. It was established primarily for the purpose of providing a pool of baccalaureate graduates qualified to pursue graduate study leading to specialization for teaching, administration and research.

## Philosophy and Objectives

The faculty of the School of Nursing accepts its responsibility for contributing to the purposes of the university through teaching, research and service. The faculty further acknowledges its responsibility to provide an environment which encourages the student, as a member of the university community, to develop his potential as a person while preparing for professional practice. The faculty believes this goal is best achieved through an integrated program of liberal and professional studies which facilitates the development of intellectual, social and professional skills.

Learning is an active, self-perpetuating process. It is individual and selective in that each learner brings to it the uniqueness of his own life patterns and goals. The environment in which learning occurs should generate critical thinking, group interaction and self-direction as student and teacher share this experience. This process, in a democratic society, enables each learner to develop an understanding of his rights, his responsibility to self and society, and the comparable rights and responsibilities of others.

The faculty believes that nursing offers a service within a health delivery system, the goal of which is promotion of health for individuals, families and communities. The

[^16]focus of the health care system has moved to encompass the full spectrum of the health-illness continuum requiring a broader scope of services in new as well as traditional agencies. Nurses must be prepared, therefore, to take leadership in identifying and initiating new roles and responsibilities in the delivery of their services. Using the nursing process, the nurse must assess health needs, identify health goals and utilize a variety of resources in making judgments essential to the provision of services. While nursing shares some activities with professionals of other health disciplines, it accepts responsibility for provision of physical care and emotional support, for health counseling and teaching and for case-finding. On this basis, nursing must derive from a broad knowledge of relevant social, natural and applied sciences.

The faculty believes its goals are best achieved through an integrated program of liberal and professional studies offered at increasing levels of complexity throughout the program. To facilitate the integration of knowledge, nursing courses in each year of the program must offer content and clinical experiences interrelating all aspects of nursing in a variety of community settings.

The graduate is prepared to provide and direct nursing care of individuals and groups, to function in a colleague relationship with other health personnel, and to participate in community action programs concerned with health. The graduate is also qualified for advanced study in nursing at the master's level.

The school has developed a curriculum designed to prepare nurses who possess:
I. Understanding of the responsibilities of a citizen in a democratic society and a changing world;
II. Understanding of the dynamic relationship between a profession and the society which it serves;
III. Ability to provide, in a variety of settings, a service directed toward the promotion of health, utilizing the nursing process in meeting immediate and long-term health needs.

## Curriculum

The curriculum leading to the Bachelor of Science degree is an integrated program of 120 credits designed to be completed in four academic years. Students who for any reason need to lighten the course load will require additional time for completion.

Courses in general education and in the nursing major are offered simultaneously throughout the program. During the first two years general education courses predominate; during the third and fourth years nursing courses increase and general education courses decrease. Liberal arts courses throughout the program are taught by faculty of various departments of the university. Nursing courses are taught by faculty of the School of Nursing with clinical practice in hospitals and other health agencies. The curriculum is planned to provide a balance in the study of social and behavioral sciences, humanities, and physical and biological sciences in addition to required courses in the professional major:

Requirements for the degree in nursing include the following:

| Group I | Nursing | 58 credits |
| :--- | :--- | ---: |
| Group II | Communications | 3 credits |
| Group III | Science and Mathematics <br> must include: | $18-21$ credits |
|  | Vertebrate physiology* | 4 credits |
| Group IV | Social Science and Humanities <br> must include: | 21 credits |
|  | $\quad$Sociology <br> Psychology | 6 credits |
|  | $\quad$ Humanities | 6 credits |
| Group V | Free Electives | $17-20$ credits |

All courses in Group I and Vertebrate Physiology must be completed as prescribed by the school. The balance of credits may be selected by the student from the other groups shown.

Clinical nursing courses begin in the sophomore year. Because of the nature of instruction in nursing, class size at this point must be controlled. Candidates for sophomore nursing courses, therefore, are selected from those members of the freshman class and transfer applicants whose overall qualifications appear to offer greatest promise of success in the program.

Nursing courses provide learning experiences of increasing depth, moving from the simple to the complex in all phases of nursing practice as the student progresses through the course of study. All clinical nursing courses require that the student demonstrate satisfactory achievement in the application of nursing knowledge as she plans, ministers, and evaluates nursing care in hospitals and health agencies.

Because of emphasis on family and community nursing and the distances involved in obtaining such experiences, students require use of a car during portions of the junior and senior years.

[^17]Faculty of the School of Nursing reserve the right to require a student to withdraw from any nursing courses if such action is in the best interest of the university.

The following undergraduate courses offered by the School of Nursing are considered liberal arts and sciences courses for purposes of degree requirements for the B.A. and B.S, degrees: Nur 100, 211 a and b, 410; Nsc 220, 225.

All courses listed in this section are preceded by the school's letter " $N$."

200 -level courses are prerequisite to 300 -level; 300 -level are prerequisite to 400 -level.

## Nur 300 a and b Contemporary Problems in Nursing (2, 2)

Deals with concepts and skills essential to development of the leadership role in effecting improvement of nursing care. Utilizes systems theory in analyzing health problems and the scientific method as the preferred means of introducing change in nursing practice. Prerequisite: junior standing or consent of instructor.

## Nur 350 Nursing and Family I (8)

Deals with scientific rationale underlying comprehensive care of physically ill adults and children and with the application of nursing skills in increasingly complex situations. Opportunities are provided for development of leadership skills, teaching patients and families, and in planning for continuity of care.

## Nur 370 Nursing and Family II (8)

Family-centered nursing care in home, hospital and community settings. Provides opportunity for study of individual and group dynamics, behavioral disorders, the child-bearing family, and community health problems. Leadership potential is identified and developed.

## Nur 400 a and b Professional Practice Seminar (2, 2)

Deals with patterns of organization of health agencies and health care delivery systems, stressing management theory, planning and decision-making. Assists the learner in transition from role of student to that of practitioner through examination of ethical, legal, and other factors inherent in professional practice.

## Nur 460 Nursing and the Community 1 (5)

Focuses on leadership in planning and providing care to hospitalized individuals with complex nursing problems. Involvement of family and community resources is emphasized. The nurse's role in directng patient care is developed through a team leading experience.

## Nur 470 Nursing and the Community II (5)

Aims to prepare the student for first level community health practice. Provides learning experiences to develop leadership skills necessary for the care of multi-problem families. Emphasizes use of the epidemiological method, and of community resources as well as the nurse's role in functioning within an interdisciplinary team.

## Nur 480 Special Problems Practicum (2)

Study of nursing problems related to areas of special interest, abilities, and goals of individual students. Involves independent reading, investigation, and practice under direction of faculty member or committee. Prerequisite: Nur 460 or Nur 470.

# Graduate School of Public Affairs 

L. Gray Cowan, Acting Dean<br>Sandro A. Barone, Assistant Dean<br>\section*{Department of Political Science}

FACULTY: C. Astiz (Chairman), J. Baer, P. Cocks, L. G. Cowan, M. Edelman, A. Felzenberg', W. Fiser, W. Goldstein, J. Gunnell, R. Hedges, E. Hoffmann, B. Johnpoll, A. Magid, D. Nichols, L. Powell, J. Riedel, R. Rienow, R. Stout, C. Tarlton, T, Wright, J. Zimmerman.
Political science is concerned with the activity and organization of society for the realization of public goals and values. The study of political science is designed to prepare the student for responsible and effective citizenship, political participation, and advanced academic or professional studies. The student of political science may gain an understanding and appreciation of political values, institutions, and processes operating in American, foreign, and international systems.

The department is currently developing a second undergraduate major in Public Affairs. (For existing course offerings see listings under Program in Public Affairs.) It also plans to institute an honors program.

## Preparation for Law School

Recognizing the fact that a lawyer must be politically knowledgeable, many pre-law students major in political science. Individuals engaged in the practice of law automatically are involved in "political" activities because of their dealings with the executive, legislative, and judicial branches of government. The nature and extent of poltical involvement with each branch, of course, depends upon the type of practice each attorney engages in.

Attorneys are employed as counsels by executive departments and legislative committees of the federal, state, and local governments. Other attorneys are employed as legislative representatives (lobbyists). A high percentage of the members of Congress, state legislatures, and councils in medium and large cities are attorneys. Other attorneys seek election to office as mayors and county executives. With rela-
tively few exceptions, judges are "Learned-in-Law." Students with long range plans for judgeships should recognize that all or some judges are popularly elected in 40 states and "political" considerations influence the appointment of judges.

Pre-law students are encouraged to join the very active Pre-Law Association, which has an office in the Campus Center, and visit the pre-law information room in University College.

For further information about law schools, consult Professor Ronald M. Stout, Departmental Pre-Law Adviser, Dean Robert H. Gibson of University College, and Professor William F. Sheehan of the School of Business.

Students interested in attending law school are advised also to consider attending a graduate program in political science with a major in public law. If the student is interested in public law as it relates to policy areas (environment, urban planning and development, energy, transportation, consumer protection, etc.), a public law graduate program may better facilitate the career aspirations of the student. A type of adjudication growing in importance is administrative adjudication, a subject which can be studied in a public law graduate program.

## Special Opportunities or Programs:

The location of the Graduate School of Public Affairs in the capital city of the Empire State affords students of political science unusual opportunities to observe and study the executive, judicial and legislative branches of the State Government, the second largest public employer in the United States. With a few exceptions, the principal office of each State Department, Division, and Office is located in Albany.

Library resources to support research in New York State Government are excellent. Students have access to the New York State Library, with one of the largest collections in the world. State Departments, Divisions, and Offices also have specialized libraries containing information not commonly housed in university or public libraries.
All undergraduate courses offered by the Graduate School of Public Affairs are considered liberal arts and sciences courses for purposes of degree requirements.

All courses listed in this section are understood to be pre. ceded by School's designation " $P$."

## DEGREE REQUIREMENTS FOR THE MAJOR IN POLITICAL SCIENCE

## General Program

B.A.: A minimum of 30 credits in political science including Pos 120 .
a. Pos 120 Introduction to Political Science is a prerequisite for other political science courses in the areas of the American Political System, Comparative Political Systems, International Political Systems, Political Theory, Public Administration, and Public Law.
b. Normally, the Department of Political Science requires that those courses to be counted toward the major be taken at SUNYA and that most of them be classroom courses. The department reserves the right to review transfer credit used to complete the major in political science. Independent study courses are to be used to deal with topics not covered by regular departmental offerings and after classroom courses dealing with the same subject have been completed. Prior to registering for independent study, a student must have his proposed research project approved by his adviser and a faculty member willing to direct the research. The student's prospectus must outline the topic of his or her proposed research, indicate its importance to political science, and describe the methodology to be employed and methodological problems that may be encountered. Students may not register for independent study unless a copy of the prospectus, properly signed, has been filed with the department. Independent study courses may not be used in lieu of classroom courses.
c. Pad 303 (Public Administration and Management) and Pad 405 (Bureaucracy and Politics in American Society) are acceptable as political science courses in meeting the 30 credit requirements in Political Science.
d. The following courses are strongly recommended for political science majors:

## American Political Systems

Pos 321 State and Local Government
Pos 331 The American Legislature
Pos 332 The American Executive
Pos 334. American Political Parties and Groups
Pos 338 Political Behavior

## Comparative Political Systems

Pos 150 Comparative Governments (Two other area courses from among Pos 351, 352, 353, 354, 355, $357,358,359$ and 360 )

## International Political Systems

Pos 370 International Relations: Theory
Pos 371 International Relations: Practice
Pos 380 Basics of International Law
Pos 381 International Organization

## Political Theory

Pos 301 Political Philosophy
Pos 307 American Political Theory
Pos 310 Contemporary Political Philosophy
Pos 314 Problems of Political Inquiry

## Public Law

Pos 330 The American Judiciary
Pos 335 The American Supreme Court
Pos 426 a and b American Constitutional Law

Each student majoring in political science must file with the department chairman a tentative degree program by the middle of the first term subsequent to the declaration of the major. Majors are encouraged to include in their tentative degree programs at least one course in each of the five fields of Political Science.

## INTRODUCTION AND SURVEY

## Pos 101 Politics and Political Science (3)

A general view and survey of politics and political science. The course is concerned with identifying and characterizing the main conceptual features of the political dimension of social life.

## Pos 120 Introduction to Political Science (3)

An introduction to the study of politics, focusing on American national government; it includes some discussion of theoretical questions (such as authority, representation, and consent), and some illustrative examples from the area of comparative and international politics.

## Pos 130 Practical Politics (2)

It is the objective of this course to consider the rich variety of political activity with which the individual citizen is most likely to come in contact in trying to become influential in his own locale. Relying heavily on available partisan and non-partisan political actors in the capital district for participants and examples, the course will review from both literature and experience, the means by which people alone, in small groups, or through political parties become politically effective.

## Pos 140 Introduction to Public Policy (3)

The goal of this course is to provide perspectives central to analysis of public policy issues and basic to the exercise of critical judgment about particular policies. The course is intended as an introduction to the field of public affairs and public policy research.

## POLITICAL THEORY

## Pos 301 Political Philosophy (3)

Historical and topical examination of various aspects of the literature of Western Political Philosophy.

## Pos 307 American Political Theory (3)

An examination of the development of political thought and action in the American experience.

## Pos 310 Contemporary Political Philosophy (3)

An analysis of selected perspectives in the political and social thought of the 19th and 20th centuries.

## Pos 314 Problems of Political Inquiry (3)

An introduction to the discipline of political science and contemporary approaches to the study of politics.

## Pos 318 Seminar in Political Philosophy (3)

An investigation of selected topics in political philosophy. Subjects to be announced by instructor. Limited enrollments. Prerequisite: two courses in political theory or cousent of instructor.

## Pos 416 Statistics for Political Scientists (3)

An introduction to quantitative analysis of political and social data: methods of summarizing and describing univariate distributions including the use of tables and graphs, measures of central tendency and dispersion; methods of examining relationships between two or more variables; probability, sampling, and inference, computer usage.

## Pos 417 Empirical Data Analysis (3)

The course is designed to introduce the student to a variety of data analysis techniques ranging in complexity from simple table construction and interpretation to casual analysis. Within this range are coding, scale and index construction, multidimensional scaling, levels of measurement, measures of association, correlation and regression, panel, and cohort analysis, and Markov Chains. Prerequisite: Pos 416.

## Pos 418 Introduction to Formal Theory (3)

An examination of formal theory as an axiomatic deductive approach relying on a small number of assumptions to generate empirically testable theories of political behavior. Topics would include: Game Theory, the logic of voting, mechanisms of Social choice, Electoral competition. Emphasis will be placed on the art of model building and applications in the American Political System.

## Pos 419 Seminar in Political Theory (3)

An investigation of special topics in political theory and philosophy. Prerequisite: two courses in political theory or consent of the instructor.

## AMERICAN GOVERNMENT

## Pos 220 American National Government (3)

An examination of the underlying principles and theories of American national government: its institutions, branches of government; relations with other levels of government; constitutional powers and limitations; formal and informal mechanisms of problem-solving, relating the structure of government to the various forms of political activity.

## Pos 222 New York State and Local Government (3)

The development of the State constitution; the judiciary and judicial administration; organization, powers and procedures of the legislature; power and duties of the governor; an introduction to the administration agencies. The function, organization, financing and politics of local units of governments.

## Pos 320 American Federalism (3)

A thorough exploration of the basic organizing principles of the American political system including the theoretical, historical, constitutional, and political factors that made and have kept the United States a federal polity for 200 years. A major emphasis will be in the various modes of intergovernmental relations, including such topics as fiscal relations, grants-in-aid, revenue sharing, and including such policy areas as health, education, environmental protection, and economic planning.

## Pos 321 State and Local Government (3)

An analysis of governmental structure, operations, and problems at the state and local level within the states of the United States, with special attention to policy formulation and administration.

## Pos 323 Urban Government (3)

An examination of governmental patterns in major urban areas of the United States. Consideration will be given to the nature of a municipal corporation, forms of government, state-local relations and urban politics.

## Pos 324 Community Politics (3)

An examination of the bases of power at the local level. Political power, social stratification and technology are discussed within a historical and contemporary context. Recommend prior course in state and local government.

## Pos 330 The American Judiciary (3)

The structure and function of the courts in the American political system with special attention to staffing, the decision-making process, judicial policy-making, and checks upon judicial power.

## Pos 331 American Legislature (3)

An examination of the legislative function in the American political system. Inquiry into the sources of legislative power, the institutions involved in formulating legislation, and the people who participate in the legislative process.

## Pos 332 The American Executive (3)

The course will focus on the principal institutions, functions, and problems of the Executive branch of government. Emphasis will be placed on the President as political leader, head of state, and administrator, as well as on his relations with Congress.

## Pos 334 American Political Parties and Groups (3)

An examination of the theory, organizational forms and dynamics of political group formation and activity, with special attention given to the political party system, interest groups, political leadership, and electoral behavior.

## Pos 335 The American Supreme Court (3)

This course will deal with the role of the Supreme Court in American political life. Topics to be considered will include: access to the Court; the nature of Supreme Court decisionmaking; the selection of Supreme Court justices; the relationship between the Supreme Court and the Executive and Legislative branches of government; and the major substantive issues with which the Supreme Court has been concerned.

## Pos 336 Civil Liberties (3)

A study of the ways in which the courts have interpreted the Constitution with respect to individual freedoms. A range of source materials will be examined to assess the role of the judiciary in arbitrating between the individual and the state, and its implications in American political life.

## Pos 338 Political Behavior (3)

Politically relevant behaviors are discussed in terms of their psychological and sociological determinants. Emphasis on manifest and latent political training in numerous contexts.

## Pos 339 Political Socialization (3)

Operating within a behavioral framework, this course deals with political socialization and its relationship to the development of political attitudes, political participation, and the maintenance and change of political systems. Both theoretical and empirical works will be considered.

## Pos 365 Government and the Mass Media (3)

A study of the relation of the mass media to the American political process, including an examination of the effect of the mass media on legislative actions, the executive, voting behavior, and the bureaucracy.

## Pos 400 Problems in Urbanism (3)

Independent study in interdisciplinary urban problems chosen by the student in consultation with the instructor. Also open to majors in other social sciences and to qualified upper division students in other disciplines.

## Pos 405 (Pad 405) Bureaucracy and Politics in American Society (3)

See Pad 405.

## Pos 426 a American Constitutional Law (3)

Basic cases will be examined in their historical settings and analyzed in terms of legal or constitutional issues and judicial doctrines, including judicial review, separation of powers, division of power, inter-state relations, the power to tax and spend, war powers, and treaty powers.

## Pos 426 b American Constitutional Law (3)

An examination of basic cases in their historical settings and analyzed in terms of legal or constitutional issues and judicial doctrines, including interstate and foreign commerce, civil and political rights, the privileges and immunities of citizenship, due process, and equal protection.

## Pos 426 c American Constitutional Law (3)

Basic cases will be examined in their historical settings and analyzed in terms of legal or constitutional issues and judicial doctrines in the area of criminal justice including search and seizure, self-incrimination, the right to counsel and right of fair trial.

## Pos 431 Legislative Internship (3)

Active participation in the legislative process through work in a staff position in the New York State Legislature. Students will also attend a series of occasional seminars to discuss the legislative process and their work experiences; prepare an annotated bibliography indicating a substantial knowledge of the academic literature related to the legislative process; and write a research paper dealing with the legislative process or some aspect of substantive policy development. Prerequisite: Pos 321 or Pos 331.

## Pos 434 Campaign Internship (3)

This course is designed for students who wish to work in election campaigns and relate their experience to the academic study of political parties, campaigns, and elections. Each student will be expected to do substantial reading of the academic literature in the field and to write a research paper which relates the campaign work experience to selected theorctical frameworks discussed by scholars in the field. Prerequisite: consent of instructor.

## COMPARATIVE POLITICS

## Pos 150 Contemporary Governments (3)

The impact of the comparative study in political theory; the characteristics and development of statehood and power; conditions of stability; constitutions and the comparative political process.

## Pos 351 European Politics (3)

A study of politics and political change in contemporary Europe, as reflected in ideology, organization, and leadership. Both Western and Eastern Europe will be treated in a common, comparative framework.

## Pos 352 Communist Political Systems (3)

The characterisites of communism in the modern world: the role of the Communist party; the state as a bureaucracy, with special reference to the U.S.S.R.; relations among the powers of the com* munist bloc and the impact of these relations on the Soviet Union.

## Pos 353 Developing Political Systems (3)

The characteristics of the developing societies; their problems of constitutional development and governmental organization; the planning of developing economies and the determination of priorities, the tendency towards one party political systems; the development of enterpreneurial and management skills and the use of autonomous institutions and public enterprises.

## Pos 354 Government and Politics of the Soviet Union (3)

In depth study of Russian and Soviet internal politics, 1861 to the present. Emphasis is placed on the activities of the Communist Party of the Soviet Union-political, economic and ideologicaland on changing characteristics of the Soviet political system. Equal attention is devoted to the origins of the Communist Party and to the Lenin, Stalin, Khrushchev, and Brezhnev and Kosygin eras.

## Pos 355 Government and Politics in Subsaharan Africa (3)

The course will focus on the relationship between ideologies, institutions, and individuals in African political systems. Implications of these factors for African political behaviors (domestic and international) will be examined.

## Pos 356 The Foreign Policy of the Soviet Union (3)

A survey of Soviet activities in international relations, 1917 to the present. Attention is devoted to the Soviet Union's relations with Western Europe, Eastern Europe, China, the developing nations and the United States. Contemporary Soviet policy is emphasized. Previous study of Soviet internal politics is desirable, but not a prerequisite.

## Pos 357 Latin American Politics (3)

A study of the domestic political institutions, the forces which shape the quest for power, and the processes by which public policies are determined in Latin America.

## Pos 358 Government and Politics of South Asia (3)

A detailed consideration of the distinctive characteristics and problems of political development in India and Pakistan with emphasis on the post-independence era, national integration, and the politics of scarcity.

## Pos 359 Israeli Politics (3)

In depth study of the political system of Israel: its history, social and political cleavages, governing institutions and persistent problems.

## Pos 360 Contemporary Politics in the Middle East (3)

An analytical survey of contemporary politics in the Middle East, including political institutions, processes, and major political issues. Particular stress will be placed on the internal variables of Middle Eastern politics.

## Pos 458 Minority Politics in the Third World (3)

Against a background of European and American experience, case studies will be made of the composition and problems of various religious and ethnic minorities; their origins, characteristics, and integration into the social and political systems of the new nations of Asia and Africa in the process of political development. Examples: the Chinese of Southeast Asia, Indian Muslims, and overseas Indians.

## INTERNATIONAL POLITICS

## Pos 370 International Relations: Theory (3)

Attention will focus on the uses of theory in observing the interaction patterns found in the international system. Concepts of equilibrium, conflict and nationalism will be examined. Theoretical propositions about power, war and diplomacy will be tested and counter-theories will be formulated.

## Pos 371 International Relations: Practice (3)

This course will survey fundamental procedures of interstate and transnational relations. It examines the historical evolution of the international system, statecraft, the use of force, negotiation and diplomacy, alliance formation, and nationalism and imperialism. Note: Pos 370 is not a prerequisite for Pos 371.

## Pos 375 International Organization (3)

The structure and processes of the United Nations evaluated in terms of its historical antecedents and the challenges that face it. The operational foundations of the specialized agencies and such other governmental organizations as are universal in character, Close attention to the forces and interest groups of international scope to which the United Nations and related organizations respond.

## Pos 380 Basics of International Law (3)

An analytical survey of the precedents and limitations of world law. The uses of law for the pacific settling of disputes and wars will be pursued with varied texts, cases and documents.

## Pos 381 International Organization (3)

The integration of political communities will be surveyed at a regional or supra-national level. An evaluation of the United Nations in theory and practice, will suggest principles of organization that can be found in NATO, the OAS or the Common Market.

## Pos 383 American Foreign Policy (3)

An introduction to the political and strategic dimensions of American foreign policy. Issues considered: revolution, survival and expansion, 1763-1900; the strategies of world power; America, Russia, and the Cold War; the nuclear revolution; U.S. diplomacy during and after the Vietnam war.

## Pos 384 Formulation of American Foreign Policy (3)

An introduction to the political institutions and values of the American foreign policy process. Issues considered: American national character; the search for national interests; the role of interest groups and public opinion; the Congress; the Presidency; the military-industrial complex; the policy system in times of peace and Cold War.

## Pos 390 Organizing to Combat Global Problems (3)

A systemic review of the organizational issues that confront mankind (population control, development of resources, oceanic degradation, currency stability, etc.) and of the effectiveness of the specialized agencies that try to grapple with them.

## Pos 391 Regional Economic and Political Integration (3)

An investigtaion of regional political and economic groupings, paying special attention to such organizations as the European Economic Community. In pursuit of these objectives the course also addresses itself to the setting of regional integration, situating it in the general process of political development and the wider context of the global system.

## Pos 392 Strategic Studies (3)

An introduction to the threat and use of organized coercion by states in their international relations. Issues considered: professional armies of the 18th century; the industrial revolution and the democratization of national politics; limited wars of the 19th century; European statecraft; Bismarck and Clausewitz; alliance forming and alliance breaking; total war-World War I and World War II.

## Pos 393 Conflict Theory (3)

Attention will focus on contemporary problems in strategic conflict, including game theory, decision theory and the causes of war. Studies will also be made of the varying diplomatic and strategic contexts in which warfare arises.

## Pos 394 Imperialism and Economic Policy (3)

The economic instruments available to the nation-state are becoming more numerous and yet weaker. Intervention in trade, aid and fiscal policy have enlarged the operational scope of the state; yet the opposition that it faces, from multi-national firms and or-
ganizations has grown at a faster rate. The course will focus upon the economics of coercion and the politics of imperialism and international trade.

## Pos 498 Independent Study (1-6)

Reading or research under the direction of appropriate faculty. Prerequisite: consent of instructor.

## Pos 499 Senior Seminar (3)

An intensive examination of selected problems of political life. Specific topics will be selected and announced by the instructor when offered. This course may be repeated once if the selected topic is substantively changed.

The following courses are open to qualified seniors:

Pos $500 \quad$ Political Philosophy (4)

Pos 512 Political Theory and Analysis (4)
Pos 513 Empirical Research Design (4)
Pos 515 Elements of Survey Research (4)
Pos 516 Political Theory and Public Affairs (4)
Pos 518 Government and the Mass Media (4)
Pos 520 American Federalism (4)
Pos 522 State Government (4)
Pos 523 Governments of Urban Areas (4)
Pos 524 Community Politics (4)
Pos 526 a $\begin{aligned} & \text { American Constitutional Law-Federalism and } \\ & \text { Separation of Powers (4) }\end{aligned}$
Pos 526 b American Constitutional Law-Civil Liberties and Civil Rights (4)

Pos 530 The American Judicial System (4)
Pos 531 The Legislative Process (A)
Pos 532 The Chief Executive (4)
Pos 534 American Political Parties (4)
Pos 538 Political Behavior (4)

| Pos 539 |
| :--- |
| Pos 540 |
| Pos 551 | Urban Politics (4) | Political Elites and Leadership (4) |
| :--- |
| Pos 552 | Comparative Communist Systems (4)

# Department of Public Administration 

FACULTY: H. Adams, D. Andersen, D. Axelrod, A. Baak- lini, W. Balk, J. Col, L. Hawkins, J. Heaphey, J. Heikoff, I. Lurie, R. Nunez, J. Plant, O. Poland, R. Quinn, J. Rohrbaugh, J. Wade, V. Zimmerman.

Public Administration is concerned with the formulation and implementation of governmental policies and programs. The approach of the department is interdisciplinary, drawing on various social and behavioral sciences. The courses focus on such topics as the role of bureaucracy in society, management of finances of the public sector, organizational theory and development, the political and legal environment of administration, and public policy research and analysis.

## Pad 201 Living with Large Organizations (3)

An exploration of basic ideas about people in large organizations, the social structure in such organizations, and how they interact with their environment. The final sessions deal with the problems involved in using large organizations to bring about social change.

## Pad 303 Public Administration and Management (3)

An introduction to the field of public administration as its theory and practice have developed in the United States, emphasizing current trends and problems of organization and management in such areas as personnel policy, budget making, policy research and planning.

## Pad 405 Bureaucracy and Politics in American Society (3)

An investigation of how bureaucratic institutions function in the American political system and why they are variously seen as assets or liabilities for a public policy process faced with unprecedented problems in guiding American society through a transition to the next century.

The following courses are open to qualified seniors. (See the Bulletin of the Graduate School of Public Affairs for descriptions.)

## Pad 500 Theories and Processes of Public Administration (4)

(Not open to students who have taken Pad 303.)

## Pad 502 Public Administration and the Political Process (4)

(Not open to students who have taken Pad 405.)
Pad 510 Introduction to Legislative Administration (4)
Pad 520 Methods of Research and Reporting (4)
Pad 571 National Goals and Public Policy (4)
Pad 572 Program Seminar in Urban Environment Systems (4)

## Program in Public Affairs

FACULTY: Combined faculty of the Graduate School of Public Affairs, including faculty from other schools and departments of the university.

Designed as a graduate program of study in the field of public policy, the program in public affairs also offers undergraduate courses in a variety of topics.

See "Interdisciplinary Second Fields" for a description of the interdisciplinary second field in Urban Affairs.

## Paf 150 Man Against His Environment (3)

A study of ecological, political and cultural forces destroying our environment and threatening the pbysical and mental well-being and quality of American life. Designed for the university student and the citizen concerned with public affairs.

## Paf 200 Social Policy and the Environment (3)

This course will deal with the principal values and institutions affecting the formulation of private and public policies directed toward environmental issues. Specific topics to be discussed include population, land, minerals, water, and air.

Paf 300 a \& b Environment Legislative Workshop (3-3)
Intensive study of current New York State legislative proposals involving environmental topics. Preparation of factual analyses of these proposals for information for the legislators and the general public. Prerequisite: consent of instructor.

## Paf 314 Peace Studies Forum (3)

The course is centered upon a series of discussions led by faculty from each of the many disciplines wheih contribute to an understanding of the problems of violence in international and domestic affairs and to an assessment of the possibilities of non-violent conflict resolution in both spheres. This is the basic course of the second field in Peace Studies, but is open to students who are not pursuing this second field.

## Paf 360 Seminar in Journalism (3)

Intended primarily for students interested in a career in journalism, the seminar focuses upon an examination of both practical and philosophical variety of instructional formats, including lectures, discussions, media presentations and field trips as well as pres* entations by practicing journalists. Prerequisite: consent of instructor.

## Paf 390 Forum in Public Affairs (3)

The examination and discussion of selected areas of public policy and topics of current social and political concern. Junior standing and consent of instructor are required.

The following courses are open to qualified seniors:
Paf 500 Selected Problems in Publlc Affairs (4)
Paf 504 Introduction to Public Policy (4)
Pat 511 Land Use Policy (4)
Paf 560 a Reporting of Public Affairs (4)
Paf 560 b Reporting of Public Affairs (4)

# School of Social Welfare 

Seth W. Spellman, Dean<br>Ivan J. Edelson, Assistant Dean

Faculty: M. Bates, L. Berg, D. Cohen, C. David, M. Dennis, M. Didier, B. Gummer, A. Klein, D. Lamkin, H. McKinley, M. Miringoff, J. Nelson, M. O'Connell, S. Pflanczer, R. Rivas, E. Sherman, M. Siporin, S. Spellman.

The objective of the school is to provide professional education in the social services to prepare students for beginning practice in social work under supervision or for graduate study. It also can serve the liberal education needs of students generally interested in the social sciences and/or the human service profession. The advanced degree program (M.S.W.) prepares students for leadership positions within the profession requiring advanced theoretical, practice research skill and/or management and policy analysis skills.

To accomplish its objectives, the school offers full programs leading to the B.S. with a major in Social Welfare and the Master of Social Work degrees. A Ph.D. program in Social Welfare has been approved by the Board of Regents of the State of New York, but is not yet offered by the school.

Both the B.S, and M.S.W. program are accredited by the Council on Social Work Education-the national accrediting agency.

## DEGREE REQUIREMENTS FOR THE MAJOR IN SOCIAL WELFARE

## General Program

B.S.: Within the general credit requirements of a Bachelor of Science, the School of Social Welfare advises in the selection of the required 66 credits for a major in Social Welfare.

Of the 66 credits: (a) 15 credits represent general requirements; (b) 30 credits constitute the core requirements for a major in Social Welfare; (c) The remaining 21 credits must be in approved supporting courses.
(a) General requirements (15 credits); a minimum of one (1) course in each of the following five (5) areas of study before beginning the major:

1. Fundamentals of Human Biology ;
2. Introduction to Human Ecology ; or Ssw 200

## 3. Elementary Statistics;

4. Philosophy;
5. Ssw 210

In addition, it is recommended that prospective Social Welfare majors elect Ssw 290 (Community Service) during the sophomore year.
(b) Core requirements ( 30 credits) of the major in Social Welfare consist of these ten courses: Ssw 321, Ssw 322, Ssw 350, Ssw 351, Ssw 400, Ssw 401, Ssw 402, Ssw 405, Ssw 406, and Ssw 410.
(c) Supporting social science or other approved courses as advised (21 credits) :

1. A minimum of 12 credits in one social science: AfroAmerican studies, Anthropology, Criminal Justice, Economics, Geography, History, Judaic Studies, Political Science, Psychology, Puerto Rican Studies or Sociology (of these, six credits must be in upper division courses);
2. A minimum of nine credits in one of the other social sciences, i.e., other than the one in which the above 12 credits are earned.

Finally, credits toward the major for courses with substantially equivalent content of core requirements (Ssw 322 ) and for approved courses require formal approval by the School of Social Welfare. All 300 level core courses for a major in Social Welfare may be open to qualified upper division non-social welfare majors upon approval by the School of Social Welfare. All 400 level courses are restricted to accepted majors in Social Welfare.

## Other Degree Requirements

Students interested in majoring in Social Welfare should be aware that because of the limited number of placements for the field course, it may not be possible to accommodate all who wish to enter the major.

At this time a limitation will be placed on the number of students to be enrolled as social welfare majors.

The major can begin only in the Fall term of the junior academic year.

Those wishing to enter the major must complete all the general requirements for the major indicated elsewhere in this bulletin and have a personal interview with faculty of the School to ascertain their readiness to participate in the program.

Field instruction is an integral part of the total educational process. It affords the student the opportunity to develop, apply, and integrate the necessary knowledge, skills, and attitudes while in direct practice in Social Welfare settings. During the senior year each student is provided field instruction by a qualified instructor in an agency designated by the school. The placements are selected by the school for the student on the basis of his educational needs and, wherever possible, his area of interest. The field placements represent a variety of settings under public and private auspices, and are located throughout the tricities' area of Albany, Schenectady, Troy and adjacent areas. Students are responsible for the expenses involved in traveling to and from placement.

In addition, a regularly scheduled seminar is required as part of the field instruction courses.

The faculty of the School of Social Welfare reserve the right to require a student to withdraw from any Social Welfare course if such action is in the best interest of the University.

The following undergraduate courses offered by the School of Social Welfare are considered liberal arts and sciences courses for the purpose of requirements for the B.A. and B.S. degrees: Ssw 200, 210, 290, 320, 321, 322, 350, 351, 390, 402, 450.

## Ssw 200 The Social System: Man and His Environment (3)

An introductory survey of culture, society, and personality as the systemic components of human development and functioning: family life, instrumental and expressive groups, formal organizations, and communities.

## Ssw 210 Development of Social Welfare as an Institution (3)

Consideration of economic, political, and social changes as they have influenced the development of social welfare policy and programs in the United States. Examination of public policy and private efforts to meet human needs and the function of the social worker in interdisciplinary as well as primary social work programs. Prerequisite: Open to sophomores, juniors, and seniors only.

## Ssw 290 Community Service (3)

Volunteer work in public or private agencies involving different types of service to the community. Six hours per week of actual work in the agency, together with supervised evaluation seminars.

## Ssw 320 Child Welfare (3)

Supportive, supplementary, and substitute child welfare services employed in dealing with the problems of dependent, neglected, delinquent children. Scope, method, problems, trends reviewed with regard to each of the services; child welfare in other counties; sociology of the child welfare worker.

## Ssw 321 Community Organization and Community Development (3)

Familiarity with the basic principles, concepts, and strategies of Community Organization as a method of social work practice, Discussion of the use of both formal and informal community structures in bringing about desirable social change. The distinction between Community Organization and Community Development is explicated. Community assessment techniques utilized in developed and underdeveloped regions will be examined. Prerequisite: for majors only and Ssw 210.

## Ssw 322 Introductory Research Method in Social Welfare (3)

A study of methodological approaches and research techniques in the field of social welfare; problems formulation, research tech. niques in data collection and analysis. Reviews of current research in professional, journals; fundamentals of report writing. Prerequisite: for majors only.

## Ssw 350 Community Law and Client Advocacy (3)

Understanding the role of attorneys, social workers, and other advocates in our legal system. Examination of legal rights of clients as parents, juveniles, employees, tenants, consumers, welfare clients, the aged, and mental patients. Functioning of the courts and administrative agencies in resolving client problems. Legislative advocacy as a tool. Prerequisite: for majors only.

## Ssw 351 Social Work with Groups (3)

Social Work with Groups is a course which explicates the social work method called group work. It covers the fundamental knowledge, skills, values, and techniques inherent in the method, as well as basic professional social work values and philosophy. Emphasis placed upon practice. Tracing the stages of group development, the course addresses itself to the role and function of the social worker in each period, Prerequisite: for majors only.

## Ssw 390 Community Service (3)

Volunteer work in public or private agencies involving service to the community. A minimum of six hours per week of actual time must be spent in the agency, together with seminars examining some aspects of voluntarism and roles of participating agencies. Prerequisite: Ssw 290.

## Ssw 400 Field Instruction in Social Welfare I (3)

Practical work experience in a social welfare agency or suitable laboratory setting; hours per week are set to meet acceptable professional standards. Action cycles of agency service and simple tasks; Prerequisites: for majors only, and consent of instructor.

## Ssw 401 Human Behavior and Social Welfare (3)

Life cycle tasks from infancy to old age. The maturation process, class differences in social expectations, stress and balance in the maintenance of optimal functioning, the influence of opportunity systems in various cultures and sub-cultures in relation to social welfare. Prerequisite: for majors only.

## Ssw 402 Social Dysfunction (3)

Social effects of chronic probems related to dependency, child neglect, marital conflict, mental illness, retardation, delinquency, the addictions and other deviant behavior. Implications for Social Welfare intervention. Prerequisite: for majors only and Ssw 401.

## Ssw 405 Social Welfare Intervention Methods I (3)

Study is made of basic social welfare interventive methods utilized in assisting individuals, families, groups, organizations and local communities with social problems. Particular attention is gven to interviewing with individuals, and groups and to the use of community resources. Prerequisite: for majors only.

## Ssw 406 Social Welfare Intervention Methods II (3)

Further study is made of interventive methods and skills. Emphasis is given to the development of applied knowledge and skill in the helping process. For majors only. Prerequisites: for majors only and Ssw 400, 401, 405.

## Ssw 410 Field Instruction in Social Welfare II (3)

Continuation of Ssw 400, with an emphasis on developing diag. nostic and direct service skills under supervision. Prerequisite: for majors only, Ssw 400 and consent of instructor.w.

## Ssw 450 Independent Study in Social Welfare (3)

Independent reading or research on a selected experimental, theoretical or applied problem under direction of a faculty member. Must have written consent of instructor and Director of undergraduate program.

## TYPICAL PROGRAM FOR JUNIORS AND SENIORS

Fall-Junior Year
Ssw 321 Community Organization and Community Development (3)
Ssw 351 Social Work with Groups (3)
Supporting Social Science courses as necessary
Spring-Junior Year
Ssw 322 Introductory Research Methods in Social Welfare (3)

Ssw 350 Community Law and Client Advocacy (3)
Supporting Social Science courses as necessary

## Fall-Senior Year

Ssw 400* Field Instruction in Social Welfare (3)
Ssw 401* Human Behavior and Social Welfare (3)
Ssw 405* Social Welfare Intervention Methods (3)

* Courses must be taken concurrently.


## Spring-Senior Year

Ssw 402** Social Dysfunction (3)
Ssw 406** Social Welfare Intervention Methods II (3)
Ssw 410** Field Instruction in Social Welfare II (3)
** Courses must be taken concurrently.

## State University of New York

The State University of New York, now in its 28th year of service, is the largest, centrally managed, multi-level system of public higher education in the nation.

Since its founding in 1948, through consolidation of 29 State-supported but unaffiliated campuses, the University has grown in response to need until its services are now felt educationally, physically and culturally the length and breadth of New York State.

The University's 64 geographically dispersed campuses bring educational opportunity within commuting distance of virtually all New York citizens. In many communities, the SUNY campuses are cultural centers of the area and a significant contributor to the local economy.

In academic 1975-76, nearly 355,000 students studied in its classrooms or pursuing study at home, at their own pace, through such innovative institutions as Empire State College, a campus without walls. More than 100,000 students are 24 years of age or older, reflecting SUNY's ability to adjust to meet the needs of more mature students.

During its relatively brief existence, it has graduated more than 600,000 alumni, the majority of whom are pursuing their careers in villages, towns and cities across the State.

In a recent report to the University's Trustees, the Chancellor emphasized the diverse role of SUNY when he said:
"The State University welcomes not only the future architects, business executives, engineers, surgeons and literary critics, but also future dairy farmers and medical technicians, accountants and social workers, foresters and automobile mechanics. And through work in film, electronics, pollution control, data processing, police science, urban studies and similar fields, the University seeks to educate persons for tomorrow's roles as well as those of today."

To provide such opportunity on a continuing basis, the University is uniquely organized into a system comprised of:

Four University centers (two of which, Buffalo and Stony Brook, include health science centers) ; two medical centers; 13 colleges of arts and science, a non-residential college; three specialized colleges, six agricultural and technical colleges; five statutory colleges administered in cooperation
with Cornell and Alfred Universities, and 30 locally-sponsored community colleges.

In addition to baccalaureate studies, 12 of the senior campuses offer graduate study at the doctoral level, and 22 at the master's level.

The two-year colleges offer associate degree opportunities in arts and science in a wide range of technical areas. They also provide transfer programs within the University for students wishing to continue to the baccalaureate degree.

Ten Educational Opportunity Centers serve the educationally deprived by upgrading occupational skills for more gainful employment and identifying students with college potential to prepare them for enrollment in the state's public and private colleges.

Overall, at its EOCs, two-year colleges, four-year campuses and university and medical centers, the University offers 3,500 academic programs.

State University is governed by a Board of Trustees, appointed by the Governor, which determines the policies to be followed by the 34; State-supported campuses.

The 30 community colleges operating under the program of State University have their own local board of trustees. The State contributes one-third to 40 percent of their operating costs and one-half of their capital costs.

The State University motto is "Let Each Become All He Is Capable of Being."

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*These operate as "contract colleges" on the campuses of private universities.
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[^0]:    * For tuition purposes, lower/upper division classification is based on acoumu. lated graduation credits, unbalanced $D$ 's, and grades of incomplete ( $I$ 's). If these credits exceed 56, one is billed upper division.

[^1]:    * These are the Colleges of Humanities and Fine Arts, Social and Behavioral Sciences, and Science and Mathematics; and the Schools of Business, Educa. tion, Public Affairs, and Social Welfare. Those registered in the Teacher Edur cation Program must first be acceptable to the School of Education.

[^2]:    ** In 1969-70, all freshman students were under a mandatory " $\mathrm{S} / \mathrm{U}$ " grading system. In 1970-71, most freshman and sophomore students were graded " $\mathrm{S} / \mathrm{U}$ "; a Himited number of students were granted exception to this system and were graded "A-E" as were all juniots and seniors. From 1971 to 1973 " $\mathrm{S} / \mathrm{U}$ " grading was normative for freshman and sophomores with an option to grant "A-E" grading to any student who petitioned for exception.

[^3]:    * Grade of $S / C$ or better is required for the prerequisite unless waived by the chairman of the department.

[^4]:    * This language should be of radically different structure from the foreign language chosen for the proficiency requirement. Non Indo-European languages are usually advised. Credits earned in Lin 289 may be counted towards the 36 credit requirement only if used to fulfill this one-year language requirement.

[^5]:    * Primary responsibility with Atmospheric Sciences Research Center.

[^6]:    Aas 450 (Prs 450) Minority Children in the United States School System (3)
    (Same as Prs 450.)

[^7]:    * Msi 230 a and b may be substituted for Msi 215, 220, 330.

[^8]:    * It is recommended that students concentrating in Management Science complete at least A Mat 113.
    ** It is recommended that a student take Law 200, Law 220 will be accepted as a substitute if a student has taken the course prior to declaring Business Administration as a major.
    *** Msi 230 a and b may be substituted for Msi 215, 220, 330.

[^9]:    * Msi 230 a and b may be substituted for Msi 215, 220, 330.

[^10]:    ** Suggested electives Msi 361 and Eco 350.

[^11]:    * The State Education Department has required that teacher education programs in New York State be re-registered in a Competency Based format. These programs may call for different professional requirements. Therefore, as teacher education programs are re-registered, the professional requirements may be modified. Students will be appopriately advised.
    ** Professional elective is not required in business education program.
    *** In some subject fields, 40 I and 490 are combined for 12 credits as 492.

[^12]:    * Elective study in the liberal arts and sciences preferably is distributed over several areas, fields, or subjects, and preferably includes at least one course each of English composition, speech, literature, natural science, psychology, and sociology.

[^13]:    * Business and office courses are business content courses, not professional business education courses.

[^14]:    * Note: Certification by the American Speech and Hearing Association, referred to as the Certificate of Clinical Competence (CCC), requires the master's degree or its equivalent, 300 clockhours of supervised clinical practicum and one year of successful paid professional work experience upon completion of the master's program or its equivalent.

[^15]:    * Students wishing to participate in the programs marked with an asterisk may have to take a leave of absence from the Albany campus.

[^16]:    * No students admitted after Fall, 1975.

[^17]:    * Prerequisites for this course include two terms of general biology and two terms of general chemistry.

