

## Queens College City University of New York

1996-98 Bulletin

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Undergraduate Bulletin Q ueens C ollege

C ity University of New York
Flushing, New York 11367
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Allen Lee Sessoms, President


## C ontents

| 5 | C alendar |
| :---: | :---: |
| 7 | Queens College Today |
| 15 | Evening Session |
| 16 | City U niversity of N ew York |
| 18 | Admissions |
| 21 | Tuition and Fees |
| 27 | Paying for College |
| 34 | Student Life |
| 39 | Curriculum |
|  | (Including LASAR) |
| 50 | Honors and Awards |
| 56 | General Information |
| 66 | U niversity Policies |
| 71 | Courses of Study |
| 203 | Faculty |
| 212 A | ministration |
| 214 | CampusM ap |
| 217 | Directory |
| 218 | Index |
| 221 | Transportation |
| Queens College is an affirmative action/equal opportunity educator and employer. |  |
| Design by Stephanie Goldson. Cover photo: Looking up through the atrium in the Rosenthal Library (Nancy Bareis). |  |
|  |  |

## C alendar

## FALL 1996

| August 28, Wednesday | Last day to drop courses with no tuition or feeliability. |
| :---: | :---: |
| August 30-Friday | First Day of Classes |
| September 2-M onday | Labor Day-College closed |
| 13-Friday | No classes or related events scheduled |
| 14-Saturday | No classes or related events scheduled |
| 23-M onday | No classes or related events scheduled |
| 25-Wednesday | Follow M onday schedule |
| October 14-M onday | Columbus Day-College closed |
| 15-Tuesday | Follow M onday schedule |
| November 28-30-Thursday-Saturday | Thanksgiving Recess |
| December 14-Saturday | Last day of classes |
| 16-23-M onday-M onday | Fifteenth Week-including final exams |

## SPRING 1997

| J anuary 29—Wednesday | First Day of Classes |
| :--- | :--- |
| February 12-Wednesday | Lincoln's Birthday—College closed |
| 17-M onday | President's Day-College closed |
| 20-Thursday | Follow M onday schedule |
| March 28—Friday | No classes scheduled |
| April 20-27-Sunday-Sunday | Spring Recess |
| May 16—Friday | Last day of classes |
| 17-27—Saturday-Tuesday | Fifteenth Week—induding final exams |
| 26-M onday | Memorial Day-College closed |
| J une 4—Wednesday | Commencement |

## IM PORTANT NOTICE OFPOSSIBLECHANGES

The Board of Trustees of The City University of New Y ork reserves the right to make changes of any nature in the academic programs and requirements of The City University of New York and its constituent colleges. All programs, requirements/and courses are subject to termination or change without advance notice. Tuition and fees set forth in this publication are similarly subject to change by the Board of Trustees of The City University of New York.
$\square$


Queens College, called "World Class" by the London Times, is dedicated to the idea that a great education should be accessible to talented young people of all backgrounds - ethnic and financial. It is a global gathering place for ideas. The College's col orful kaleidoscope of tongues, talents, and cultures - 67 different native languages are spoken here - provides an extraordinary educational environment. A strong liberal arts curriculum assures students education for a full career and a full life. Opportunities abound with special programs developed for honors students; students in pre-law, pre-med, and business; adults; "fresh start" students; foreign language speakers. In all their diversity, students come first.

Queens College is listed as being among the top eight percent of all U. S. colleges in the 1997 Princeton Review Guide, and it was also cited by The New York Times Selective Guide to Colleges as the strongest college in the City University of New York. Like other CUNY colleges, it is a commuter school. Funded by the State of New Y ork, Queens College serves all the people of the state. Most students live in New Y ork City's five boroughs, or in Nassau, Suffolk, and Westchester counties.

The campus is located at Exit 24 of the Long I sland Expressway (I-495) on Kissena Boulevard in Flushing, close to public transportation (the Long Island Railroad and Queens and New York City bus and subway lines).

## Enrollment

The student population is diverse and achievement oriented. Close to 17,500 students are enrolled in all divisions. The graduate student enrollment is over 3,000.

## $Q$ ueens C ollege Today

## Student Achievement

Recent graduates have won fellowships, scholarships, and assistantships for study at many of the country's leading graduate schools, including H arvard, Yale, Northwestern, Emory, and MIT. A number of Queens College students received special awards for graduate study, most notably several recent Salk Fellowships.

Eighty-three percent of Queens College students who apply to medical schools are accepted, as are 90 percent of those who apply to dental schools.

## Faculty

The faculty is a roll-call of excellence-world-class research scholars who care deeply about teaching. The City University has recognized this excellence by honoring ten faculty members with the title of Distinguished Professor. F or day and evening, including adjuncts, the faculty numbers over 1,000 ; of the nearly 550 full-time faculty, more than 80 percent hold the doctoral degree.

## Research

Recent awards to support faculty research have included grants from New York State agencies to support ethnic studies projects and day-care training services, as well as the establishment of a Reference Resource Center for the New York State Department of Social Services. Federal grants facilitate the conduct of many basic research projects in the sciences, some with important implications for causes and treatment of disease.

Undergraduates are often deeply involved in Queens College projects, working in laboratories, classrooms, or in the field. Because of the diversity of ongoing research and training efforts, students are able to participate in and gain important insights into potential
career paths and to prepare for further graduate training.

## Academic Structure

Queens College offers day and evening classes in its undergraduate College of Liberal Arts and Sciences and its Graduate School. In addition, there is a Summer Session that serves all branches of the College.

Queens College has three academic divisions: Arts and Humanities, Mathematics and Natural Sciences, and Social Sciences.

The Division of the Arts and Humanities includes the following departments: Art; Classical, Middle Eastern, and Asian Languages and Cultures; Communication Arts and Sciences; Comparative Literature; Drama, Theatre, and Dance; English; European Languages and Literatures; Hispanic Languages and Literatures; Library; Linguistics; and the Aaron Copland School of Music.

The Division of Mathematics and the Natural Sciences includes the following departments: Biology; Chemistry and Biochemistry; Computer Science; Family, Nutrition, and Exercise Sciences; Geology; M athematics; Physics; and Psychology.

The Division of the Social Sciences includes the following departments: Accounting and Information Systems; Anthropology; E conomics; History; Philosophy; Political Science; Sociology; Student Personnel; Urban Studies; the Graduate School of Library and Information Studies; and the School of Education, composed of Elementary and Early Childhood Education and Services; Secondary Education and Y outh Services; and Educational and Community Programs.

## Degrees

Queens College offers the Bachel or of Arts (a four-year, 120-credit degree, unless otherwise noted in a department's listing) in many disciplines; Bachelor of Science in Computer Science, Geol ogy, and Physical Education; Bachelor of Fine Arts; Bachelor of Music; Master of Arts; Master of Arts in Liberal Studies; Master of Arts in the Social Sciences; Master of Fine Arts; Master of Science in Education; and Master of Library Science; as well as combined B.A.-M.A. degrees in chemistry and biochemistry, computer science, music, philosophy, physics, and political science.

Please note: Effective September 1, 1996, all bachelor's degree programs require a maximum of 120 credits for graduation. The CUNY Office of Academic Affairs may grant waivers for undergraduate degree programs that require additional credits for certification or accreditation from outside professional organizations or for other compelling educational reasons. See page 49 for the maximum number of credits to complete each degree program.

## Accreditation

Queens College is registered by the New Y ork State Education Department (Office of Higher Education and the Professions, Cultural Education Center, Room 5B28, Albany, NY 12230; 518-474-5851). It is accredited by the Commission on Higher Education: Middle States Association of Colleges and Schools, 3624 M arket Street, Philadelphia, PA 19104-2680; (215) 662-5606; Fax (215) 662-5501. The College is also approved by the Middle States Association of Colleges and Secondary Schools, and the American Association of Colleges for Teacher Education includes Queens in its list of member colleges.

## Facilities

The College's campus, lined with trees surrounding grassy open spaces, consists of over 30 buildings on 76 acres. Some of the original stucco-and-tile buildings from the early 1900s still stand, contributing to the pleasantly eclectic style of the campus. A major building program begun by former President Saul Cohen is continuing and includes greatly expanded classroom and research facilities, as well as spaces for varied campus activities. For example, facing Melbourne Avenue is the Science Building, which houses laboratories and offices for five science
departments. At the western edge of the Quadrangle is the Benjamin Rosenthal Library. Adjacent to Colden Center and facing Reeves Avenue is the Music Building. The recently renovated Klapper Hall is now home to the Art and English Departments as well as the Godwin-Ternbach Museum. On the southern end of the Quad is the newly renovated Delany Hall. West of the Library is an expanded parking facility as well as various rebuilt athletic fields.

The College's grounds are continuously being made safer and more accessible through the repaving of sidewalks and roadways, improved site security lighting, a new Security Building, improvements in King and Rathaus Halls, an addition to the Heating Plant, accessibility for the disabled, infrastructure rebuilding of the fire alarm and electrical distributions, a state-of-the-art telephone network, reduction of cross-campus vehicular traffic, and horticultural improvements.

## Office of Information Technology

The Office of Information Technology provides a full range of multimedia, academic, and administrative computing support and service to the College community. OIT support areas include delivery and presentation of media materials for classroom instruction (videotapes, motion pictures, etc.); design and production of original programming; operation of the College's computer laboratories and classrooms; design and maintenance of the College's campuswide computing infrastructure; maintenance of the College's presence on the Internet; and coordination and presentation of major satellite teleconferences throughout the year. OIT offices are located in Kiely Hall and the I Building with user facilities in Kiely Hall, the I Building, the Dining Hall Building, the Science Building, and Rosenthal Library.

## Computing Resources

Centralized time-shared computing facilities operated by OIT include a Digital Equipment Corporation VAX 6000-420 running the VMS operating system; and an AlphaServer 2100 4/275 running UNIX and providing Web Server functions. A wide range of academic programming languages, statistical packages, graphics software, and application software is available. Administrative computing services are provided by a Hitachi Data Systems EX-50 IBM-compatible mainframe running the VM/ESA and VSE/E SA operating systems and providing both
administrative and academic support.
Major administrative subsystems include QUASAR, a CUNY-provided student information system with more than eight hundred QC users; POS, a Point-of-Sale system used by the Bursar's Office; the Telephone Information Access System that facilitates telephone registration; and the Alumni/Development information system. OIT also provides communications to the City University Computer Center's IBM systems on West 57th Street in Manhattan.

The University Computer Center (UCC) facility includes an IBM 3090 Model 600J with two vector processors running the VM/ESA operating system with CMS; and an IBM 3081KX running MVS/XA with WYLBUR and J ES3. A comprehensive library of programming languages and applications packages is available.

## Communications

OIT operates several data communications networks. The major on-campus Local Area Network (LAN) consists of over 25 interconnected 10 Megabit/sec ethernet subnets. M ore than 5,000 users access the LAN using a mix of microcomputers and terminals. OIT provides users connected to the LAN with high-speed communications to all the facilities mentioned above, plus the ability to access the Internet in full graphics/multimedia mode. The College utilizes a high speed 100 Megabit/sec FDDI (Fiber Distributed Data Interface) backbone interconnecting the 10MB ethernet subnets.

OIT currently supports more than fifteen LAN server machines. The LANs permit wide-band exchange of information between student labs, academic departments, administrative offices, and the Internet. The College, as a member of BITNET, provides communications with systems at academic institutions worldwide. NYSERNET, the New Y ork State Educational \& Research Network, links universities, supercomputing facilities, and industrial research centers in the State, and serves as the College's high-speed gateway to the Internet and other national computing networks.

## Web Server

OIT is responsible for operating and maintaining the College Web Server (http://www.qc.edu). Current information is available regarding schedules, class listings, computing facilities, and academic programs. Current departmental links include Computer Science,

Sociology, Biology, Business \& the Liberal Arts, Chemistry \& Biochemistry, Queens College Libraries, and OIT itself. In addition, OIT publishes a newsletter, CITcomms, available in hard copy and electronic web editions.

## Microcomputer Facilities

Extensive microcomputer laboratory facilities managed by OIT are located in the Science Building, the Library, and the second floor of I Building. In total, OIT facilities provide more than 500 IBM, IBM-compatible, and Apple Macintosh microcomputers for classroom and open laboratory use. OIT provides an electronic classroom and advanced development facilities in the I Building Available equipment includes laser printers, text and graphics scanners, plotters, and CD-ROM readers. A wide range of software is available for full administrative and academic support.

Most labs are open six days a week, including five evenings. Terminals and workstations in Rosenthal Library are available Sundays as well. The hours of operation for the laboratories in the Science Building and the I Building are: 9:00 am - 9:45 pm, M onday thru Thursday; 9:00 am - 1:45 pm, Friday; and 11:00 am - 1:45 pm, Saturday (closed on Sunday).

The new Learning Center, located in Kiely Hall, Room 226, has interactive audio facilities and one of the nation's most advanced computer classrooms, where students meet in class groups for instruction in such academic areas as foreign languages, English as a Second Language, accounting, sociology, and Graduate Library studies. The Learning Center also provides playback services for students who wish to review lectures and other materials that have been audiotaped or videotaped. A separate audio lab is available for self-paced learning.

## Other Services

The College provides a variety of services to personal computer users, including pre-purchase consulting, installation assistance, and troubleshooting. CUNY and Queens College have negotiated site licenses or volume purchasing agreements for a variety of software packages.

## Laboratories

The College's laboratory facilities house up-to-date scientific instruments for research in biology, chemistry and biochemistry, family, nutrition, and exercise sciences, geology, physics, and psychology.

Colden Center for the Performing Arts, which opened in September 1960, contains the 2,143-seat Colden Auditorium and the 476-seat Goldstein Theatre. Both venues have facilities for presentation and instruction in the performing arts. The complex also houses the Gertz Speech and Hearing Center and two academic wings: Karol Rathaus Hall and Rufus King Hall.

FitzGerald Gymnasium, completed in 1958, houses the physical education and exercise sciences programs of the Department of Family, Nutrition, and Exercise Sciences, the Health Service Center, and the office of the Director of Athletics, Intramurals, and Recreation. The main gymnasium measures 225 feet by 194 feet. There are also an auxiliary gymnasium, individual sports areas, a swimming pool, classrooms, dance studios, and applied physiology research Iaboratories. Adjacent to the gymnasium are outdoor physical education facilities, which include 18 composition tennis courts, a quarter-mile track, ball fields, and other teaching and recreation facilities. In 1991 the soccer, lacrosse, and baseball fields were upgraded as part of the construction of a parking facility. Plans are under way for construction of an airsupported structure over six composition tennis courts.

The Horace Harding Building, located on Horace Harding Expressway about a half mile from campus, houses the Center for the Biology of Natural Systems.

Jefferson Hall, one of the original campus buildings, houses the offices of the Registrar, Bursar, Placement Center, Undergraduate Scholastic Standards Committee, Office of Research and Sponsored Programs, other administrative departments, and several area studies offices.

Kiely Hall, opened in Spring 1968, houses the offices of the President, Provost, and the Dean of the Faculty for the Arts and Humanities; the Vice President for Finance and Business; the Vice President for Graduate Education and Research; Academic Advising, Adult Collegiate Education (ACE), English Language Institute, Human Resources, Summer Session, and Continuing Education Program. The second floor includes the offices of Payroll and Purchasing and the Child Development Center. Department offices for Hispanic Languages and Literatures, Mathematics, Comparative Literature, and Film

Studies are also located here, in addition to the Academic Skills and Resource Center, the Learning Center, the Office of Special Services, the Office of Admissions, and the Office of the Academic Senate.

Kissena Hall, across from the campus on Kissena Boulevard, houses the Departments of Linguistics and Sociology as well as some area studies and administrative offices.

Klapper Hall reopened in 1992 after being extensively renovated. It houses the Art and English Departments and the Godwin-Ternbach Museum.

The Benjamin S. Rosenthal Library, which opened in Spring 1988, includes innovations in space configuration and information retrieval. The distinctive Chaney-Goodman-Schwerner Clock Tower, which is dedicated to the memory of three civil rights workers who were murdered in Mississippi during the Freedom Summer of 1964 (one of whom, Andrew Goodman, was a Queens College student), is a landmark for the community. The tower also houses the Queens College Bells, five beautifully crafted instruments that chime each quarter hour.

The Library maintains a carefully selected collection of print and nonprint material, including approximately 683,000 books, 2,500 current periodicals, and pamphlet files. There also is an extensive collection of microform material. In addition, the Library is a selective depository for many United States government publications. A reference area contains materials for research on a wide range of social science, humanities, education, and science topics, and includes CD-ROMs for data on various subjects in a local area network with multiple workstations.

## Special Collections

The Library houses significant collections of specialized materials:

Art Library. Resources include art slides, exhibition catalogs, and a picture collection.

Education Materials. Special holdings include juvenile books, school textbooks, curriculum materials, filmstrips, records, cassettes, pictures, teaching aids, and pamphlets. The education collection also includes college catalogs, a career file, the complete ERIC documents, and a large number of standardized tests.

Music Library. Located in the Music Building, the Music Library is a major resource for students and faculty. It offers an extensive collection of books and periodicals, the complete works of over 150 composers in scholarly editions, a collection of recorded music, and extensive microform holdings; the performance library includes scores, orchestral and other instrumental parts, and a large collection of choral music. On two levels, the library includes listening facilities and ample provision for study.

## Rosenthal Library Services

Reference Professional librarians are always available to assist students in the use of the Library's resources and to answer research questions.

Circulation. Books are charged out with a current Queens College ID card. In order to validate the ID card for Library use, a student should bring his or her validated ID card to the Circulation Desk in the Library, where a unique zebra label will be affixed to it. An open-access program enables Queens faculty and students to borrow from most other CUNY libraries.

ReserveLibrary. The Reserve Library contains books and pamphlets assigned as required readings by an instructor.

Interlibrary Loan. Through Interlibrary Loan, patrons can borrow books, theses, and periodical articles that are unavailable at the College. For further information, contact the Interlibrary Loan office at 997-3704.

Instructional Services. Orientation tours are available on a regular schedule as are workshops on selected online databases. Course-related bibliographic instruction in a variety of subject areas is available on request for class groups, day or evening. A formal credit course in basic library research is usually offered each semester.

Disabled Students. In cooperation with the Office of Disabled Students, the Library offers special orientation sessions and services for handi capped students on campus.

Photocopying. Card-operated photocopying machines are available throughout the Library. The cost to photocopy is 10 cents a page ( 20 cents for microform). Photocopying services are also available in the basement of the Student Union Building.

Music Building. The Aaron Copland School of Music occupies the Music Building, which was completed in 1991. The building includes classrooms surrounding a central enclosed atrium, the 490-seat LeFrak Concert Hall with tracker organ, and a smaller recital hall, rehearsal studios and practice rooms, the music library, electronic music studios, music education facilities, a professional-level recording studio, faculty offices, and the departmental office.

Razran Hall, opened in 1971, houses physics and psychology research and instructional laboratories, classrooms, and faculty offices. A new central airconditioning system has significantly improved air-conditioning throughout the building.

The Science Building was completed in 1986 and houses offices, laboratories, classrooms, and lecture halls for the Departments of Physics, Psychology, Computer Science, Biol ogy, Chemistry and Biochemistry, and Geology. Its distinctive appearance won a prize from the Queens Chamber of Commerce.

Powdermaker Hall, including Persia Campbell Dome, opened in 1962 and contains classrooms and faculty and department offices for education and the social sciences. The offices of the Dean of Students, the Dean of the School of Education, Graduate Studies, the Robert Morris Papers Research, Financial Aid, Graduate Admissions, and the Dean of the Faculty for the Social Sciences are located here.

The Queens College Dining Hall, opened in 1962 and later expanded, contains cafeterias, a faculty dining room and lounge, committee luncheon rooms, and rooms for formal use. The College Bookstore and the administrative computer are located in the west wing.

Remsen Hall, a science building and the first of the College's newer buildings, opened in 1950. It contains Chemistry and Biochemistry and Family, Nutrition, and Exercise Sciences Department offices, laboratories, lecture halls, testing rooms, classrooms, and demonstration facilities. The office of the Dean of the Faculty for Mathematics and the Natural Sciences is located here.

G Building, remodeled and reopened in 1988, provides office space for the faculty of the Department of Communication

Arts and Sciences. Plans are also under way to provide facilities for an international satellite communication access system, film studio, and sound studio.

T-1 Building houses computer equipment; T-3 Building is the home of Labor Studies, the Asian/American Center, LEAP, the Michael Harrington Center, and the Office of Community Studies.

Gertz Speech and Hearing Clinic is located in the Colden Center Building.

Delany Hall, renovated in 1991, houses the SEEK Program, Honors in the Western Tradition, the Director of College Preparatory Programs (who coordinates QC courses with Townsend Harris High School), the temporary offices of the Freshman Year Initiative, and other classrooms and activities.

Parking Facilities. In 1985 new parking fields were opened on Reeves Avenue. In 1990 parking field 3, adjacent to the Music Building, was reopened. In 1991 a deck structure was constructed at the western end of the campus near Rosenthal Library.

For the location of department and administrative offices and other points of interest, consult the directory and map in the back of this Bulletin.

## Governance

## Academic Senate

The Academic Senate is the chief legislative body of the College, responsible, subject to the Board of Trustees, for the formulation of policy relating to the admission and retention of students, curriculum, granting of degrees, campus life, and the nomination of academic (full) deans. It also establishes rules governing the use of the College name by organizations and clubs, and conducts all educational affairs customarily cared for by a college faculty.

Although the minutes of the meetings constitute the official record of Academic Senate decisions, the Policy Book serves as a handy compendium of rules, regulations, and policies.
The A cademic Senate Charter, as modified in Fall 1977, provides for a membership of 60 faculty and 30 students. In addition, there are ex officio members, including the College president, who have all the privileges of membership except voting and holding office. Faculty representatives serve for two years, student representatives for one year. Elections take place during the Spring semester. Student represen-

## $Q$ ueens $C$ ollege Statement of P urpose

The mission of Queens College is to prepare students to become leading citizens of an increasingly global society. The College seeks to do this by offering its exceptionally diverse student body a rigorous education in the liberal arts and sciences under the guidance of a faculty that is dedicated to the pursuit of excellence and the expansion of the frontiers of knowledge. Its goal is that students learn to think critically, address complex problems, explore various cultures, and use effectively the full array of available technologies and information resources.

Within a structured curriculum and in an atmosphere of collegiality and mutual respect, the College fosters an environment in which students learn the underlying principles of the humanities, the arts, and the mathematical, natural, and social sciences. The College also prepares students in a variety of professional and preprofessional programs that build upon and complement the liberal arts and sciences foundation.

Recognizing the special needs of a commuting student population, the College strives to create a broad range of intellectual and social communities. The College offers a spectrum of curricular and co-curricular programs that serves individuals and distinctive student constituencies.

In support of the need for advanced study in the liberal arts and professions, the College offers a variety of master's degree and certificate programs. In particular, the College recognizes and accepts its historic responsibility for providing high quality programs for the pre-service and in-service education of teachers.

As a partner with the University's Graduate School, the College provides faculty and resources in support of the University's mission in doctoral education and research. The College employs University graduate students and prepares them for careers in higher education and research, and it supports faculty who serve as mentors for doctoral students and engage in related scholarly activities.

For its faculty, the College seeks productive scholars, scientists, and artists deeply committed to teaching. It endeavors to enhance the teaching effectiveness of faculty and to encourage their research and creative work. The College recognizes the importance of having a diverse faculty responsive to the needs and aspirations of students of all ages and backgrounds.

As a public institution, Queens College provides affordable access to higher education and embraces its special obligation to serve the larger community. It is a source of information in the public interest; it is a venue for cultural and educational activities serving the general public. Through its graduates' contributions to an educated workforce and through the leading roles they assume in their local communities, the College is vested in the economic future and vitality of New York.

As one of the most culturally diverse campuses in the country, Queens College faces special challenges and opportunities. By balancing tradition and innovation in the service of this diversity, it represents the future of the nation.

From the 1995 Queens College Self-Study presented to the Middle States Association's Commission on Higher Education.
tatives are elected by the student body from among undergraduate students (who have a cumulative index of at least 2.0 and are not on probation) and graduate students (who have a cumulative index of at least 3.0 and are not on probation). All full-time members of the faculty with the rank of professor, associate professor, assistant professor, instructor, and lecturer may vote for the faculty representatives.

Much of the Academic Senate's work is done by committees composed of an equal number of students and faculty. These committees prepare proposals for the Senate in such areas as curriculum, scholastic standards, and campus affairs. All students and members of the instructional staff (professorial titles, lecturers, instructors, deans, HEOs, registrars, business managers, etc.) are eligible to serve as voting members on these committees.

The Academic Senate meets on the second Thursday of each month from September through May. Meetings are held in Kiely Hall 170 and are open to all members of the College community - faculty, staff, and students - and all have the right to participate in discussions. A complete description of the Academic Senate, including the apportionment of representatives and the duties and composition of Senate committees, is available in the office of the Academic Senate in Kiely Hall 810.

| Presidents |  |
| :--- | :--- |
| Paul Klapper | $1937-1948$ |
| Margaret V. Kiely |  |
| (Acting) | $1947-1949$ |
| J ohn J. Theobald | $1949-1958$ |
| Thomas V. Garvey <br> (Provost) | $1956-1958$ |
| Harold W. Stoke | $1958-1964$ |
| Harold C. Syrett <br> (Acting) | 1964 |
| Glenn W. Howard <br> (Administrative Head) | $1964-1965$ |
| J oseph P. McMurray | $1965-1971$ |
| J oseph S. Murphy | $1971-1976$ |
| Nathaniel H. Siegel <br> (Acting) | $1977-1978$ |
| Saul B. Cohen | $1978-1985$ |
| William Hamovitch | 1985 |
| (Acting) |  |
| Shirley Strum Kenny | $1985-1994$ |
| Stephen M. Curtis |  |
| (Acting) | $1994-1995$ |
| Allen Lee Sessoms | $1995-$ |

## The Curriculum:

## To Develop the Whole Person

The College's original curriculum was planned by its first president, Dr. Paul Klapper, after the liberal arts model of the University of Chicago: developing the whole person through a required sampling of the humanities, social sciences, sciences, language, and the arts; a more intensive preparation in one subject; and freedom of choice in a third group of courses.

In 1963 under President Harold W. Stoke, in 1970 under President J oseph P. McMurray, and in 1971 under President J oseph S. Murphy, the undergraduate curriculum was changed to reduce, and allow for more flexibility in, the required part of the program. An experimental program begun in 1971 eliminated all Collegewide requirements except proficiency in English. In 1976 the Academic Senate voted to require that entering students fulfill a minimum of basic skills and distributional requirements.

Under President Saul B. Cohen in 1980, the Academic Senate voted to institute new Collegewide academic requirements, which provide for a reinvigoration of the tradition of a wellrounded liberal arts education. Thus, reemphasis on devel opment of the whole person has become the curriculum objective of the College, in pursuit of its primary mission.

## The College and the Community

 A municipal college funded by the State of New York, Queens College is particularly aware of its mission in the broader community. College-community services include Continuing Education courses and lectures; Student Union facilities and programs; exhibits in the Art Center, the Godwin-Ternbach Museum, and the gallery in Kiely Hall; and plays, concerts, dance recitals, lectures, and other cultural and educational programs presented in Colden Auditorium, the Goldstein Theatre, and the LeFrak Concert Hall. A number of specialized programs that serve the community and in which the community can participate are described in this section.The Queens College Choral Society is open to members of the community and to the students and staff of the College. The Society makes accessible to the public the cultural benefits of participating in the performance of great works of choral music. There are two concerts annually: Winter and Spring. In these performances the Choral Soci-
ety is assisted by the Queens College Orchestra. Rehearsals are held every Wednesday evening when the College is in session.

The Godwin-Ternbach Museum in Klapper Hall is a teaching museum with a permanent collection of 2,500 works of art in all media from antiquity to the present. The Museum presents three to five exhibitions a year and holds lectures, workshops, and tours that are open to students and the public.

The Queens College Speech, Language, and Hearing Center, operated by the Department of Communication Arts and Sciences, is located in the Samuel Gertz wing of Colden Center. Among its services are diagnostic speech, language, and hearing evaluations, and speech and language therapy. Its facilities are used for research and to provide clinical practice experience for students who wish to become speech-language pathol ogists and audiologists.

Funds are contributed by friends of the College, who have organized the Queens Speech, Language, and Hearing Service Center, Inc., and by individuals who make direct contributions to the Speech and Hearing Center. These funds are used primarily to provide scholarships for anyone unable to afford the established fees. F or information, call 520-7359; Fax 520-7583.

The Center for the Biology of Natural Systems conducts research on energy, pollution, and resource problems of urban ecosystems. Its staff collaborates with faculty, students, and local community groups to investigate problems such as the environmental impact of alternative municipal trash disposal systems, alternative solutions to the problem of dependence on non-renewable fuels, the health effects of dioxin, and the eutrophication of water supplies from agricultural sources. Professor Barry Commoner is the director of the Center, located at 163-03 H orace Harding Expressway. F or information, call 670-4180; Fax 670-4189.

The Center for Environmental Teaching and Research offers facilities such as classrooms, laboratories, and dormitories. Located in Caumsett State Park on Lloyd Neck in Huntington, Long I sland, the Center is used for courses in the arts, the sciences, and the social sciences, for faculty and student research, and for day and overnight school groups wishing to study the environment. In addition to environ-
mental studies, the Center is used for conferences and seminars.

The Asian/American Center (A/AC), founded in 1987, is dedicated to the development of community-oriented research to analyze the multicultural diaspora experience of Asians in North, Central, and South America and the Caribbean. The Center seeks knowledge that is rooted in local community experience and emphasizes an interdisciplinary cultural studies approach. The A/AC is concerned with returning this knowledge back to the communities it is about, thereby enriching our understanding of everyday life and the impact of social policy. For more information, contact the director, Professor J ohn Kuo Wei Tchen, at 997-3050; F ax 997-3055.

The Center for Byzantine and Modern Greek Studies promotes Byzantine and neoHellenistic scholarship and publications, supports and coordinates the teaching of Byzantine and modern Greek subjects at Queens College, and relates academic research and teaching to the needs of the Greek community of Queens and beyond. Publications of the Center include: Essays on the Cyprus Conflict, edited by V. Coufoudakis (1976); F oreign Interference in Greek Politics: An Historical Perspective by T. A. Couloumbis, J. A. Petropoulos, and H. J. Psomiades (1976); Greek American Relations: A Critical Review, edited by T. A. Couloumbis and J. O. I atrides (1980); The Greek-American Community in Transition, edited by H. J. Psomiades and A. Scourby (1981); Education and Greek Americans: Process and Prospects, edited by H. J . Psomiades, S. Orfanos, and J. Spiridakis (1987); and Greece, the New Europe, and the Changing International Order, edited by H. J. Psomiades and S. Thomadakis (1992). The Center also publishes an annual, J ournal of Modern Hellenism, which first appeared in 1984. F or information about the Center and special events, contact Professor Psomiades in J efferson Hall 301, 997-4520; Fax 997-4529.

The John D. Calandra Italian American Institute is a university institute devoted to organized research on the Italian American experience, as well as to instruction, training, counseling, and service involving the Italian American students and community. It is located in midtown Manhattan at 25 West 43 Street, Suite 1000.

The overall purpose of the Institute
is to foster higher education among Italian Americans. To accomplish its mission, the Institute conducts and sponsors empirical, theoretical, and analytical research that strengthens critical understanding of the Italian American experience; serves as a clearinghouse for the dissemination of research to academia, government, industry, and the civic community; organizes conferences, lectures, seminars, and symposia on the Italian American experience; operates specialized counseling programs in areas of outreach, articulation, and student retention at CUNY; administers the Columbus CUNY/Exchange Program between CUNY and Italian public universities; maintains a resource library of printed material as well as videos pertaining to the Italian American experience; maintains updated listings of Italian American students and faculty at CUNY as well as faculty, academic scholars, and professionals at other universities; provides a Speakers Bureau on topics relevant to the Italian American experience; the Institute, in conjunction with CUNY-TV, produces the "Italian American Magazine," which is a national 30 -minute monthly television program featuring personalities, news, and information important to the Italian American community.

For information, contact the Executive Director, J oseph V. Scelsa, at (212) 642-2095; Fax (212) 642-2030.

The Center for Jewish Studies promotes scholarship, conferences, seminars, and publications connected with the various disciplines related toJ ewish Studies. It brings together humanists, social scientists, theol ogians, and others pursuing research and sharing an interest in J ewish Studies, and provides a means for the cross-fertilization of ideas and dial ogue. The Center enriches and supports the teaching of J ewish Studies in the New York area and creates a vital scholarly arena in which faculty and students can be exposed to various streams of thought. It also acts as a link to other institutions involved in J ewish Studies through mutual projects and research interests. F or more information, contact the director at 997-4530.

Campus Ministry: Hillel, Protestant, Catholic, and Greek Orthodox
The Queens College Campus Ministers is an association of the Hillel Center for J ewish Life, Protestant, Catholic, and Greek Orthodox ministries on campus.

Its purpose is to foster harmony among religious traditions and to join in campus efforts to promote spiritual and ethical growth. The campus ministers serve as a resource for religious and ethical information and insight for the academic and the wider Queens community. All unaffiliated students, faculty, and staff are wel come to participate in the activities of the various centers.

Individually, the four religious centers serve the needs of their constituents on campus.

TheHille Center for J ewish Life (Student Union 206; 793-2222; e-mail: hillel @qcvaxa.acc.qc.edu; Fax 793-2252) provides religious, cultural, and social programming, counseling, and outreach for J ewish students, faculty, and staff.

The Protestant Center (Student Union 203; 261-1550) wel comes students, faculty, and staff from the various Protestant denominations for worship and Bible study, counseling, and a variety of programs.

The Catholic Newman Center (Student Union 207, 208; 793-3130, 5207823) provides a ministry of worship and pastoral outreach to the Catholic community on campus.

The Greak Orthodox Center (Student Union 209) provides religious, cultural, and social programming, counseling, and outreach for Greek Orthodox students, faculty, and staff. It also provides information on worship and Bible study. For information on religious matters, call Fr. Demetrios Antokas, $458-5251$. For other matters, call the Byzantine and Modern Greek Studies Office, J efferson Hall 301, 997-4520; Fax 997-4529.

Cooperative Education and Internships works with individual students to integrate classroom learning with work or field experiences. For more information, see page 36 .

The Queens College Center for the Improvement of Education is involved with innovation, implementation, and research in curriculum design, administration, and effective school/family/community relationships. The Center conducts experimental projects and collects and analyzes data on the creative, intellectual, emotional, and physical growth of pre-adolescent and early adolescent children in order to seek ways to improve instruction in the middle grades. Recently it has extended its interests to include all grades and has established partnerships with elementary, middle, junior high, and high schools. The Center has offices in the

Louis Armstrong Middle School in East Elmhurst, Queens, and in the School of Education. It publishes CONNECTIONS, an educational periodical, along with occasional papers and monographs. Professor Paul Longo is the director (997-5252; Fax 997-5222).

The Office of Technology in the School of Education has teaching laboratories in Powdermaker Hall. The Kaplan Macintosh Lab has the latest power-pc MACs including CD-ROMs. The IBM and IBM-compatible labs provide facilities for telecommunications including email and Netscape, CD-ROMs, Videodisk, and MBLI (Microcomputer-Based-L aboratory-I nstrumentation). A faculty and staff lab provides access to a state-of-the-art Macintosh computer with multimedia capacity, a scanner, and laser printer.

Concerned with the impact of contemporary technol ogy on the classroom, the Office conducts experimental classes for public school students and teachers on and off campus, monitors developments in educationally appropriate technology, and develops curriculum materials associated with microcomputer use, communication systems, and data retrieval. The Office, through its research, teaching, and associated activities, supports the preservice and in-service training components of the various departments within the School of Education.

For information, see Professor Daniel Brovey, Powdermaker Hall 02, 997-5435; Fax 997-5222.

## Townsend Harris High School at

Queens College
The College's Office of College Preparatory Programs works in partnership with the New York City Board of Education on a number of projects in association with Townsend Harris High School at Queens College. It is involved in research and publishing projects, training programs, and workshops for college and high school teachers, and runs the "Bridge Year" program, which includes a year-long team-taught course at the College for Townsend Harris seniors. The Office welcomes all members of the College community to make inquiries and suggest projects. Marvin Leiner is the director (Delany Hall, Room 301, 997-3175).

Queens College Upward Bound Project is a federally funded college-preparatory program designed to provide economically disadvantaged ninth-, tenth-, and eleventh-grade students with the basic
skills and motivation necessary for success in post-secondary education. F or more information, see page 37.

The Training and Resource Center for Economic Education, operated jointly by the Department of Secondary Education and Youth Services and the Department of Economics, offers a program of seminars, forums, and courses for teachers, administrators, and community leaders in building a better understanding of economics and economic education. Programs are designed on both the theoretical and practical levels to meet economic issues and to aid economic decision-making on a daily basis. The Center also conducts studies of economic understanding and serves as a clearinghouse for research in economics that has particular application to schools. See Professor J ack Zevin (Powdermaker 186, 997-5164; Fax 997-5222) or Professor Hugo Kaufmann (Powdermaker 300E).

The Michael Harrington Center for Democratic Values and Social Change exists to promote public discourse about social issues, to advocate social change, and to work in partnerships with others to build a more just society. To accomplish these goals, the Center:
■ sponsors conferences, workshops, and discussion groups;

- provides technical assistance to groups and organizations who work for social justice and equity;
- publishes working papers, newsletters, and quarterly action briefs on current social issues;
■ sponsors action programs;
- conducts and publishes research on social issues.
The Center's partners include educational institutions, public policy makers, racially and ethnically diverse community organizations, religious organizations, media, and public scholars. For information, call 997-3070.

The Center for the New American Workforce is devoted to making diversity work in corporate America. The Center is a preeminent resource for information collection and dissemination as well as a forum for the exchange of information and a catalyst for practical and productive change in the workforce. F or more information, contact the executive director, J oanna Cohlan, at 997-5898; Fax 997-5897

The Labor Resource Center provides laborrelated resources and educational services to the College, the public, and the labor community. It collects, prepares, and distributes educational material as well as promotes discussion and debate on labor issues. For more information, contact the director, Dr. Gregory Mantsios, at 997-3060; Fax 997-3069.


# E vening Session 

Queens College offers fulltime and part-time students the opportunity to complete a degree by taking classes during the evening session. A rich variety of courses, including the courses required for over 17 majors, are offered during the evening hours, with many courses scheduled to meet once a week.

Students attending classes in the evening session fulfill the same requirements as students attending day classes. J ust as for classes scheduled during the day, evening programs stress excellence and a quality education. Queens College faculty, which includes distinguished scholars in all fields, teach both day and evening classes. The student body is heterogeneous, including students of all ages and backgrounds.

Every effort is made to accommodate the evening student. Many administrative offices are open during the evening, and academic advisement is available. Student involvement in campus life is enhanced by organizations such as the Evening Student Association and the ACE Student Association.

## Evening Degrees Offered

Students who attend classes at night may earn a degree in the following areas: Accounting; Art; Biology; Communication Arts and Sciences; Computer Science; E conomics; Education*; English; Family, Nutrition, and Exercise Sciences; History; M athematics; Philosophy; Political Science; Psychology; Sociology; Spanish; and Urban Studies. In addition, many courses offered in other disciplines allow students to pursue a balanced and complete liberal arts education.

[^0]For requirements regarding degree and non-degree programs, consult the Admissions section of this Bulletin.

## Financial Aid

Over half of Queens College students receive some form of financial aid. Possibilities include state and federal loans, grants and scholarships, and work-study programs. Y ou may obtain further information from the Financial Aid Office (997-5100).

## DEGREE PROGRAMS FOR STUDENTS OVER 25

Adult Collegiate Education (ACE) Adult Collegiate Education is an accelerated baccalaureate curriculum for highly motivated adults 25 years and older who have a high school education or its equivalent. In both day and evening classes, ACE offers a personally rewarding education that also provides a secure foundation for career advancement and for graduate and professional study.

The four major components of an ACE student's curriculum are: 1) Basic ACE Seminars: a special series of interdisciplinary seminars in the arts, sciences, and social sciences, which fulfill most of the College's entry-level distribution requirements; 2) evaluation of prior learning for Life Achievement credits; 3) the academic major; and 4) elective courses.

Students are also encouraged to participate in tutorials, off-campus weekend seminars, and travel seminars.

To apply for ACE, you must be at least age 25 and have a high school diploma or a GED. A committee reviews the application and selects students for admission.

For more information, call ACE at 997-5717; Fax 997-5723.

## Worker Education and LEAP

The Office of Worker Education attempts to expand educational services to working adults and the labor community. It was established in cooperation with a number of New York City unions to provide union members with an opportunity to: 1) gain a better understanding of the world of work, the economy, and society in general; and 2) develop the skills and background necessary for career advancement.

The Labor Education and Advancement Project (LEAP) serves working adult students on campus. The Extension Center serves students attending classes in Manhattan. These programs are open to highly motivated adults who are 25 years or older, have a high school education, and are recommended by their unions.

Matriculated LEAP students are eligible to enroll in a special Worker Education curriculum. The four major components of this curriculum are: 1) basic courses that include a special series of interdisciplinary seminars in the arts, sciences, and social sciences (some courses are shared with the ACE program and some are courses offered specifically by LEAP); 2) the academic major; 3) elective courses; and 4) life experience.

For more information, call the office at 997-3060; Fax 997-3069.

# C ity U niversity of N ew York 


ity University of New York consists of ten senior colleges, a technical college, six community colleges, a graduate school, a law school, and an affiliated medical school. It is governed by a Board of Trustees (formerly the Board of Higher Education of the City of New York), composed of 15 appointed members and the chairpersons of the University Faculty Senate and the University Student Senate, who serve ex officio. Five members are appointed by the mayor of New Y ork City and ten by the governor of New York State. The governor also appoints the chairperson and vice-chairperson.

The Chancellor is the University's chief academic and administrative officer and is responsible for executing board policies. The Chancellor is assisted by a Central Office staff and advised by the CUNY Council of Presidents, a University Faculty Senate elected by faculty members from each campus, and a University Student Senate of student representatives designated by the student governments of each college.

## History

City University of New York traces its beginnings to 1847 and a municipal
public referendum authorized by the State Legislature to determine if the people of New Y ork City were willing to underwrite the cost of a tuition-free institution of higher education for their children. The Free Academy, created as a consequence of that overwhel mingly affirmative vote, Iater became City College of New York. In 1870 Hunter College was founded to educate women and became the first free normal school in the country. The State Legislature established a municipal college system in 1926 with the creation of a 21-member New York City Board of Higher Education.

As the demand for higher education grew, other colleges were established within the city's system: Brooklyn College in 1930, Queens College in 1937, New York Community College in 1947, Staten Island Community College in 1955, Bronx Community College in 1957, and Queensborough Community College in 1958. In 1961 the Legislature designated the municipal system as City University of New York. Rapid expansion and restructuring followed. The Graduate School was organized in 1961 to provide a vehicle for graduate programs that could draw on the faculties of all CUNY colleges. Ten other colleges were chartered during the next
decade: Borough of Manhattan Community College (1963), Kingsborough Community College (1963), J ohn J ay College of Criminal J ustice (1964), Richmond College (1965), Y ork College (1966), Medgar Evers College (1968), Eugenio Maria de Hostos Community College (1968), and Fiorello H. LaGuardia Community College (1968). Bernard M.
Baruch College, which had been the School of Business and Public Administration within City College, became a separate senior college in 1968. Lehman College, which had been a branch of Hunter College in the Bronx, became an autonomous senior college the same year. In 1967 the Mount Sinai School of Medicine was affiliated with CUNY.

Richmond College and Staten Island Community College were joined together as a federated institution named the College of Staten Island in 1976. In 1994 Medgar Evers College was designated a senior college in the CUNY system.

The City University of New York School of Law at Queens College, which is dedicated to training lawyers to practice "Law in the Service of Human Needs," opened in 1983. It received full accreditation from the American Bar Association in August 1992.


# Admissions 

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dmission information is outlined on the following pages. Since requirements, deadline dates, and fees are subject to change from year to year, applicants are encouraged to contact the Undergraduate Admissions Office, 997-5600, for current information.

## Definitions

Applicants may be admitted as matriculated or as non-degree students.

A matriculated student is one who has been admitted into an academic program and is recognized by the College as pursuing a degree. Matriculated students may attend Queens College on a full- or part-time basis. Freshmen and transfers, as well as those admitted to the SEEK and ACE programs, are considered matriculated students.

A non-degreestudent is one who is registered for credit-bearing courses but is not pursuing a degree at QC.

## Freshmen

Freshmen are those students who have completed high school but have not attended any post-secondary school since high school graduation or receipt of the GED.

Queens College seeks to admit freshmen who have completed a strong academic program in high school with a B+ average. Admission is based on a variety of factors, including grade-point average, academic program, and test scores. Successful candidates will have chosen a well-rounded high school curriculum that includes academic coursework in math (3 years), English (3 years), science ( 2 years), social studies (3 years), and foreign language ( 3 years). Although not required for admission, the SAT is strongly recommended; a minimum score of 1050r
may be an important factor for those who do not meet the above profile. GED recipients must have a test score of at least 350 for consideration.

Freshmen will be admitted to baccalaureate degree programs only if the remedial and ESL instruction they are evaluated as needing can be accomplished through a sequence of courses in each area that can be completed in one semester.

## SEEK

The Search for Education, Elevation, and K nowledge (SEEK) program serves academically underprepared and economically disadvantaged students who would not otherwise qualify for admission. SEEK helps students achieve academic success by providing financial support, academic instruction, tutorial assistance, and counseling services. Applicants are admitted for the Fall semester only, and a Pre-Freshman Summer Program may be required for some students. For further information, contact the SEEK Office (997-3150) or the Admissions Office (997-5600).

## Scholarships

Queens College Scholars offers a variety of scholarships to Fall semester freshmen and transfers. For 1996, over 90 merit-based scholarships were awarded to new freshmen and transfers, ranging from $\$ 5,000$ to $\$ 2,000$ per year. Selection is competitive and most awards are renewable contingent upon continued high academic achievement. Scholarship recipients must be fulltime students.

## Freshman Scholarships

Freshman applicants who rank in or near the top $10 \%$ of their class with a strong academic program, excellent grades, and SAT scores of 1250 r are en-
couraged to apply. An essay and teacher recommendations are required, and two SAT II subject tests are strongly recommended. In addition to completing the CUNY Freshman application with Queens College listed as the first choice, scholarship applicants must file the QC Scholarship application available in the high school guidance office or the QC Admissions Office. Application deadline is February 15.

## Transfer Scholarships

The Transfer Scholarship is in the amount of $\$ 2,000$ per year and is renewable for a second year. Community college graduates who have completed the A. A. or A. S. degree with a GPA of 3.5 are encouraged to apply. An essay and teacher recommendations are also required. In addition to completing the CUNY Transfer application with Queens College listed as the first choice, scholarship applicants must file the QC Transfer Scholarship application, available in the QC Admissions Office and local community college transfer offices. Application deadline is $J$ une 1.

## Transfer Students

Transfers are those students who have continued their education beyond high school/secondary school. Queens College admits students who have earned credits from other accredited colleges and universities. Admission is based on the previous college record, and in cases where insufficient credits have been completed, the high school record will also be used. CUNY transfers with more than 60 credits must have satisfied basic skills requirements in reading, writing, and mathematics, and passed the CUNY Assessment Test prior to transferring to Queens College.

Transfer of Credit
Coursework completed at other institutions will be evaluated after the student is offered admission to Queens College. Transfer of credit will be considered for liberal arts courses completed at an accredited, degree-granting U. S. institution with a minimum grade of C - (or any passing grade from a CUNY college). Students must complete at least 45 credits at Queens College in order to receive a degree. Consequently, a maximum of 75 transfer credits may be counted toward the 120 required for graduation. Contact the Office of Admissions (997-5404) for further information.

## Second B.A. Degree

Transfer students who have earned a bachelor's degree from an accredited institution may apply to matriculate for a second baccal aureate degree through the Queens College Second B.A. program. See page 39 for details.

## International Applicants

All students educated abroad - including U. S. permanent residents and foreign nationals - file the appropriate CUNY Freshman or Transfer application for admission. Academic transcripts as well as official translations are required to complete the application. The results of the Test of English as a F oreign Language (TOEFL) and a financial statement demonstrating the family's ability to meet all financial obligations may be required. For information about admission requirements for international students, write to:

Office of Admissions Services
City University of New York
101 West 31 Street
New York, NY 10001

## How to Apply

Queens College participates with all CUNY colleges in a centralized application process for freshmen and transfers.

Freshmen applicants, including SEEK and international freshmen, file the CUNY Freshman Application. This is available in local high school guidance offices, the CUNY Office of Admission Services (212-947-4800), and in the Queens College Admissions Office. For earliest consideration, file by J anuary 15 (December 1 for international students) for Fall admission, and by September 15 for Spring admission. SEEK applicants must complete the designated SEEK section of the Freshman Application in order to determine family income eligibility. Mail the application, fee, and all necessary documents and transcripts to:

University Application Processing Center
P. O. Box 350136

Brooklyn, NY 11235-0001
Transfer applicants, including Second B.A. and international transfers, file the CUNY Transfer Application. This is available from CUNY Community Colleges, the CUNY Office of Admission Services (212-947-4800), and the QC Admissions Office. F or earliest consideration, file by February 15 (December 15 for international students) for Fall, and by September 15 for Spring admission. Forward the application, fee, official high school and college/university transcripts to:

University Application Processing Center
P. O. Box 350136

Brooklyn, NY 11235-0001
College Preparatory Initiative (CPI) The City University expects students who graduated from high school to have taken a full complement of academic courses. These courses prepare the student for college-level work. Students should take as many academic courses in high school as possible.

The academic courses expected of entering students are in the following areas: English, math (such as Sequential I, II, III, algebra, geometry), lab science, social sciences, foreign language, and visual and performing arts. Students who have not taken these academic courses will still be eligible for admission to City University, but will have to make up the work in college. These requirements are in addition to others noted in this Bulletin.

All students who will be affected by this regulation will be given a "CPI Transcript," which will indicate those requirements not met by work taken in high school or by college work taken elsewhere. Students graduating from New Y ork City high schools may obtain information about CPI from their school or from the College's Office of Academic Advising in Kiely 104 (997-5599).

## ACE Program

The Adult Collegiate Education program (ACE) provides mature, highly motivated adults with an opportunity to earn an undergraduate degree. F or information and applications, contact the ACE Office at Kiely 134A (9975717). See page 74 for more details.

## Fresh Start

Each year a small number of selected students return to college via the Fresh Start program. Transfer and reentry applicants who do not satisfy regular
admissions criteria, who have been out of college for at least three years, and who demonstrate a high level of motivation may be eligible for admission through Fresh Start. Contact the QC Office of Admissions for information and applications.

## Reentering Students

Students who attended Queens College as matriculants, left while meeting retention standards, and have not attended other schools are encouraged to reenter the College to complete their degree. Deadline dates for Reenter applications are J uly 1 for Fall and December 1 for Spring admission.

M atriculants who attended Queens and did not meet retention standards may also apply to reenter, but readmission will be decided by a faculty committee. Reenter applications must be submitted by April 15 for Fall and November 1 for Spring consideration.

Students wishing to matriculate at Queens after having attended as a visiting or permit student from another college may do so by filing the CUNY Transfer Application. (See transfer section on pages 18-19.)

Readmission to the College is not automatic. Reenter applications are available in the Admissions Office.

## Veterans

Queens College is an approved training institution for veterans, disabled veterans, and children of deceased or totally and permanently disabled veterans. Students who believe they are eligible for benefits can be certified to the Veterans Administration by going to Registrar's Office in J efferson Hall, Room 100, as soon as possible after registration.

Students must notify the certifying official of all changes in their credit load in order to insure their eligibility for future benefits.

## Senior Citizens

NY State residents 60 years or older who have completed high school may qualify to audit classes on a spaceavailable basis. Auditors receive no credit for coursework and pay $\$ 70$ per semester. Those interested must file the Senior Citizen Auditor application and provide proof of age. Applications are available in the QC Admissions Office. Deadlines are J uly 15 for Fall and December 1 for Spring.

## High Jump

Through the High J ump program, selected high school seniors can take one college course in their senior year. Eli-
gibility is selective and determined by the high school academic record, maturity, and CUNY Assessment Test scores. Applications and information are available in the QC Admissions Office (997-5604). Deadlines areJ une 1 for Fall and December 1 for Spring admission.

## Non-Degree Admission

The following guidelines will be hel pful for those wishing to apply for admission as a non-degree undergraduate. Admission is not guaranteed, but applicants who meet these guidelines will be considered for admission. Applications are available through the QC Admissions Office. Deadl ine dates are August 1 for Fall and December 1 for Spring admission.

Non-degree students are defined as:

- Visiting or permit students from another accredited university/college.
- Casual students with a bachelor's degree from a U. S.-accredited college.
- Applicants who are eligible for admission as a freshman or transfer but who do not intend to pursue a degree.
- Students who do not meet requirements for admission as freshmen may be considered for non-degree admission if: they satisfactorily completed high school or a GED; they never attended college; and three years have elapsed since high school graduation.
- Students who do not meet requirements for admission as transfers may be considered for non-degree admission if: they satisfactorily completed high school or a GED; college/university work carries a GPA of at least 1.75 with no dismissal; at least three years have el apsed since the applicant attended school.

Unless exempted, non-degree students must take the CUNY Assessment Test prior to registration and will be responsible for satisfying all conditions pertaining to non-degree students and their matriculation as adopted by the Academic Senate.

Non-degree students may register for day or evening courses but are limited to three courses per semester.

Credits earned as a non-degree student may be applied to a degree program if the student applies and is accepted for matriculation. Non-degree students may apply for matriculation after completing 12 credits, but must apply before accumulating 24 credits. Matriculation forms are available in the QC Admissions Office.

# Tuition \& Fees 

AII tuition and other fees listed in this Bulletin and in any registration material issued by the College are subject to change without prior notice. In the event of an increase in fees, payments already made to the College will be treated as a partial payment, and notification will be given of the additional amount due and the time and method of payment.

Class schedules, issued prior to registration, should be checked for any fee changes.

## Payment of Tuition and Fees

In planning to register for courses, students must be prepared to pay all fees associated with registration. These include tuition, the activity fee, consolidated service fee, material and transportation charges, and other fees.

Students registering during the early registration period will receive a bill in the mail. This must be paid by the "payment due date" printed on the bill. If payment is not received by this due date, the student's entire registration will be canceled by the College.

Students who receive a zero "balance due" bill will not be required to have it validated at the Bursar's Office.

A student who issues a bad check will be liable for tuition and fees in addition to a reprocessing fee. A "stop payment" on a check does not cancel registration. The student must withdraw officially.

For billing and payment information, refer to the Telephone Registration Guide and Schedule of Classes.

## Tuition Fees

## Resident

(Enrolled prior to 6/1/92)
Full-time Matriculated $\$ 1,475 /$ semester

Part-time Matriculated $\$ 125 /$ credit
(Enrolled for first time
beginning on or after $6 / 1 / 92$ )
Full-time Matriculated \$1,600/semester Part-time Matriculated \$135/credit
(No enrollment restriction)
Non-Degree
\$160/credit
Senior Citizen Fee
\$70/semester
Non-Resident
(Enrolled prior to 6/1/92)
Full-time Matriculated \$3,275/semester
Part-time Matriculated \$275/credit
(Enrolled for first time
beginning on or after $6 / 1 / 92$ )
Full-time Matriculated $\$ 3,400 /$ semester Part-time Matriculated \$285/credit
(No enrollment restriction)
Non-Degree
\$325/credit

## Note:

1. To qualify for New York State resident fees, a student must have been a resident of the State of New York for a consecutive period of one year immediately preceding the first day of classes of the session in consideration.
2. There is no maximum tuition for undergraduate non-degree students who register for graduate courses.

## Guidelines for New

Tuition Schedule
To implement the new tuition rates established by the April 27, 1992 Board Resolution and effectiveJ une 1, 1992, the following definitions and guidelines are provided:

First-time freshmen, who are degree students at Queens College, registering on or after J une 1, 1992, pay the higher rate of undergraduate tuition and are eligible for free tuition in their last semester.

Students at Queens College who en-
rolled at CUNY prior toJ une 1, 1992, as either a degree or non-degree student and meet the definition of continuing student, pay the lower rate of undergraduate tuition. Students not meeting the definition of continuing student or non-CUNY advanced standing transfer student pay the higher rate of undergraduate tuition.

Non-degree students as of J une 1, 1992, pay a higher rate than degree students. In the case of the CUNY Baccalaureate Program (CUNY B.A./B.S.), students should contact the program's office to determine their academic status.

A full-time undergraduate degree student is one who is enrolled for 12 or more credits or billable equivalent credits. A part-time undergraduate degree student is one who is enrolled for less than 12 credits or billable equivalent credits.

Part-time students are billed on a per credit basis up to but not including 12 credits. The tuition for part-time degree students should not exceed the full-time degree rate in a regular semester.

There is no full-time tuition rate for Summer Session students. Similarly, there is no full-time rate for non-degree students. Therefore, both Summer Session and non-degree students are to be billed on a per credit basis regardless of the number of credits for which they register.

## Last Semester Free Policy

For full-time students, the last semester is any semester of full-time attendance ( 12 or more credits) that will result in a student receiving a baccalaureate degree. If, for whatever reason, the student does not actually fulfill the degree requirements during the semester in which the last semester free benefit is conferred, the student will be
required to pay the rates in effect at the time for all subsequent semesters or sessions of study.

For part-time students, the last semester begins at the point at which a student is 15 credits away from degree completion and ends after the next 15 credits for which a student registers; that is, once a part-time student is within 15 credits of the total number required for a baccal aureate degree, the next 15 credits are free. If for any reason (failure, switched major, withdrawals, etc.) those next 15 credits do not result in a baccalaureate degree and the student must, or wishes to, take additional credits, then the normal charges per credit would apply from the 16th credit forward.

If, for whatever reason, a student wishes to postpone implementation of the last semester free option, a college can, with presidential approval, seek consent from the Vice Chancellor of Budget, Finance, and Computing.

## Definitions Used in Last Semester Free Policy

First-time Freshman: F or purposes of determining eligibility for the last semester free, a first-time freshman shall be defined as a student entering a CUNY college on or after J une 1, 1992, as either a degree or a non-degree student without prior registration or credit accumulated as a college student from any accredited postsecondary institution. This student at a senior college pays the higher rate of undergraduate tuition.

A first-time freshman may, however, enter a CUNY college with $25 \%$ of the credits required for the degree, up to a maximum of 32 credits, earned at any time prior to admission through any of the following mechanisms individually or combined:

1) Successful scores achieved on such tests as the College Board's Advanced Placement (AP) program for high school students, the College-Level Examination Program (CLEP), and the New York State College Proficiency Examinations (CPE). Individual college policy determines credit award per subject area test score.
2) College-level work completed as a high school student through a high school/college collaborative program (whether at CUNY or elsewhere), or through the armed forces. (F or those on active duty, this shall include actual enrollment in another accredited postsecondary institution.)
3) Credit granted for life experience
or job training/education experiences. Such credit awards are determined by the college or specific departments upon completion of a specified period of attendance.

All other students who have attended another college or accredited postsecondary institution, regardless of course grade or credit award, will be considered non-CUNY advanced standing transfer students. These students will pay the higher undergraduate rate and will not be eligible for the last semester free.

## Residency within a CUNY Baccalaureate

Program: Students who begin as firsttime freshmen in any CUNY college on or after J une 1, 1992, may earn nonCUNY credits toward the baccalaureate degree and still maintain eligibility for the last semester free if more than 50\% of credits toward the degree are earned at CUNY in accordance with the following:

1) Students may attend a non-CUNY college as a "special student" for one or more specific courses, or participate in study abroad or exchange programs, if they have the recorded approval of their departmental or academic adviser or college registrar prior to such attendance. Advance recorded approval shall be necessary to protect eligibility for the last semester free.
2) Students who are otherwise eligible for the last semester free but leave a CUNY college and enroll in any number of credits elsewhere without having received specific approval from the home college will be considered as advanced standing (non-CUNY transfer) students upon their readmission to CUNY and will have forfeited their eligibility for the last semester free.
3) Students who are otherwise eligible for the last semester free and who leave a CUNY college but do not engage in any other college-level work for which credits are awarded, can return to the home college as a readmitted student, or apply for admission to any other CUNY college and still maintain eligibility for the last semester free. These students do not have to meet the six-year requirement since they are not continuing students as defined below.
4) CUNY community college graduates who were first-time freshmen on or after J une 1, 1992, who do not seek immediate enrollment within a baccalaureate program, will, upon future admission to such a program, be eligible for the last semester free provided that they do not engage in any other
college-level work for which credits are awarded inconsistent with provisions 1) and 2) above.
5) Students with breaks in attendance may participate in educational or "life" experiences previously defined that lead to the awarding of college credits and still be eligible for the last semester free.

New York State Residency: Documented New York State residency at the time of enrollment as a first-time freshman shall qualify a student for the last semester free regardless of subsequent changes in residency. However, if at the time of the last semester free (or semesters in the case of a part-time student) the student is determined to be a nonresident, then the tuition-free benefit shall only be at the resident rate and the difference between the resident and non-resident tuition rate shall be charged to the student.

Those students who enter CUNY claiming residency status for the last semester free, but have not documented such residency by the time of initial course registration, shall have one year from initial registration to do so. If a student demonstrates that at the time of initial registration he or she was a New Y ork State resident, that student shall be deemed eligible for the last semester free (assuming all other conditions are satisfied).

This definition of New York State residency is used to determine the last semester free and is different than the definition used to determine whether a student pays the resident or non-resident rate of tuition. A student may satisfy the residency requirement for the last semester free since it is based upon fulfilling New York State residency at initial course registration; however, this same student may not satisfy the residency requirements for tuition purposes since it is based upon being a New York State resident 12 consecutive months immediately preceding the first day of classes. Such students shall be required, however, to pay the non-resident tuition rate until the first semester or session following satisfactory documentation of the University's current one-year State residency requirement for tuition rate purposes.

Continuing Student: A continuing student is one who registers on or after J une 1, 1992, and whose previous college of attendance, either as a degree or non-degree student, was a CUNY institution. This student must have attended CUNY beforeJ une 1, 1992.

| Undergraduate Activity Fees |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Student Govt. Fe | College Assoc. Fee | Student Union Fe | Sports <br> Fe | $\begin{aligned} & \text { PIRG } \\ & \text { Fe } \end{aligned}$ | Disabled Students Fe | Special NonInstruc. Fee | Child CareFee | Univ. Govt. Fee |
| Day Session |  |  |  |  |  |  |  |  |  |  |
| Full-time | \$91.35 | \$5.08 | \$9.42 | \$56.00 | \$15.00 | \$3.00 | \$1.25 | -0- | \$. 75 | \$. 85 |
| Part-time | 60.60 | 2.71 | 5.04 | 40.00 | 7.00 | 3.00 | 1.25 | -0- | . 75 | . 85 |
| Cooperating Teachers |  |  |  |  |  |  |  |  |  |  |
| Full-time | 25.00 | -0- | -0- | -0- | -0- | -0- | -0- | \$25.00 | -0- | -0- |
| Part-time | 25.00 | -0- | -0- | -0- | -0- | -0- | -0- | 25.00 | -0- | -0- |
| Evening Session |  |  |  |  |  |  |  |  |  |  |
| Full-time | 86.35 | 5.08 | 9.42 | 56.00 | 10.00 | 3.00 | 1.25 | -0- | . 75 | . 85 |
| Part-time | 58.60 | 2.71 | 5.04 | 40.00 | 5.00 | 3.00 | 1.25 | -0- | . 75 | . 85 |
| Cooperating |  |  |  |  |  |  |  |  |  |  |
| Teachers |  |  |  |  |  |  |  |  |  |  |
| Full-time | 25.00 | -0- | -0- | -0- | -0- | -0- | -0- | 25.00 | -0- | -0- |
| Part-time | 25.00 | -0- | -0- | -0- | -0- | -0- | -0- | 25.00 | -0- | -0- |
| Senior Citizens |  |  |  |  |  |  |  |  |  |  |
| (NYS residents over | 65.00 | -0- | -0- | -0- | -0- | -0- | -0- | 65.00 | -0- | -0- |
| 60 auditing undergraduate courses only) |  |  |  |  |  |  |  |  |  |  |

All students (including non-degree and senior citizens) will be charged a Consolidated Service Fee of \$5/semester or session.
The $\$ 3$ PIRG fee is refundable if application is made to the College PIRG Office (Student Union, B22) within 3 weeks of the start of the session.
The Sports fee is refundable if application is made in FitzGerald Gym, Room 218, within 3 weeks of the start of the session. You must show your paid bill with your application.
The Child Care fee is refundable if application is made in the Child Care Center Office (Kiely Hall 245) within 3 weeks of the beginning of the Fal and Spring semesters or within one week of the beginning of the Summer semesters. Y ou must show your paid bill and validated ID with your application.
Students who initially register for 12 or more credits and/or equated credits and subsequently reduce their load to fewer than 12 after the semester begins must still pay the full-time activity fee.
The Activity Fees, Senior Citizens Fees, Cooperating Teachers Fees, Material/Film and Transportation/F ield charges cannot be refunded, if paid, unless the student drops all courses before the official opening day of the semester or if the student's registration is canceled by the College.

Such previous attendance must have occurred within the six-year period immediately prior to the start of the semester. This continuing student pays the lower senior college undergraduate tuition rate and is not entitled to the last semester free. If any non-CUNY college was attended for purposes of degree study as the most recent previous institution of attendance, then said student is not a continuing student at CUNY upon return, but a non-CUNY advanced standing transfer student. This transfer student pays the higher undergraduate tuition rate and is not entitled to the last semester free.

## Refund of Tuition Fees

Under the current registration procedure, once students have obtained a bill, they must pay it by the "payment due date" printed on the bill. Students may change their registration via the telephone registration system. To receive a $100 \%$ refund of tuition, a student must have dropped all courses before the official opening day of the semester. All written requests to drop classes must be postmarked before the official opening day of the semester.

The last date of attendance in class is not an official withdrawal date unless
some other action has been taken. Re funds shall be made in accordance with the schedule in the table below.

Pro Rata Refund for

## Tuition Refund Schedule

Fall and Spring
Amount of Refund

* Withdrawal from course before the official scheduled opening date of the semester 100\%
* Withdrawal within one week after official scheduled opening date of the semester $\qquad$ 75\%
* Withdrawal during second week after official scheduled opening date of the semester 50\%
* Withdrawal during third week after official scheduled opening date of the semester $\qquad$ 25\%
* Withdrawal after completion of third week after official scheduled opening date of the semester None

If a student is placed on active military status, partial refunds may be made. Students who are so notified should get in touch with the Registrar's Office immediately. Except as otherwise noted in this section, no other fees are refundable.
The tuition refund schedule, as adopted by the CUNY Board of Trustees, is to be used for calculating the refund where courses are dropped after classes begin.

Note: A full ( $100 \%$ ) refund of tuition will be made in the event that:

1) a student drops a course before the scheduled opening date of the semester.
2) a student's entire registration is canceled by the College after payment is made.
[^1]| Remedial, Developmental, and Compensatory Courses |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Course | Degree Credits | Course Hours | Billable Credits | Remedial, Developmental, Compensatory |
| College English as a Second Language |  |  |  |  |
| CESL 10 |  | 12 | 12 | R |
| CESL 21 | 1 | 4 | 4 | D |
| CESL 25 | 1 | 4 | 4 | D |
| CESL 28 | 1 | 4 | 4 | D |
| CESL 31 | 2 | 4 | 4 | D |
| CESL 35 | 2 | 4 | 4 | D |
| Chemistry 111 | 2 | 4 | 4 | D |
| Math 4.24, 4.25, 4.26 | 2 | 4,5,6* | 4,5,6 | D |
| Math 6.13, 6.14 | 1 | 3,4* | 3,4 | D |
| Math 10.23, 10.24 | 2 | 3,4 | 3,4 | C |
| Math 100 | 3 | 5 | 5 | C |
| Reading 1 | 2 | 3 | 3 | D |
| Science 1 | 4 | 5 | 5 | C |
| SEEK 1 | 0 | 4 | 4 | R |
| SEEK 4.15, 4.16 | 2 | 5,6 | 5,6 | D |
| SEEK 6.14 | 1 | 4 | 4 | D |
| SEEK 10.24 | 2 | 4 | 4 | C |
| SEEK 99 | 0 | 4 | 4 | R |
| SEEK 100 | 2 |  |  | D |
| SEEK 101 | 3 | 4 | 4 | D |
| SEEK 102 | 3 | 4 | 4 | D |
| SEEK 111 | 2 | 4 | 4 | D |
| SEEK 112 | 3 | 4 | 4 | C |
| SEEK 113 | 3 | 4 | 4 | C |
| SEEK 120 | 1 | 4 | 3 | D |
| SEEK 121 | 1 | 4 | 3 | D |
| SEEK 122 | 2 | 4 | 3 | D |
| SEEK 123 | 2 | 4 | 3 | D |
| SEEK 131 | 4 | 5 | 5 | C |
| SEEK 132 | 4 | 5 | 5 | C |
| SEEK 141 | 4 | 5 | 5 | C |
| SEEK 142 | 4 | 5 | 5 | C |

[^2]| Credits in Excess of 18 | Fee |
| :--- | ---: |
| $19-20$ | $\$ 100$ |
| $21-22$ | 230 |
| $23-24$ | 460 |
| 25 or more | 690 |

This fee applies to regular semesters only. Study during Summer Session or modules under nontraditional calendars other than Spring and F all are not subject to this fee. Inasmuch as this is a fee and not tuition, TAP financial aid does not apply. This fee, however, may be included in the cost of education to determine a student's Pell Award.

Students who are charged this fee will be entitled to a refund according to the schedule on page 23.

## Activity Fees

This fee covers Student Activities, Public Interest Research Group (PIRG), Sports Fee, Child Care Fee, and Student Union. It does not cover service fees that a student may incur individually, such as fees for program changes, late registration, transcripts, special examinations, or parking. Unless changed after printing of this Bulletin, the fees are as noted on page 23.

Remedial, Developmental, and Compensatory Courses
For details about remedial, developmental, or compensatory courses, contact the respective department.

The College classifies some undergraduate courses as remedial, developmental, or compensatory. These differ from other courses in that students who register for them pay for them by the billable credit rather than by the degree credit. F or example, a course with 2 degree credits and 6 hours may be charged at a billable credit rate, or strictly by the hours the course meets. Some specific courses in this category are Math 4 and 6 . If you have any questions, check your courses, or check with the department in which the courses are being offered, to determine which courses have billable credits and which are charged strictly for the hours assigned to the course (see chart at left).

Billable credits are the number of contact hours of remedial, compensatory, and developmental courses, regardless of the number of credits given for these courses. All hours of noncredit courses are considered billable credits.

Note: The billable credit is the amount of tuition charged to the student on the student's bill as established by specific department determination.

## Material/Film and Transportation/Field Charges

| Title | Course Number | Amount | Title Cou | ourse Number | Amount | Title Co | se Number | Amount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Biology | 8 | \$20 | Chemistry | 353 | 25 | Family, Nutrition, | 101 | 60 |
|  | 11 | 20 |  | 355 | 25 | and Exercise | 104 | 10 |
|  | 12 | 50 |  | 365 | 25 | Sciences | 121 | 25 |
|  | 43 | 40 |  | 366 | 25 |  | 125 | 30 |
|  | 44 | 25 |  | 376 | 25 |  | 203 | 60 |
|  | 107 | 25 |  | 379 | 25 |  | 307 | 60 |
|  | 108 | 20 |  | 391 | 25 |  | 371 | 60 |
|  | 201 | 25 |  | 502 | 18 |  | 372 | 60 |
|  | 210 | 50 |  | 711.1, . 2 | \$25 |  | 373 | 60 |
|  | 211 | 25 |  | 742 | 25 |  | 374 | 60 |
|  | 212 | 50 |  | 790 | 25 |  | 375 | 60 |
|  | 217 | 50 |  | 795 | 25 |  | 376 | 60 |
|  | 220 | 50 |  | 796 | 25 |  | 378 | 60 |
|  | 225 | 50 |  |  |  |  | 708 | 60 |
|  | 226 | 40 | Communication Arts and Sciences | 143 | 10 |  | 771 | 60 |
|  | 251 | 30 |  | S 144 | 10 | French | 50 | \$10 |
|  | 261 | 50 |  | 147 | 10 |  |  |  |
|  | 262 | 50 |  | 340 | 10 | Geology | 6 | 9 |
|  | 263 | 50 |  | 341 | 10 |  | 7 | 15 |
|  | 312 | 50 |  | 342 | 10 |  | 101 | 25 |
|  | 321 | 50 |  | 343 | 10 |  | 102 | 18 |
|  | 340 | 50 |  | 344 | 10 |  | 110 | 25 |
|  | 343 | 50 |  | 348 | 10 |  | 232 | 25 |
|  | 345 | 50 |  |  |  |  | 233 | 9 |
|  | 346 | 50 | Comparative Lit. | 241 | 10 |  | 234 | 9 |
|  | 347 | 50 |  |  |  |  | 335 | 9 |
|  | 365 | 40 | Education | 220 | 10 |  | 339 | 9 |
|  | 372 | 25 |  | 231 | 5 |  | 359 | 18 |
|  | 555 | 50 |  | 232 | 5 |  | 360 | 36 |
|  | 617 | 50 |  | 332 | 7 |  |  |  |
|  | 621 | 50 |  | 333 | 5 | German | 261 | 10 |
|  |  |  |  | 350 | 7 |  |  |  |
| Biology (Field) | 380.3 | 50 |  | 351 | 7 | Italian | 50 | 10 |
|  | 380.4 | 50 |  | 365 | 5 |  |  |  |
|  | 380.5 | 50 |  | 375 | 5 | Philosophy | 105 |  |
|  | 380.6 | 50 |  | 555 | 5 |  | 209 | 10 |
|  | 680.3 | 50 |  | 562 | 5 |  |  |  |
|  | 680.4 | 50 |  | 711 | 5 | Psychology | 213 |  |
|  | 680.5 | 50 |  | 712 | 5 |  | 311 | 10 |
|  | 680.6 | 50 |  | 720 | 10 |  | 312 | 10 |
|  |  |  |  | 750 | 10 |  | 313 | 10 |
| Chemistry | 11 | 18 |  | 751 | 5 |  | 317 | 10 |
|  | 17 | 18 |  | 753 | 5 |  | 701 | 10 |
|  | 19 | 18 |  | 754 | 5 |  | 702 | 10 |
|  | 58 | 18 |  | 755 | 5 |  | 760 | 10 |
|  | 59 | 25 |  | 773 | 5 |  | 761 | 10 |
|  | 79 | 18 |  | 780 | 5 |  | 764 | 10 |
|  | 112 | 18 |  | 781 | 5 |  | 774 | 10 |
|  | 113 | 18 |  | 782 | 5 |  |  |  |
|  | 114 | 18 |  | 783 | 5 | Russian | 244 | 10 |
|  | 116 | 18 |  | 784 | 5 |  |  |  |
|  | 119 | 18 |  | 787 | 5 | Sociology | 249 | 10 |
|  | 241 | 18 |  | 788 | 5 |  |  |  |
|  | 251 | 25 |  | 887 | 10 | Spanish | 50 | 10 |
|  | 252 | 25 | English |  |  |  |  |  |
|  | 332 | 25 |  | 280 | 10 |  |  |  |
|  | 342 | 25 |  | 285 | 10 |  |  |  |

[^3]
## Special Fees

1. Application fee of $\$ 40$ for new students seeking admission to Queens College (except senior citizens), or filing application for a master's degree program. The fee for transfer students is $\$ 50$.
2. Readmissi on fee of $\$ 10$ payable by students who withdraw from the College and later want to be readmitted (except senior citizens).
3. N onpayment service fee of $\$ 15$. Students who are delinquent in paying tuition and fees will be required to pay this fee in addition to all outstanding bills to regain the privileges of good fiscal standing with the College, which include right to attend classes and access to student records. If the student is required to pay a readmission fee, the "nonpayment service fee" shall be in addition if appropriate.
4. A charge of $\$ 15$ for late registration.
5. A charge of $\$ 10$ for students who change their schedule of courses after it has been approved and they have registered, i.e., adding a course or courses, or changing from one section to another of a course. There is no fee for dropping a course.
6. Reprocessing fe of $\$ 15$. When a check tendered to the College by a student is not honored by the bank upon which the check is drawn, the student shall be charged a reprocessing fee. A separate fee will be charged for each check that requires reprocessing.

Note: If your check is returned by the bank as not presentable for collection, you will be liable for all tuition and fees in addition to a reprocessing fee. Your future registration will be so noted and you will be required to pay your registration by cash, credit card, certified check, or bank money order.

If your check is returned by the bank for "stop payment," you will be liable for all tuition and fees, in addition to a reprocessing fee. A "stop payment" on a check does not cancel any liability.

In the event that the return of the check resulted from a bank error, and the bank acknowledges the error in writing, the College will not charge a reprocessing fee.
7. Breakage fees to cover the cost of equipment damaged in the course of laboratory work. There is no charge for total breakage under \$1.
8. Replacement charge at list price of any physical education equipment issued to the student that is missing from the student's gym locker at the end of each session.
9. A fee of $\$ 15$ is charged when a
makeup examination is given. Each additional examination in a session is $\$ 5$.
10. A fee of $\$ 125$ per year, including 6\% NYC parking tax, is charged for campus parking privileges, if granted. (See Campus Parking, page 37.)
11. Duplicate Records: a) duplicate ID card: \$5; b) duplicate diploma: \$15; c) each transcript of record: \$4 (no charge when the transcript is to be forwarded from one unit of the City University to another); d) others: \$5.
12. A charge of $\$ 15$ for the binding of the master's thesis.
13. Duplicate Bursar Bill: \$5.

Payment of service fees, fines, miscellaneous charges, and all bills may be made at the Bursar's windows, J efferson Hall, second floor.

## Related Costs

There is more to the cost of education than just tuition. Whether you are planning to attend Queens College as a part-time or full-time student, you can approximate your own expenses for the academic year by considering the following items:

Books and Supplies: The average cost for a full-time student is \$500 a year.
Transportation: The average amount is $\$ 675$ a year. The cost will vary depending on the number of fares you will pay traveling to and from your place of residence and the College.
Lunch: Approximately \$855 a year (at school).

Personal: Approximately \$475 an academic year.
The average cost for the above items, excluding tuition, fees, and room and board is $\$ 2505$.
Housing: Dormitory space is not available within CUNY except for Hunter College students. Students interested in obtaining information on housing and apartments may contact the Office of the Dean of Students.

Activity Fees: Funds are paid by each student to support student clubs, student government, various campus services, and a variety of student activities. See page 23 for a detailed listing of all activity fees for both fulltime and part-time students.

## Holds

Students who have outstanding debts (accounts receivable) for any tuition, fees, parking violations, breakage, emergency loans, etc., that are past due will have holds placed on registration, transcripts, grades, and diplomas.

## Transcripts

There is a fee of \$4 to order a copy of your Queens College record. (Note, however, that there is no fee for transcripts to be sent to other branches of CUNY.) To order a transcript, go first to the Bursar's payment windows on the second floor of J efferson Hall. When you pay your fee, you will be given a voucher to bring to the Registrar's Office, J efferson 100. Y ou must give the Registrar's representative the Registrar's copy of the voucher to receive a transcript request form. Fill out the form completely and be sure to sign it. Return both copies of the form to the Registrar's Office. Allow three to four weeks for delivery. (No same-day service.)

If you want to request a transcript by mail, obtain a transcript form from Queens College, 65-30 Kissena Blvd., Flushing, NY 11367-1597, Attention: J efferson Hall 100. Please make sure that you complete all the information on the form and mail it back to the office. Be sure to include Social Security number and current address on your check or money order. The fee covers complete transcript for all divisions attended. Complete information and fee must be received in order to fill the request.

If a hold has been placed on your record, you will be notified. Requests for transcripts will not be honored until the hold has been cleared.

# Paying for C ollege 

Students who feel they will need help in meeting college expenses should contact the Financial Aid Office, which is located in Powdermaker Hall, Room 127. The office is open from 9:30 am to 4:00 pm, Monday through Thursday, 9:30 am to 2:00 pm, Friday, and from 5:00 pm to 7:30 pm, Tuesday and Wednesday when classes are in session. Counselors are available to advise and assist you with applications. The phone number is 997-5100.

## The Cost of Education

The cost of education is an important consideration when deciding upon attending college. In general, a student budget consists of the direct educational costs of tuition, fees, books, and supplies, and those costs incurred by virtue of attendance, such as transportation and lunch. In addition, you will have recreational and personal expenses. If you are a self-supporting (independent) student, you will also have the day-to-day expenses of housing, food, clothing, and medical care.

## Student Resources

In reviewing your student budget, you should consider the resources you will have from earnings and savings, the amount your parents can contribute, and any benefits you receive such as Social Security, Veterans' Benefits, unemployment, or welfare.

Summer employment can help meet the first costs of enrollment and you should plan to save money from your Summer earnings. Cash will be needed right away for books, supplies, and transportation.

## Financial Aid Programs

If available resources are not sufficient to cover the cost of your attendance, you
should look into the possible financial aid available. Financial assistance, provided through the College, is intended for eligible students who need assistance in meeting costs. The College does not provide financial assistance for students who attend on less than a half-time basis.

## Packaging

Rather than using one source to finance your education, a combination of monies from all of the programs for which you are eligible may be used. This system for allocating aid is called packaging. Funds will be allocated first to meet the basic costs of attendance (tuition, books, transportation), and if funding permits, other living expenses will then be addressed. Y our need for aid is determined by an analysis of the information contained in your Free Application for Federal Student Aid (FAFSA).

What follows is a brief description of the financial aid programs available to eligible undergraduate students at Queens College. The descriptions are based on current statutes and regulations and are subject to change. Additional information may be obtained from the Financial Aid Office. The programs described are:

## New York State Programs

Tuition Assistance Program (TAP)
City University Supplemental Tuition
Assistance (CUSTA)
Aid for Part-Time Study (APTS)
Regents Award for Children of
Deceased or Disabled Veterans
Vietnam Veterans Tuition Award Program
Regents Award for Children of Deceased Police Officers, Firefighters, or Corrections Officers Paul Douglas Teacher Scholarship Program

State Aid to Native Americans
Search for Education, Elevation, and Knowledge (SEEK)

Federal Programs
Federal Pell Grants
Federal Supplemental Educational Opportunity Grants (FSEOG)
Federal Perkins Loans
Federal Work-Study Program (FWSP)
William D. F ord Federal Direct Student Loan Program
Federal Unsubsidized Direct Loans
Federal Parents' Loans for Students (FPLUS)
Veterans Administration (VA) Educational Benefits

Queens College Programs
Emergency Student Loan Funds
Adele Fox Book Loan Fund
SEEK Academic Presidential Scholarships
Herbert Bienstock Memorial Scholarship
CMP Publications, Inc. Scholarship in J ournalism or English
Ivan C. Daly, Sr. Scholarship in the Physical Sciences
Dr. Pearl D. Foster Scholarship
Kenneth Kupferberg Memorial Scholarship
J ohn S. Linakis Scholarship Fund
Mitsui USA Scholarships
Evelyn Nagdimon Scholarship
Queens College Scholars
Saul Weprin Memorial Scholarship
New York State Programs
TUITION ASSISTANCE
PROGRAM (TAP)

## Application Procedures

Applicants must apply annually. Students may apply on the CUNY Financial Aid Supplemental Information Request (FASIR) or on a New York

Higher Education Services Corporation Student Payment Application. The deadline for the 1996-97 academic year is May 1, 1997.

The Higher Education Services Corporation determines your eligibility and mails an award certificate to you indicating the amount of your grant. The College will deduct the amount of your grant from the tuition bill, if you receive your award before you register for classes.

## Selection of Recipients

TAP is an entitlement program. There is neither a qualifying examination nor a limited number of awards. You must:

1. be a New York State resident for one year and a $U$. S. citizen, permanent resident alien, refugee, or paroled refugee;
2. be enrolled full time and matriculated in a program approved for State student aid by the New York State Education Department;
3. have, if dependent or independent with dependents, a family net taxable income of $\$ 50,500$ or less, depending on when you first applied for TAP. If independent and single with no tax dependents, have a net taxable income below \$10,001;
4. be charged a tuition of at least \$200 a year;
5. not be in default in the payment of a student loan;
6. declare a major not later than the beginning of your junior year.

For any questions about independent/ dependent status, contact the Financial Aid Office.

## Award Schedule

The amount of the TAP award is scaled according to the number of prior TAP payments you have received, tuition charge, number of family members who are full-time college students, and net taxable family income for the preceding tax year. The minimum award is $\$ 100$ per year; the maximum is $90 \%$ of tuition.

Program Pursuit and Academic Progress For continued eligibility, students must meet the program pursuit and academic progress requirements outlined in the chart below. If you fail to meet the requirements, you may regain eligibility by:

1. making up the deficiency while attending Queens, without state aid;
2. leave Queens and return after one year or more;
3. transfer to another college; or
4. receive a waiver.

You will be allowed the use of the waiver once as an undergraduate and once as a graduate student. A waiver will enable you to receive TAP for that semester only. You must then meet the requirements to be eligible for further payments.

## Waiver Guidelines

The New York State Education Department allows a one-time waiver of the pursuit and progress standards if, for some exceptional or extraordinary reason, a student was unable to meet the standards. A death in the immediate family, a serious illness, and similar circumstances are reasons for which
waivers may be granted. Students who apply for waivers must document the reason for the request.

## Important Note

Beginning with the Fall 1996 semester, TAP and APTS recipients who have already received two years of state assistance or the equivalent, must have earned a grade-point average of 2.00 .

## CITY UNIVERSITY SUPPLEMENTAL TUITION ASSISTANCE (CUSTA)

Application Procedures
If you have applied for TAP, no further application is necessary. The University will review your records to determine if you are eligible for a CUSTA award.

## Selection of Recipients

and Allocation of Awards
To be eligible for CUSTA, you must be:

1. enrolled in an undergraduate program at a CUNY senior or technical college;
2. enrolled on a full-time basis;
3. eligible for the maximum TAP
award; and
4. at least a fifth-semester TAP recipient but not have exhausted your TAP eligibility.

## AID FOR PART-TIME STUDY (APTS)

## Application Procedures

The CUNY FAFSA may be used. That application must be filed by September 15 for the academic year, or February 1 for the Spring semester only.

## ELIGIBILITY FOR TAP

| Program Pursuit | Minimum Credits / Equated Credits | Undergraduate students may receive <br> You Must Complete in Prior Payment |
| :---: | :---: | :---: |
| To BeEligiblefor TAP Payment \# | Semester |  |
| 2 | 6 | TAP for 8 semesters, or 10 semesters if |
| in the SEEK program. |  |  |

## Academic Progress for Students in B.A. Program

To BeEligiblefor TAP Payment \#

| Minimum DegreCredits Earned | Minimum GradePoint Average <br> through Last Semester of Attendance |
| :---: | :---: |
| through Last Semester of Attendance | 0 |
| 0 | 1.0 |
| 6 | 1.2 |
| 18 | 2.00 |
| 31 | 2.00 |
| 45 | 2.00 |
| 60 | 2.00 |
| 75 | 2.00 |
| 90 | 2.00 |

## Selection of Recipients

To be considered for an award, you must

1. have, if dependent, a family net taxable income of \$50,500 or less; or, if independent, a family net taxable income of \$34,250 or less;
2. be a New York State resident for a year and a U. S. citizen, permanent resident alien, or a paroled refugee;
3. not have received the maximum number of TAP or Regents Scholarship payments;
4. be matriculated and enrolled for at least 6 but not more than 11 credits per semester;
5. declare a major not later than the beginning of your junior year.

## Award Schedule

The amount of the award may not exceed tuition incurred and is dependent on your financial need, the City University's allocation of funds, and the number of eligible applicants.

To retain eligibility, you must meet the New York State program pursuit and academic progress standards.

## Program Pursuit

You must complete a minimum of 1.5 credits in each semester of the first year an award is received; 2.25 credits in each semester of the second year; and 3 credits in each semester thereafter.

## Academic Progress

The academic progress standard used for TAP is adapted for part-time study (see page 28 ). Generally, as a part-time student you will have two semesters to achieve the standard that a full-time student must achieve in one semester.

## REGENTS AWARD FOR CHILDREN OF DECEASED OR DISABLED VETERANS

## Application Procedures

A special application, obtainable from the high school principal or counselor, must be filed with the New Y ork State Higher Education Services Corporation (HESC), 99 Washington Avenue, AIbany, New Y ork 12255.

## Selection of Recipients

To be eligible for a Regents Award for Children of Deceased or Disabled Veterans, you must be:

1. a legal New York State resident, and
2. the child of a veteran who died, or who has a current disability of 50 percent or more, or who, at the time of death, had such disability resulting from U. S. military service during one of the following periods:

Dec. 7, 1941 - Dec. 31, 1946
J une 25, 1950 - J uly 27, 1953
Oct. 1, 1961 - March 29, 1973
These awards are independent of family income or tuition charge, and are in addition to other grants or awards to which the applicant may be entitled.

## Award Schedule

The amount of the award is $\$ 450$ per year, for up to five years, depending on the normal length of the program of study, for full-time students.

## VIETNAM VETERANS TUITION AWARD PROGRAM

Application Procedures
Eligible veterans had until Sept. 1, 1990 to apply for a determination of eligibility for the program. After eligibility has been established, applicants must apply annually for payment of their award to the New York State Higher Education Services Corporation (HESC), 99 Washington Ave., Albany, New York 12255. The application deadline for the 1996-97 academic year is May 1, 1997. Application forms are available in the Financial Aid Office.

## Selection of Recipients and

Allocation of Awards
To be eligible for a Vietnam Veterans
Tuition Award, you must:

1. have served in the armed forces of the United States in Indochina between J an. 1, 1963, and May 7, 1975;
2. have been discharged from the service under other than dishonorable conditions;
3. have been a resident of New York State on April 20, 1984, or have been a resident at time of entry into the service and resumed residency by Sept. 1, 1988;
4. apply for a Tuition Assistance Program (TAP) Award and a Pell Grant if applying as a full-time student or for a Pell Grant only if applying as a parttime student
5. be matriculated in a degree program.

## Award Schedule

Full-time awards are \$1,000 per semester or the cost of tuition, whichever is less. If the veteran also receives a Tuition Assistance Program (TAP) award, the combination of the two awards cannot exceed tuition. Part-time awards are $\$ 500$ per semester or tuition, whichever is less. Part-time study is defined as at least 3 but fewer than 12 credits.

For full-time study, awards are
available for up to eight semesters of a four-year program, or ten semesters if you are in an approved five-year program. For part-time study, awards are available for up to 16 semesters, or 20 semesters in an approved program that would normally require five years if the study were full time.

The total of all awards received cannot exceed \$5,000.

## REGENTS AWARD FOR CHILDREN OF DECEASED POLICE OFFICERS, FIREFIGHTERS, OR CORRECTIONS OFFICERS

## Application Procedures

A special application must be obtained from the New Y ork State Higher
Education Services Corporation (HESC), 99 Washington Avenue, AIbany, New Y ork 12255. Documentary evidence to establish eligibility must be submitted with the application.

## Selection of Recipients

To be eligible for this award, the applicant must be:

1. the child of a police officer, regular or volunteer firefighter, or corrections officer, who died after J une 30, 1982, as a result of an injury sustained in the line of duty;
2. a legal resident of New York State.

## Award Schedule

The amount of the award is $\$ 450$ per year for up to five years of full-time undergraduate study, depending on the normal length of the program of study. Study must be at an approved postsecondary institution in New Y ork State.

To receive payment, awardees must file a TAP payment application and a special supplement annually.

## PAUL DOUGLAS TEACHER

## SCHOLARSHIP PROGRAM

## Application Procedures

Applications are available by writing to the New Y ork State Education Department, Bureau of Higher and Professional Educational Testing, Cultural Education Center, Albany, NY 12230. Applications must be filed by F ebruary 28 for the following academic year.

## Selection of Recipients

Scholarships are awarded for full-time undergraduate study in an approved program leading to certification as a teacher in a field designated as having a shortage of teachers. Eligibility is limited to students who are in or who graduated in the top ten percent of their
high school graduating class or who have comparatively high GED scores.

## Award Schedule

The award may be up to \$5,000 a year for educational expenses for up to four years of full-time study. A service commitment of two years of teaching is required for each year of award payments received. This service can be reduced by one-half depending upon the school and teaching program selected by the recipient. The teaching service may be performed at any public or qualifying private school in the United States.

## STATE AID TO NATIVE AMERICANS

## Application Procedures

Application forms may be obtained from the Native American Education Unit, New Y ork State Education Department, Albany, New York 12230.

## Selection of Recipients

To be eligible, you must:

1. be a member of one of the several Native American tribes located on reservations within New Y ork State;
2. have graduated from an approved high school, or have earned a General Equivalency Diploma;
3. be enrolled at least as a half-time student in an approved program;
4. maintain satisfactory progress toward completion of the program.

## Award Schedule

The award is $\$ 1,100$ per year for a maximum of four years of full-time study. If you are registered for less than full time, you will be funded at approximately $\$ 46$ per credit hour.

## SEARCH FOR EDUCATION, ELEVATION, AND KNOWLEDGE (SEEK)

## Application Procedures

To be considered for admission through the SEEK Program, you must complete the back page of the application for admission to the University.

## Selection of Recipients

To be eligible, a student must be:

1. a resident of New Y ork State;
2. academically underprepared according to guidelines approved by the City University of New York;
3. economically qualified according to guidelines approved by the Board of Regents and the Director of the Budget;
4. an applicant for admission as an entering freshman.

## Award Schedule

The amount of support for fees, books, and stipends available to SEEK stu-
dents is dependent on financial need as determined by the CUNY needs-analysis system.

## Federal Programs

Eligibility Requirements
To be eligible for the Federal Title IV student financial aid programs
(FSEOG, Federal Pell, Federal Perkins L oans, FWSP, F ord Federal Direct
Loan, and FPLUS), you must:

1. be enrolled at least half time as a matriculated student;
2. be a U. S. citizen or an eligible non-citizen;
3. show evidence of need;
4. not be in default of a Federal student loan, or owe a repayment of a Federal Pell or FSEOG;
5. file a statement of educational purpose and Selective Service Registration Compliance with the Financial Aid Office prior to being awarded federal aid;
6. make satisfactory academic progress in your course of study.

Note: The College reserves the right to withhold transcripts from students who default on any student loan.

## Satisfactory Progress Standard for <br> Title IV Federal Student Assistance

To maintain eligibility for Federal Student Financial Assistance, you must make satisfactory progress toward the completion of a degree. The requirements for federal assistance are different from those for New Y ork State assistance.

Y ou must maintain the required cumulative grade-point average. Students on probation remain eligible for federal financial aid. (See Retention Standards, page 61.)

In order to make satisfactory progress toward the completion of a degree, an undergraduate student must accumulate credits toward the degree according to the following standards:
A) Attempted credits may not be more than 192 and
B) Accumulated credits must be equal to or greater than two-thirds the credits attempted at Queens College.

If the standard in $B$. is not met, eligibility may be retained by meeting the conditional standard:
C) Accumulated credits must be equal to or greater than (. $75 \times$ accumulative credits attempted) minus 18.

You will be measured against the satisfactory progress standard at the end of the Spring term to determine your eligibility for receipt of federal funds for the upcoming year.

If you fail to meet either the satisfactory progress or provisional standard, you will lose eligibility for federal financial assistance and have the right to appeal. A successful appeal will result in the granting of a one-year probation period during which you will be expected to improve your record.

Additional information concerning these progress standards may be obtained from the Financial Aid Office.

## FEDERAL PELL GRANTS

## Application Procedures

Queens College students may apply for a Federal Pell Grant for 1996-97 using the FAFSA available in the Financial Aid Office. The completed application is submitted for processing according to the instructions included on it. You will receive a Student Aid Report (SAR) indicating your student aid index, which must be presented to the Financial Aid Office during the payment period while you are still enrolled and in attendance. The deadline for filing for 1996-97 is J une 30, 1997.

## Selection of Recipients

The Federal Pell Grant program is an entitlement program. Y ou must meet the eligibility requirements for federal programs listed on this page.

Financial need is determined by a formula devel oped by the U. S. Department of Education and reviewed annually by Congress.

## Award Schedule

Awards vary each year. The amount of your Federal Pell Grant will be determined according to the schedule of awards based on your student aid index, the cost of education at Queens College as defined by the Federal Pell Grant program, your enrollment as a full- or part-time student, and federal appropriations.

## FEDERAL SUPPLEMENTAL <br> EDUCATIONAL OPPORTUNITY GRANTS (FSEOG)

## Application Procedures

You apply through Queens College on the FAFSA, which is available in the Financial Aid Office.

## Selection of Recipients

To be eligible, you must have exceptional need and meet the eligibility requirements for federal programs listed on this page.

## Award Schedule

Awards range from $\$ 100$ to $\$ 4,000$ based on available funds. Y ou are eligi-
ble to apply for the FSEOG for the period required for the completion of your first undergraduate baccal aureate degree.

## FEDERAL PERKINS LOANS

Application Procedures
Application is made through Queens College by completing the CUNY FAFSA.

## Selection of Recipients

Recipients must meet eligibility requirements listed on page 30.

## Schedule of Awards

The maximum amounts that may be borrowed vary each year.

The current annual interest rate, payable during the repayment period, is 5 percent on the unpaid principal. Repayment begins six months after graduation or leaving school (nine months for first-time borrowers in 1988-89 and after) and may extend over a period of up to ten years.

For additional information about repayment schedules and deferral of repayment, contact the Financial Aid Office.

## FEDERAL WORK-STUDY <br> PROGRAM (FWSP)

## Application Procedures

Application is made through Queens
College by completing the CUNY
FAFSA.

## Selection of Recipients

To be eligible, you must meet the eligibility requirements listed on page 30 .

The College must make employment reasonably available to all eligible students. In the event that more students are eligible than there are funds available, preference is given to students who have a greater financial need and who must earn a part of their educational expenses.

## Award Schedule

The College arranges jobs on-campus and off-campus in public or private nonprofit agencies and in a limited number of for-profit organizations. J obs in forprofit organizations must be academically relevant. Y ou may work up to 20 hours per week during the school year and full time during the Summer.

The salary level must be at least the minimum wage; wages higher than the minimum depend on the nature of the job and the qualifications of the applicant.

Satisfactory academic progress must
be maintained as well as satisfactory performance on the job.

## WILLIAM D. FORD FEDERAL DIRECT STUDENT LOAN PROGRAM

Application Procedures
All students must first complete a
FAFSA to determine eligibility for a loan

## Selection of Recipients

To be eligible for a Direct Loan, you must meet the eligibility requirements listed on page 30 and fill out the Request for Direct Loan form.

## Loan Schedule

The maximum loan is $\$ 2,625$ for freshmen, $\$ 3,500$ for sophomores, and $\$ 5,500$ per academic year for juniors and seniors. The undergraduate aggregate maximum is $\$ 23,000$. The graduate student maximum is $\$ 8,500$ per year. The amount you may borrow is limited to the cost of education minus the total expected family contribution and the estimated financial assistance you may receive.

The variable rate of interest for the Ford Federal Subsidized Direct Loan is no more than 8.25 percent. You are eligible for a full interest subsidy during the time you are in school and for six months after you cease to be at least a half-time student. You are responsible for payment of the 4 percent origination fee and insurance premium, which is taken as a direct deduction when the loan is made.

F or more detailed information about repayment schedules and procedures, contact the Financial Aid Office.

## FEDERAL UNSUBSIDIZED

 DIRECT LOANS
## Application Procedures

The application for an Unsubsidized Loan and the procedures for approval are the same as for the F ord Federal Subsidized Direct Loans.

## Selection of Recipients

To be eligible, you must meet the eligibility requirements listed on page 30 and be an independent undergraduate enrolled on at least a half-time basis.

## Loan Schedule

I ndependent undergraduates may borrow up to $\$ 5,000$ per year, up to a total of $\$ 23,000$. The maximum for graduate students is $\$ 10,000$ per year.

The loan may not exceed the difference between your cost of education and the other financial aid, including any

Ford Federal Subsidized Direct Loan, you may receive.

Unsubsidized loans have a variable interest rate adjusted each year, not to exceed 8.25 percent. While you are enrolled full time, you do not have to make payments on the loan principal. The interest may be paid quarterly or capitalized, if agreed upon by the lender.

## FEDERAL PARENTS' LOANS FOR STUDENTS (FPLUS)

## Selection of Recipients

To be eligible for an FPLUS, the applicant must be:

1. a U. S. citizen or permanent resident alien;
2. the parent of a dependent student who is enrolled at Queens College as a matriculated student attending at least half time;
3. not in default of any previous student loan.
4. Fill out the "PLUS Request" form.

## Loan Schedule

Parents may borrow an amount not to exceed the cost of attendance minus any financial aid.

The annual interest rate for FPLUS is the same as for other Direct Loans. Repayment of interest begins within 60 days of disbursement of the loan or capitalized if agreed upon by the lender.

The principal may be deferred while the student is in full-time attendance.

For detailed information about deferment of payments, contact your lending institution or the Financial Aid Office.

## VETERANS ADMINISTRATION (VA) EDUCATIONAL BENEFITS

## Application Procedures

Application forms are available at all VA Offices, active-duty stations, and American embassies. F orms completed by the Registrar's Office are to be submitted to the regional VA Office.

## Selection of Recipients

Educational benefits are available through the Veterans Administration under the following programs:
New GI Bill (Chapter 30): Service persons who entered active duty between J uly 1, 1985 and J une 30, 1988.
Vocational Rehabilitation (Chapter 31): Veterans who have at least a 10 percent disability as a result of active service.
Veterans Contributory Benefits (VEAP) (Chapter 32): Veterans and service persons who entered active duty after De-
cember 31, 1976.
GI Bill (Chapter 34): Veterans who served more than 181 days between J anuary 31, 1955 and J anuary 1, 1977.

Dependent's Educational Assistance Benefits (Chapter 35): Spouses and children of veterans whose death or total, permanent disability was service connected.

Selective Reserve Benefits (Title 10, Chapter 106): Members of the Selected Reserve who enlisted for a six-year period between J uly 1, 1985 and J une 30, 1988.

For more information regarding eligibility criteria for these programs and other assistance to veterans and their dependents, contact the Veterans Administration.

## Queens College Programs

## EMERGENCY STUDENT LOAN FUNDS

 Students may borrow small amounts to cover emergencies for a short time and pay no interest. In general, loans are limited to $\$ 50$ to $\$ 100$ and are to be re paid within 30 days. Apply in person at the Financial Aid Office. Approved loans usually may be obtained in two days.
## ADELE FOX BOOK LOAN FUND

Students may borrow up to $\$ 250$ per semester to purchase books at the Queens College Bookstore and repay from their financial aid award.

## SEEK ACADEMIC PRESIDENTIAL

## SCHOLARSHIPS

Four scholarships are awarded each year to the freshman, sophomore, junior, and senior student in the program having the highest academic average in his/her class. Finalists are chosen by the SEEK Scholarship Committee.

## COLLEGE-ADMINISTERED SCHOLARSHIPS

The Herbert Bienstock Memorial Scholarship is awarded annually to a registered Queens College student who has a disability documented through the Office of Special Services for Students with Disabilities. The student must demonstrate outstanding scholarship (criteria to be determined by the Scholarship Committee) as well as service and/or advocacy on behalf of individuals with disabilities. Candidates for the Bienstock Scholarship will be referred to the Scholarship Committee by a Recruitment Committee comprised of representatives of the Office of Special Services
and the Committee for Disabled Students.

CMP Publications, Inc. Scholarship in Journalism or English is awarded at the beginning of the junior year to a student who has been a role model for AfricanAmericans, and is pursuing a career in journalism or English.

Offered in the Spring semester of the sophomore year for the following Fall semester (junior status), the full-tuition award, based on academic achievement, will be given to a full-time student carrying a minimum of 12 credit hours each semester. The award is renewable for three additional semesters, subject to review of academic standing.

Selection of the scholarship recipient will be made by a committee of faculty and staff at Queens College. Additional information and applications are available in the Department of English, Klapper Hall 607.

The Ivan C. Daly, Sr. Scholarship in the Physical Sciences is awarded to a black student, of junior class standing and with financial need, who is majoring in one of the physical sciences. The recipient shall have maintained an outstanding academic record at the College. The scholarship is to be used for educational expenses.

This scholarship was established by Dr. Marie M. Daly, an honors graduate of the Class of February 1942, in memory of her father. Information on the application deadline is available in Powdermaker Hall 119.

The Dr. Pearl D. Foster Scholarship is awarded to a lower junior woman or minority student majoring in the biological sciences who has an outstanding academic record and has been involved in community activities. The scholarship, which carries an award of $\$ 500$ per semester, is renewable for three semesters subject to the maintenance of a 3.3 cumulative GPA and registration for a minimum of 12 credit hours a semester. Information on the application deadline is available from the Dean of Students' Office, Powdermaker Hall 116.

The scholarship is funded by Dr. Foster's friends and colleagues. Dr. Foster is an honor graduate of the Queens College Class of 1943 and the recipient of the Alumni Association Distinguished Alumna Award of 1983.

The Kenneth Kupferberg Memorial Scholarship of $\$ 1,000$ is awarded to a full-time junior or senior majoring in the natural sciences. Academic excellence and fi-
nancial need are both taken into account in selecting the recipient. The scholarship endowment is funded by the Kupferberg Foundation and the family and friends of Kenneth Kupferberg, Class of 1941. Information about eligibility and application deadlines is available in Powdermaker Hall 119.

The John S. Linakis Scholarship Fund was established in memory of J ohn S. Linakis, a longtime Queens resident and community leader. An annual award of at least $\$ 250$ will be made to a Queens College student based on financial need and promise for community activism and leadership. Preference will be given to applicants who show potential for future contribution to improving the quality of life in New York City, promoting more harmonious racial and ethnic relations, increasing the voice of those who have gone unheard, increasing the political participation of those who have been politically under-represented, or otherwise serving as an advocate for the dispossessed. For more information, contact Dr. Gregory Mantsios of LEAP (997-3060).

Mitsui USA Scholarships are two \$5,000 scholarships that are awarded annually to students enrolled in their last two years of study in the Business and Liberal Arts (BALA) minor. Applicants should show interest in international business and its cultural environment, as demonstrated by their chosen course of study, special research projects or papers, and participation in organizations or events related to international commerce. Other criteria include strong academic performance, financial circumstances, and community activities. Applicants must be U. S. citizens or permanent residents (student visa status not eligible). These scholarships are funded by the Mitsui USA F oundation on behalf of the trading company Mitsui \& Co. (USA), Inc.

The Evelyn Nagdimon Scholarship (\$200$\$ 500$ ) is awarded each semester to an ACE student who is at least a sophomore (36 credits minimum). Applicants must carry 6-11 credits and demonstrate academic potential and financial need. Applications are available in the Adult Collegiate Education Office (Kiely 134A).

Queens College Scholarships. E ach year the Queens College Scholars program offers a variety of scholarships to incoming Fall freshmen with strong academic credentials. These scholarships
are supported by gifts to the College from foundations and alumnaeli. See page 18 of this Bulletin for further de tails. Applications are handled by the Office of Admissions.

The Saul Weprin Memorial Scholarship in the Public Interest is awarded to a full-time Queens College junior or senior who has demonstrated a commitment to public service or community service. Recipients are selected on the basis of their academic record and evidence of a strong commitment to and interest in pursuing a career in the public interest. This scholarship has been established at Queens College by the National Speakers Conference in memory of Saul
Weprin, former speaker of the New York State Assembly. Information about eligibility and application deadlines is available in Powdermaker Hall 119.


# Student Life 


o-curricular activities at Queens play an important part in your education. Because there are so many different activities going on each semester, you are sure to find a club, concert, film, or speaker that interests you. Announcements of activities can be found in the student press and posted around the campus.

The Student Union is the hub of campus life. Containing major social, cultural, recreational, and educational facilities and services, the Student Union adds greatly to student development, enrichment, and pleasure. Over 45 student organizations have office space here and another 90 use the Union for meetings, events, and seminars.

Various food service options are available at the Student Union. The Snack Shoppe in the lobby features Dunkin' Donuts and TCBY. The Cafe, a self-serve buffet-style restaurant, is open for lunch. The Servery, featuring hot and cold entrees, grill items, and a Taco Bell Express, is open for breakfast, lunch, and dinner. The Cellar Entertainment Lounge is open for lunch and remains open through the early evening offering pizza, snacks, soda, and excellent entertainment. A Subway Sandwich Shop is on the lower level.

Other services offered at the Student Union include a copy/fax center, game room, an underground parking garage, and a 24 -hour ATM. Catering facilities, meeting rooms, and the fourth floor Ballroom are available for lectures, movies, music performances, conferences, and dinner or dance events.

The Student Union is financed through Student Union fees and rev-enue-producing enterprises. The Student Union is committed to meeting the
needs of the entire Queens College and greater New York communities.

The Queens College Association was formed to administer that portion of the Student Activity Fee intended for use by student organizations. The administrative functions of the QCA are handled by the Student Union through the Student Life Office. Over 90 student organizations receive funding from the QCA.

The Queens College Auxiliary Enterprise Association is a nonprofit organization responsible for the operation of the Campus Bookstore, the food services in the Dining Hall, as well as the game room and gourmet shop, all located in the Dining Hall building.

There are three main dining rooms located in the Dining Hall building:
The Banner Room is the largest of the dining rooms. Lunch and dinner are served here. Also in this room is the Game Room, which contains a variety of the latest video games.
The Red Rail Room has three serving areas and is open for breakfast, lunch, and dinner. It has a lounge area and is also home to: Kosher Haven, a special area that serves only K osher food under Glatt K osher supervision; the Gourmet Shoppe, which serves freshly baked croissants, pastries, flavored gourmet coffees, teas, sodas, and packaged snacks; and the Anyway Shoppe, which serves a variety of fast foods, such as hot dogs, knishes, meat patties, taco chips with cheese sauce, and other specialties. (Closed for renovation.)
The Patio Room is open for breakfast and lunch. There is a lounge available here for faculty and staff to eat in.
The Campus Bookstore sells all course books, reference books, bestsellers, sale
books, stationery and art supplies, College apparel, emblematic gifts, and other related items. Approximately $\$ 250$ a semester is a reasonable estimate for the cost of books and supplies.

If financial assistance is needed to buy books, students should consult the Financial Aid Office, Powdermaker 127. Bookstore hours are posted outside of the store.

The Student Association is the day-session student government. All day-session students are entitled to vote for representatives in the Spring elections. There are 17 senators, a president, a vice-president, and National Student Association delegates. The Student Association is in the Student Union, Room 319 (969-7100).

The Evening Student Association promotes the welfare and furthers the interests of evening students. The officers of the Association are elected in the general election. Its office is in the Student Union, Room 319 (263-0181).

Student Activities and Student Life. All student clubs must register each semester with the Office of Student Life (Student Union, Room 320). Information is available in this office about elections for positions in the Academic Senate and Day, Evening, Graduate, ACE, and SEEK student governments.

The Academic Senate governs the College and determines many of its policies. There are 30 student representatives and 60 faculty. The student representatives are elected every Spring by the student body. In addition, there are 14 active Academic Senate standing committees, all of which have student members. These committees deal with issues ranging from curricu-
lum and academic standards to campus beautification. Interested students can contact the Academic Senate office and apply for any committee opening (Kiely 810, 997-5880; Fax 997-5884).

The Information Center maintains a calendar of all College events in the first floor lobby of Kiely Hall (997-5411).

Identification Cards. The College supplies each student with an identification card. College regulations require students to carry these cards on campus and to present them to a member of the faculty or staff if requested to do so. The ID card not only protects the College from persons not authorized to be on campus or to use College facilities, but also extends to registered students all the privileges of membership in the College community.

New students must have their ID photographs taken in J efferson Hall, Room 202, after they have completed their registration. Students must show proof of school registration and a picture ID, such as a driver's license. ID validation stickers will be mailed to the student's home along with acknowledgment of tuition payment.

You must show a validated ID card at the time of collecting any checks from the Bursar's Office and when using the Library.

Replacement of lost or stolen ID cards takes five days from date of notification to the Security Office, J efferson Hall 204. A fee of $\$ 5$ is charged to duplicate a lost ID.

A \$5 fee is also charged if the ID is not obtained during the first semester at Queens College.

Note: In order to obtain a College ID (new or replacement), all students must show two pieces of identification:

1. Proof of school registration.
2. Birth certificate, driver's license, or passport.

## Health

Immunizations. If you were born on or after J anuary 1, 1957, New York State law requires that you be immunized against measles, mumps, and rubella in order to attend classes.

All undergraduate and graduate students must show proof of immunity. Proof of immunity consists of:
Measles: Two doses of live measles vaccine (the first administered after 12 months of age, the second after 15 months of age and at least 30 days after the first), physician documentation of measles disease, or a blood test showing immunity.

Mumps: One dose of live mumps vaccine administered after 12 months of age, physician documentation of mumps disease, or a blood test showing immunity.
Rubella: One dose of live rubella vaccine administered after 12 months of age or a blood test showing immunity.
If you have not yet filed a completed QC Immunization Form at the Health Service Center (FitzGerald Gym, Room 204), please do so immediately.

Disability or Pregnancy. A student who becomes disabled or pregnant should consider discussing with a staff counselor from the Dean of Students' Office the various alternatives regarding current and future academic plans. Some of these alternatives are continuation of attendance, a leave of absence, or a program adjustment.

Blood Drive. At least one blood drive is conducted annually with the cooperation of the Greater New York Blood Program. Seventeen-year-olds must show proof of age in order to donate. All Queens College students are eligible to receive blood from the Blood Bank. Further information may be obtained from the Health Service Center, FitzGerald Gym, Room 204.

Insurance. The College offers options for health and accident insurance to students on a voluntary basis. For further information, contact the Health Service Center.

## Committee on Honors and Awards

 Office of Honors and Scholarships Powdermaker Hall 119 997-5502; Fax 997-5508
## Hours: 9:00 am to 5:00 pm

The Committee on Honors and Awards selects the recipients of awards and scholarships for graduating seniors and recommends criteria for graduation with honors.

The Director of the Office of Honors and Scholarships advises students on national and state fellowship programs and is available to discuss matters of interest to prospective candidates. British Marshall Scholarships enable Americans to study for degrees at British universities. Rhodes Scholarships provide an opportunity to study for up to three years at Oxford University. Mellon Fellowships provide support for graduate study in the humanities. Fulbright Scholarships are for students who wish to pursue graduate study abroad. NSF Fellowships are
awarded for study leading to advanced degrees in the mathematical, physical, medical, biological, engineering, and social sciences, and in the history and philosophy of science. The Barry M. Goldwater Scholarship and Excellence in Education Program provides awards for up to two years of undergraduate study for students who have outstanding potential and intend to pursue careers in mathematics, the natural sciences, or certain engineering disciplines. All of these are highly competitive scholarships.

Students considering graduate work who want to know about additional awards should make an appointment to see the Office's Director. The Office of Honors and Scholarships also administers the Saul Weprin Memorial Scholarship in the Public Interest (see page 33) and the Kenneth Kupferberg Memorial Scholarship in the Natural Sciences (see page 32).

The Queens College Scholars Program is administered by the Office of Honors and Scholarships, although the scholarships are awarded through the Office of Undergraduate Admissions (see page 18).

## Academic Advising

The Office of Academic Advising, Iocated in Kiely 104 (997-5599), provides advising services to new students and to continuing students who have not declared a major. It also provides referrals to academic departments and to other student service offices. For details, see page 42.

## Evening Advising

When classes are in session, advisers are available in Kiely 111, Monday to Thursday, 5:30-8:00 pm (997-5200).

## Committee for Disabled Students

The Committee for Disabled Students, in Kiely 175 (997-5899), is an organization of students with and without disabilities working together to provide information and advocacy to assist students with temporary or permanent disabilities. In addition, the Committee helps students with disabilities to participate more fully in the educational and social life of the campus.

## Veterans

Queens College is an approved training institution for veterans, disabled veterans, and children of deceased or totally and permanently disabled veterans. Students who believe they are eligible for benefits can be certified to the Veterans Administration by going toJ effer-
son Hall, Room 100, as soon as possible after registration.

Students must notify the certifying official of all changes in their credit load in order to insure their eligibility for future benefits.

## Financial Aid Services

Powdermaker Hall 127

## 997-5100; Fax 997-5122

Hours: See below
The Financial Aid Office provides information and counseling to full-time and part-time graduate and undergraduate students on the various financial aid programs (grants, work, and loans) offered by New Y ork State, the federal government, and private organizations.

Counselors are available from 9:30 am to 4:00 pm, Monday to Friday, and 5:00 to 7:30 pm on Tuesday and Wednesday evenings (when classes are in session) to assist students with the completion and processing of aid applications, and to help them resolve problems related to their financial aid.

## Division of the Dean of Students

## Powdermaker Hall 116

## 997-5500; Fax 997-5508

The Division of the Dean of Students is part of the College's effort to educate the whole person. This group of caring and talented professionals is committed to a student development concept of facilitating emotional, psychological, social, and intellectual growth and devel opment.

These services are part of your education outside of the classroom to supplement your education inside the classroom.

## Counseling and Advisement Center

Powdermaker Hall 128; 997-5420
Hours: Monday-Friday, 9:00 am-4:00 pm Students have to deal with a variety of personal, emotional, and interpersonal issues that can affect their general college adjustment. Many students have found it hel pful to discuss their current life situations and plans with a staff member of the Counseling and Advisement Center.

Students will be seen on an individual basis. There is no fee for services. Students can make appointments on their own or may be referred by an adviser, an instructor, or an administrative office. The staff is also ready to consult with faculty members and departments concerned with student needs or problems.

The staff, which includes certified psychol ogists, sees students for personal and academic counseling for as few as one or two sessions to as long as
one or two semesters. The contact may involve referral to other College services such as Career Development, the Office of Special Services, the Undergraduate Scholastic Standards Committee, and Scholarship Opportunities, or to various community resources including longer-term counseling centers and practitioners. The staff al so sees students who are on academic probation or are having other academic difficulties.

All counseling services are strictly confidential.

In addition, individual advisement sessions with peer advisers can be arranged on a walk-in basis. Peer advisers are undergraduate students who have achieved at least lower sophomore status and who are trained in general College information, regulations, resources, and communication skills. They are available to discuss an individual's concerns about college adjustment, program planning, selecting a major, or exploring career choices. Peer advisers also participate in registration assistance and Advisement Days for freshmen and advanced standing students. Descriptions of the Peer Advisement Program and credit-bearing courses are available in the Counseling and Advisement Center.

International Student Services
Jefferson Hall 105; 997-4440
All international students on a student visa must file a student information card with International Student Services, as required by the U. S. Immigration Service. International students requiring immigration forms for visa status, trips out of the U. S., employment off campus, and transfer from Queens College should go to this office with their passport and I-20 ID card. See also the Health Service Center and Financial Aid.

The office provides credential and credit evaluations, immigration counseling, and registration assistance.

## Minority Student Affairs and

Pre-Professional Advisement
Powdermaker Hall 128; 997-5423
Hours: 9:00 am to 4:00 pm
As an advocate for minority students, the Minority Affairs Office works in collaboration with academic, administrative, and support units to ensure effective outreach toward, support of, and sensitivity to the needs of minority students.

## Office of Career Development

and Internships
Jefferson Hall 201
997-4465 (Career Development)
997-2850 (Co-op Ed. \& Internships)
Fax 997-4463
Hours: Monday-Thursday, 9:00 am to 4:00 pm; Friday, 9:00 am to 12 noon; Evening hours: Wed. until 7:30 pm when classes are in session; Summer evening hours by appointment
The Office is the students' link between the academic, business, and professional worlds. Aside from the one-onone career counseling, a wealth of resource is available to assist in choosing academic majors, career planning, and job search. It offers the following services:

- Counseling and assessment to students in how to choose an academic major.
- Career counseling on how to select a career.
- Computer-assisted counseling and information to explore different graduate school and part-time job placement for current students who wish to develop practical work experience while earning money.
- Internship and Co-op Education referral and assistance.
- Workshops on career exploration for students who are in the process of defining their career goals.
- J ob-search counseling for graduating students who are preparing to enter the work force.
■ Summer job placement. The Center offers summer job referrals and information.
- Workshops on resume writing, interview techniques and job-search strategies where students are assisted to develop skills to organize their educational and work experience to prepare for the transition from college to work.
- On-campus recruitment for graduating students through an extensive campus interview program.
- Full-time job information for graduating students and recent alumni.
- Information on recruiting organizations, employer and career directories, current job vacancy listings, and an array of other career resources.
- Credential Services: F or a modest fee students can maintain a file where recommendation letters from professors can be stored, and forwarded to graduate schools and prospective employers to support applications.

Cooperative Education and Internships is a supervised education program that
integrates classroom learning with work experience that is career related, pays wages, and earns degree credit (Cooperative); or field experience pertinent to a course or topic of study that earns degree credit (Internship). The program provides students with an individualized, structured, career-exploration plan that includes:

- Career counseling
- Resume preparation
- Interviewing techniques
- J ob-search strategies
- Work experience
- Professional enrichment

The program is administered by the Office of Career Development and Internships in cooperation with the academic departments that sponsor internships.

## Health Service Center <br> FitzGerald Gym 204; 997-2760 <br> Hours: 9:00 am to 4:30 pm

A registered nurse is available to administer first aid and emergency care to anyone who becomes ill or injured on campus. Other services and materials include:

- Health teaching and counseling
- Blood pressure screening and monitoring
- Scales for height and weight
- Eye tests for drivers
- Booklets and pamphlets on health topics
- Health care referrals
- Immunization oversight (see page 35)

All student health records as well as consultations between students and nurses are strictly confidential. The nurse is especially sensitive to the needs of students, and preventive health care is a high priority.

The Child Development Center at Queens College
Kiely Hall 245; 997-5885
Hours: Monday-Thursday, 8:00 am to 8:00 pm; Friday, 8:00 am to 4:00 pm
The Child Development Center provides quality child care and an early childhood education program for children ( 33 months to 6 years) of QC students. Students are able to register their children according to their own class/study schedule. Fees are based upon the number of hours each child is registered in the Center. The Center is licensed by the NYC Department of Health and staffed by professional early childhood educators.

Office of Special Services
Kiely Hall 171
997-5870; Fax 997-5895
Hours: 8:00 am to 4:00 pm
The Office of Special Services provides a full range of services to enhance educational and vocational opportunities for students with disabilities. These services include orientation, alternative registration, counseling, academic advisement, vocational testing, peer counseling, and career development activities.

In addition to serving students on campus, the Office of Special Services offers a program for homebound students via a two-way telephone conference system.

## Upward Bound Project

J Building; 520-7606
Summer Hours: Monday-Thursday, 8:00 am to $6: 00 \mathrm{pm}$;
Academic Year Hours: Monday closed; Tues-day-Thursday, 9:00 am to 6:00 pm; Friday, 9:00 am to 5:00 pm; Saturday, 9:00 am to 3:00 pm
Queens College Upward Bound is a federally funded college preparatory program for Queens high school students from low-income families whose parents have not graduated from a four-year college or university.

The project is divided into two parts: a nonresidential Summer program followed by a ten-month academic year component that serves as a supplement to instruction at the home school.

The program is intense, personal, and exciting, offering young students an opportunity to maximize their success in high school, while at the same time preparing themselves for entrance into college.

Opportunities exist for current Queens College graduate and undergraduate students to serve as tutor/counselors, counselor/interns, and mentors for the program.

Office of Student Retention Programs Powdermaker Hall 128; 997-5420

## Hours: 9:00 am to 4:00 pm

In an effort to increase student retention, the Office of Student Retention Programs works in collaboration with campus advisement, new student orientation, and other campus programs to help students connect with the College and successfully complete their studies here. Special attention is given to firstsemester students to help smooth their transition to college life.

The office serves as a referral resource for students experiencing col lege adjustment and/or personal problems that may be affecting them academically.

## CLIQ Program

The College Life Introduction at Queens (CLIQ) program is an innovative program at Queens College that introduces freshmen to life outside the classroom. CLIQ fosters intellectual, social, and personal growth by having students participate in various campus events.

Because invol vement in activities is an indispensable aspect of college life, freshmen are expected to attend several out-of-classroom activities, such as the Introduction to Coll lege Life Program, career/major forums, health/wellness programs, library tours, etc. Certified CLIQ events are worth a predetermined number of points. Students must obtain a minimum of 6 points by the time they have attempted 24 credits. Campus publications will list day, evening, and weekend activities that qualify as CLIQ events. For more information or event listings, call 997-5424.

## Campus Parking

Parking space on campus is extremely limited, and only a few students can be accommodated. During the day, the College provides parking for faculty, staff, and students with severe physical handicaps. During the evening, limited space is available for students in courses beginning after 3:00 pm. Students should plan their programs without assuming that parking will be available; program changes cannot be made due to lack of parking.

## Applying for Parking

Applications will be accepted only during the regular registration period and the first week of classes.

Applications for parking may be made at the Security Office, J efferson Hall, Room 204, with proof of school registration (computer printout or bill is the only acceptable proof).

Applicants must also produce a driver's license and the car registration (which must be in the student's name or in the family name) at the time of application. Permits are assigned on the basis of need, determined according to a point system. Information concerning this system is available with the parking application. The Security Office will advise when you should return to learn if you have been approved for parking. (This information will not be available over the telephone.) Office hours will be posted at time of application.

Approved applicants will receive a parking decal from Security after payment. The fee for the Fall and Spring semesters is $\$ 125$ (Summer Session is free, but decal must be picked up in the

Security Office). Spring semester only: \$65; Summer Sessions only: $\$ 65$.

Students purchasing a parking decal will receive a copy of the parking and traffic regulations. Decals must be permanently affixed (not taped on) according to the directions printed on them. Lost or stolen decals will not be replaced; they must be repurchased at full price. Parking fees are not refundable for an unexpired period for which a decal was issued, except to those who have paid for a second semester in advance. Claims for such refunds must be made no later than J anuary 31.

Violation of campus parking or traffic regulations can result in fines, suspension of parking privileges, towaway, withholding of transcripts, and blocking of future registrations until fines are paid. Parking fees and fines are subject to change without notice.

Students with medical problems must have a handicap plate or a handicap tag issued by the Motor Vehicle Bureau in order to be approved for medical parking. The handicap tag must be displayed at all times.

## Athletics

In the belief that an integrated curriculum should foster students' physical as well as cognitive abilities, the Queens College Athletics Office presents students with an opportunity to participate in and enjoy varsity as well as intramural and recreational athletics.

The intercollegiate athletic program provides students an opportunity to participate in sports on a high level of competition. Students also assist in organizing and conducting these events.

The intercollegiate program competes on the varsity level for both men and women. The following teams are open to all students who have matriculated and have satisfied the necessary academic requirements as specified by the College and the NCAA: Men: baseball, basketball, cross country, lacrosse, swimming, tennis, track (indoor and outdoor), volleyball, water polo. Women: basketball, cross country, softball, swimming, tennis, track (indoor and outdoor), volleyball, water polo.

The recreation program is made up of two components: organized intramural activities and informal open recreation. Students who wish to participate in either program should contact the Recreation Director. Open recreation consists of basketball, swimming, weight lifting, running, volleyball, softball, tennis, and many other activities. The hours when the facilities for these activities are available are
posted in the Recreation Office at the start of each semester. The intramural program is composed of many of the same activities listed above, plus special events such as three-on-three basketball, volleyball tournaments, and a Turkey Run. Students may enter as a team or ask to be placed on an existing team. Announcements about specific activities and the appropriate forms may be obtained in the Recreation Office in FitzGerald Gym, Room 216.

Students interested in any of these areas may contact the Athletics or Recreation Office in FitzGerald Gym.

In compliance with the Equity in Athletics Disclosure Act, the Athletics Office has prepared a report detailing the participation rates, financial support, and other information related to our men's and women's athletic programs. This report will be available in FitzGerald 218 by October 1 of each calendar year.

## Emergency Closings

Should some emergency necessitate the closing of the College, every effort will be made to provide a timely announcement over the following radio stations:
WINS - 1010 AM
WCBS - 880 AM, 101.1 FM
WBLS - 107.5 FM
WLIB - 1190 AM
WFAS - 1230 AM, 104 FM
WADO - 1280 AM

WCBS - 880 AM, 101.1 FM
107.5 FM

WFAS - 1230 AM, 104 FM
WADO - 1280 AM


## C urriculum

Aliberal arts and sciences college, Queens College offers students the preparation for enriching their lives, enhancing their understanding of the world, thinking constructively and independently, and making creative contributions to their local community and to society.

## The Divisions

Queens College has three curricular divisions: Arts and Humanities, Mathematics and Natural Sciences, and Social Sciences; and two professional schools: the School of Education and the Aaron Copland School of Music. They are described on page 7 .

Within the divisions, the College is divided into academic departments, each with its own Chair and the faculty members who teach within it. The student's major is usually taken in a specific department, although it may be interdisciplinary (see The Major, page 41). M ost department offices and faculty members' offices are located close together (see the Directory, page 217).

## Requirements for the

## Baccalaureate Degree

1. The completion of at least 120 credits of college-level work approved by the College.

Please note: Effective September 1, 1996, all bachelor's degree programs require a maximum of 120 credits for graduation. The CUNY Office of Academic Affairs may grant waivers for undergraduate degree programs that require additional credits for certification or accreditation from outside professional organizations or for other compelling educational reasons.
2. Completion of Basic and Advanced Learning Skills, Foreign Language,

Physical Education, and Liberal Arts and Sciences Area Requirements (LASAR; see pages 46-48).
3. A minimum of 45 credits in residence at Queens College during the student's undergraduate career.
4. At least 30 of the last 64 credits credited toward the degree taken at Queens or the CUNY Graduate Center.
5. A cumulative grade-point average of 2.0 or better based only on work done at Queens.
6. The satisfactory completion of the requirements in the major area of concentration, as determined by the appropriate Queens College department or program. At least one-third of the credits in the concentration must be taken in residence at Queens College, except when a departmental waiver is given.

The Bachelor of Fine Arts
For specifics, see the Art Department section in this Bulletin and consult a department adviser.

## The Bachelor of Music

For specifics, see the Music Department section in this Bulletin and consult a department adviser.

## Requirements for the Second Baccalaureate Degree

Queens College may award a baccalaureate degree to students who have already earned one.

1. The student must have completed a baccal aureate degree from an accredited U. S. college or university, or from a foreign institution of equivalent level, with a cumulative grade-point average of at least 2.0.
2. The second baccalaureate degree will be in a field of study different from the major of the student's first degree.
3. The student must be accepted by the academic department or program of
the second major, subject to the recommendation of the Dean of the division or school in which the new major is offered.
4. The student will complete at least 45 credits of course work at Queens beyond that applied to the first degree.
5. The student must complete all requirements in the second major area of concentration as defined by the appropriate QC department or program. At least 20 credits of the major requirements must be taken at Queens. Departments may define more stringent residency requirements.
6. The student must achieve a gradepoint average of at least 2.0 at the end of the first semester (or first 10 credits) to remain in the program; thereafter, the student must maintain a 2.0 average. Departments may define a more stringent grade-point average requirement.
7. The student who holds a baccalaureate degree from an institution other than Queens must satisfy the College's basic and advanced skills requirements and Liberal Arts and Sciences Area Requirements (LASAR) in effect at the time of admission by:
a) passing the CUNY Assessment Tests and having prior course work evaluated as being the equivalent of courses used to satisfy QC skills requirements and LASAR; or
b) completing successfully at Queens all courses necessary to satisfy QC skills requirements and LASAR; or c) a combination of a) and b) above.

Courses taken by such students to satisfy skills deficiencies - English 95, Reading 1, and Math 6 - may not be applied to the 45-credit residency requirement. Courses taken to satisfy requirements in English composition, foreign language, physical education,
and LASAR may be applied to the residency requirement.
8. The student who already holds a baccalaureate degree from Queens has satisfied basic skills and general education requirements of the College, but is bound by the other requirements.

## Basic and Advanced Learning Skills Requirements

## CUNY BASIC SKILLS REQUIREMENTS

The Board of Trustees has mandated that students meet a University-wide minimal level of skills proficiency before entrance to the upper division. Consequently, students will be tested in these areas after admission but prior to their freshman year, so as to determine whether they meet the minimal University standards and the College's standards.

All students are required to take CUNY Assessment Tests in writing, reading, and mathematics. Students who do not pass one or more of these tests must comply with College requirements for remediation before retaking the test. Students must pass all three tests by the time they reach 60 credits. If they do not, they may be barred from further registration until they have passed the test(s).

Students will ordinarily be admitted to baccal aureate degree programs only if the remedial and ESL instruction they are evaluated as needing can be accomplished through a sequence of courses in each area that can be completed within two semesters, excluding Summer. Beginning in Fall 1997, students will be expected to be able to complete the ESL sequence within one semester, excluding Summer.

Students will not be permitted to repeat a remedial or ESL course after receiving either no credit or a failing grade twice previously in that course.

The Academic Skills Center's Office of Assessment Testing is responsible for administering the CUNY Assessment Tests to all students at Queens College. Students with physical or learning disabilities that require special accommodation are served through the following procedure:

1. Students make a request for special test conditions to the Office of Special Services (Kiely 171). Medical and/or psychoeducational documentation is required.
2. Office of Special Services staff review the documentation and determine the appropriate accommodations. All such accommodations - extended time, oral presentation of exam materials,
use of visual enlargers or calculators, etc. - are offered to students whose disabilities handicap them during standard test administration.
3. Students are then referred to the Office of Assessment Testing (Kiely 231) for an appointment.
4. The Offices of Assessment Testing and Special Services work together to assure appropriate time, space, and personnel considerations.

## QUEENS COLLEGE REQUIREMENTS

## ENGLISH COMPOSITION

A condition for registration at the College for all undergraduate students is testing and placement with respect to proficiency in the use of the English language.

All students entering Queens College for the first time - including transfer students and non-degree students who have been required to take remedial courses or College English as a Second Language (CESL) - will be expected to demonstrate their competence in writing English on the CUNY Writing Assessment Test. Students transferring from other CUNY institutions may submit their original scores in lieu of retaking the test. Students reentering after an absence of one year or more who have not yet passed English 120 will be retested and appropriately placed.

Non-degree undergraduate students on a temporary visa may be evaluated on the basis of the TOEFL (Test of English as a Foreign Language) or other examinations. If their scores warrant admission to Queens College (a minimum of 500 on the TOEFL and at least 50 on each part), they will be tested and placed into CESL or other English courses based on their performance on the Reading and Writing portions of the Assessment Test.

The basic sequence of writing courses currently required of all students graduating from Queens College is English 110 and 120. SEEK students will normally take English 101 and 102 instead of English 110. It is important that students pass these courses in their first semesters at Queens and before they begin taking advanced courses in any department of the College.

This requirement may be waived in part or completely on the basis of the Basic Skills Assessment Test and advanced placement in English. Qualified students may be exempted from English 120 on the basis of exceptional writing ability and by recommendation of an instructor in English 110 or 102.

Townsend Harris High School graduates may be granted advanced standing in English Composition equivalent to English 110 and 120, as long as the writing component of their program is judged by the English Department to equal or exceed that of English 110 and 120.

Students who, on the basis of the CUNY Writing Assessment Test, may not be admitted to English 110, will take English 95 (formerly English 105) as prerequisite to English 110. This course, or any lower-level or CESL course required, must be taken in the first semester of residence, and the student must remain continuously registered in this course or a required sequence until English 95 is passed. Most other departments will not allow registration in their courses until the student has passed or is taking English 95. This is indicated in footnotes to the course descriptions in this Bulletin. A student may not drop a required English course more than once without permission from the Undergraduate Scholastic Standards Committee, and will face dismissal if continued registration is not maintained.

Students who are taking English courses bel ow the level of English 95 will be permitted to register for other courses only with the written approval of a CESL academic adviser. SEEK students must have the written approval of their SEEK academic adviser. Students who have registered without such permission will be dropped from these courses.

The Queens College English writing requirement (English 110 and 120 or the equivalent) should be completed before entrance to the upper division of the College. Students entering as freshmen should complete the requirement within the first 60 credits. Students who have completed 60 credits but have not yet passed English 120 will not be allowed to register for any other courses until they have completed the basic English requirement.

Similarly, students who are admitted with more than 60 credits and who have not satisfied the writing requirement, must do so within their first two semesters at Queens. Exception to these restrictions may be granted only by the Undergraduate Scholastic Standards Committee.

Transfer students who have taken college-level composition courses must justify their equivalence to Queens courses by the CUNY Assessment Test. A student who fails to pass into English 110 may obtain only blanket credit for

English composition courses taken elsewhere. A student who does not place above English 110 may not transfer credit for a course to satisfy the requirement, and may receive only blanket credit for a course that otherwise might be considered equivalent to English 110. Similarly, students who do not place above the level of English 120 may not satisfy the requirement by transfer credit.

Please Note: In the Spring of 1996 a revision of the English Composition requirement was adopted by the Academic Senate and is awaiting approval by the Board of Trustees. Students should check with the Department of English for the latest information. The revised requirements read as follows:

The basic sequence of writing courses, required of all students graduating from Queens College, is English 110 and three additional courses which have been designated as "writing intensive." Students should consult the course offerings catalog each semester for a list of courses which have this designation. English 120 carries two writing units, and may be recommended by the instructor of English 110 for those students who would benefit from a more formal writing experience. Students who are waived from English 120 will need to complete one writing intensive course. Courses taken to fulfill the composition requirement may not be taken P/ NC.

This requirement would become effective for students entering in the Fall of 1997.

## READING

Students may not register for the second semester in attendance unless they have either passed the CUNY Reading Assessment Test or are maintaining enrollment in Reading I or another appropriate (SEEK or CESL) reading sequence.

Students who fail the CUNY Reading Assessment Test after having taken Reading I or Reading 103 (SEEK) must re-register for the course continuously until they pass the test.

## MATHEMATICS

Entering students are expected to demonstrate competence in arithmetic and algebra. Competence in these areas is proven by passing the CUNY Math Assessment Test and satisfying the Queens College Basic Skills Requirement in Mathematics. The Basic Skills Requirement is satisfied by either:
i) a placement higher than Math 6 on
the QC Math Placement Test, or
ii) a passing grade on the New York State Sequential III Math Regents or the New Y ork State I ntermediate Algebra and Trigonometry Regents, or
iii) a passing grade in (Queens College) Math 6, or
iv) a passing grade in precalculus or calculus.

Students who fail the CUNY Assessment Test must retake and pass the CUNY test by the time they complete their 60th credit.

For more information about the CUNY Assessment Test, contact the Testing Center in Kiely 231 (997-5680). For more information about the Queens College Math Placement Test, contact the Department of Mathematics in Kiely 237 (997-5800).

## FOREIGN LANGUAGE

All baccalaureate students must attain a knowledge of a foreign language equivalent to three semesters of study at the college level. Bachelor of Music students should see the Music School section in this Bulletin for their foreign language requirement. The following regulations apply:

1. Students who successfully complete the third level of foreign language instruction at the high school level or who achieve a passing grade on the New Y ork State Regents Comprehensive Language Examination, Level 3, are exempt from this requirement.
2. Students who have studied a foreign language or whose native language is not English may be exempted from part or all of this requirement by passing one of the competency examinations administered by the foreign language departments. They may also be exempted from part or all of this requirement on the basis of scores obtained on other externally administered examinations approved by the foreign language departments, or, in the case of American Sign Language, by the Office of Special Services.
3. Students should enroll in the most advanced course in a sequence of courses in a given language for which they are qualified by either placement or previous study. Normally, one year of study of a foreign language at the high school level is the equivalent of one semester of study at the college level. Students not certain of the appropriate course level should take the department placement examination and consult with an adviser in the language department in question.
a) It is the responsibility of students to find out from the appropriate department what level of language they should register for and to obtain permission from the Department Chair if there is any doubt. Students may not receive credit for taking courses below the level of their competency as determined by the instructor or by the placement examination. If the instructor finds that a student is already competent at the level of instruction, this will be reported to the Department Chair, who will notify the Registrar to cancel credit for the course.
b) Neither blanket nor equivalent credit shall be granted for introductory courses in a foreign language from which a student has been exempted by examination.

## PHYSICAL EDUCATION

All baccalaureate students at Queens College shall complete satisfactorily one course in physical education selected from FNES 11 through 30 (or 101 through 145), or, for ACE students only, Physical Education 32. Students with physical and medical problems whose physician has stated in writing that it would be medically inadvisable to complete a physical activity course, may select Physical Education 30, a 3credit academic (classroom) course (Fitness Through Diet, Exercise, and Weight Control) that does not require a physical component.

## See LASAR course listings pp. 46-48.

## THE MAJOR

## Planning a Course of Study

A major is a concentration of study in a department or allied departments. It enables students to concentrate part of their energies on a particular field of learning so they can prepare for the kind of work they are interested in and also prepare for any graduate training that may be necessary for further specialization. A concentration form should be filed in the student's major department/program, generally by the end of the sophomore year. By doing so, the student is assigned an adviser and is eligible for departmental services such as pre-registration. Further details on departmental and area studies majors can be found in this Bulletin and in handbooks available in department and program offices.

An interdisciplinary major (described under Interdisciplinary and Special Studies, page 154) cuts across academic disciplines and enables stu-
dents to design a program of study for the major that is specially suited to their needs and interests.

## Graduation Procedure

Candidates for degrees must declare their candidacy by filing a diploma card with the Office of the Registrar in accordance with the following schedule. For February graduation, file on or before November 1; for May graduation, file on or before March 1; for September graduation, file on or before J uly 1.

Diploma cards may be obtained at the Office of the Registrar (J efferson 100). Candidates are encouraged to file these when they register for their last semester. A diploma card should be filed as long as there is a reasonable certainty that all degree requirements will be satisfied by the end of the semester preceding the graduation date. Diploma cards received after the above deadlines may not be processed.

## ACADEMIC ADVISING

The Office of Academic Advising in Kiely 104 provides advising services to new students and to continuing students who have not declared a major. It also provides referrals to academic departments and to other student service offices: the Counseling and Advisement Center for students who are experiencing personal and academic difficulties; the Office of Career Development and Internships for those who wish assistance in making choices about career and major; and the peer advisers, who are knowledgeable about College information, regulations, and resources. Call 997-5599 for hours of service and to schedule appointments.

## Freshman Advising

All new freshmen attend an Academic Information and Registration Session (AIRS) before their first registration. Through AIRS, students receive general information about College procedures and policies and develop an appropriate academic program with guidance from faculty and trained student advisers. When program planning is complete, students are referred to registration terminals where they are assisted in registering for courses. Call 997-5599 for information.

## Freshman Year Initiative

The Freshman Year Initiative is an academic program open to incoming freshmen who qualify for English Composition I. Freshmen choose a block of three courses: English 110 and two other general College requirements. To
complete their first-semester schedule, students also elect one or two other courses of their own choice. Beginning in September 1992 as a CUNY pilot project, FYI was federally funded by the F und for the Improvement of Postsecondary Education for three years, and is now part of the College's offerings. FYI is temporarily housed in Delany Hall G-18 (997-5567).

## Academic Advising for

Continuing Students
Advice concerning academic program planning for continuing students, both day and evening, who have not declared a major may be obtained from the Office of Academic Advising (997-5599). Through small group workshops and individual advising sessions, students receive information and guidance about curricular choices before they decide upon a major.

## Transfer Student Advising

The Office of Academic Advising in Kiely 104 (997-5599) provides assistance in small group workshops and individual advising sessions to all newly admitted transfer students.

The Interdisciplinary and Special Studies Office (Kiely 1107) works directly with individual students in planning honors work or interdisciplinary programs. (See Interdisciplinary and Special Studies, page 154.)

Pre-Professional Advisement. The Health Professions Advisory Committee offers assistance to students planning careers in medicine, dentistry, chiropractic, pharmacy, veterinary medicine, or other health professions (SB B338, 9973470). The Law Advisement Committee advises students who plan to study law (Powdermaker 170C, 997-3624 or Powdermaker 106E, 997-5082). Information on pre-engineering programs is available in the Physics Department (SB B334, 997-3350). (See also Pre-Professional and Professional Programs, page 43.)

The Executive Officer of the Undergraduate Scholastic Standards Committee of the Academic Senate and staff are available to discuss questions involving registration for additional credits, current and retroactive course withdrawals, academic dismissal, CUNY Assessment Test appeals, extensions of time to complete courses, and other questions regarding academic policies and standards. A student may appeal to the Executive Officer of the USSC for adjustments in
scholastic requirements that may be appropriate to both the student and the standards of the College.

The Committee Office, located in J efferson Hall 104, is open Monday through Thursday between 10:00 am and 2:00 pm, Friday between 10:00 am and 1:00 pm, and Wednesday evenings, when classes are in session, from 5:00 to 7:00 pm. The telephone number is 997-4488.

The USSC's Handbook of Grades, Degree Requirements, and General Scholastic Standards is available in J efferson Hall 104.

## CUNY B.A.

The City University and the College offer a variety of individualized routes to the baccal aureate that include field experience and individualized study under intensive supervision. The CUNY B.A. is open to all students. Those interested should see Assistant Provost Hratch Zadoian (Kiely 1111, 997-5780) as early as possible in their college careers.

## B.A.-M.A. Degrees

The Departments of Chemistry and Biochemistry, Computer Science, Philosophy, Physics, and Political Science, and the Aaron Copland School of Music offer qualified undergraduate students the opportunity to receive combined Bachelor's and Master's degrees. Application to the B.A.-M.A. program should be made in the upper sophomore or lower junior semester through the Office of Graduate Studies, Powdermaker Hall 100K. Admission is granted only in the junior year. Full details and application forms are obtainable from the Chair or graduate adviser of the department in question or from the Office of Graduate Studies.

The B.A.-M.A. degree programs are officially registered with the New York State Department of E ducation under the following HEGIS codes:

| Program | Degree | HEGIS <br> Code |
| :--- | :--- | :--- |
| Chemistry | B.A.-M.A. | 1905 |
| Computer Sci. | B.A.-M.A | 0701 |
| Music | B.A.-M.A. | 1004 |
| Philosophy | B.A.-M.A. | 1509 |
| Physics | B.A.-M.A. | 1902 |
| Political Science | B.A.-M.A. | 2207 |

Important Note: The B.A.-M.A. program is an accelerated program. In accordance with the CUNY FeeManual, students are billed at the undergraduate rate for the first 128 credits of the program, regardless of whether courses taken are graduate or undergraduate. Beyond 128 credits, all courses -
including undergraduate courses - are billed at the graduaterate. Students who anticipate that their course of study will require credits far in excess of the normal B.A.-M.A. program in their discipline should consider carefully the financial implications of B.A.M.A. status. Students who have questions should see Ms. Mary J ane Wochinger, Office of Graduate Studies, Powdermaker Hall 100K (997-5191).

## Changes in Degree Requirements

Matriculated students are responsible for meeting degree requirements in force at the time of their matriculation. Changes to the structure of a major must be applied in such a way as to avoid increasing the number of credits required of students who have started taking courses required for the major. If general degree requirements are changed following matriculation, the student is given the option of satisfying the original requirements or new requirements. The above policy includes those undergraduate students who were matriculated, took a leave of absence (while in good standing), and then returned to the College.

Students who are dismissed for academic reasons may be subject to the new regulations, depending on how long after dismissal the student returns and such other factors as may be taken into account by the appropriate Scholastic Standards Committee.

The six-year graduation rate for Queens College is 42.3 percent. Students should be aware that the graduation rate varies significantly based on individual preparedness.

## The Minor

Some departments offer a minor: a program of 15 or more credits students can take to supplement their major or to pursue an area of interest. A minor concentration form must be filed with the department, and the minor will appear on the student's transcript.

## Electives

Students may complete the remaining credits needed for their degree by taking courses in any department they choose. These courses are called electives and do not require faculty approval; however, depending on the course, students may need to have department permission or certain prerequisite courses. Electives may be used to supplement the major (an English major may want to take a course in French or Italian literature) or to fulfill interest in a totally different area (an English major may be fascinated by
mathematics and choose electives in the Math Department). If professional requirements also must be met, as for secondary school teaching or medical school candidates, electives will provide the additional credits necessary.

## Honors in the Western Tradition

This is a carefully constructed series of courses whose subject is the masterpieces of the Western heritage and whose methods are reading, writing, and discussion in small sections of select students. The sequence fulfills most of the Liberal Arts and Sciences Area Requirements of the College. A student who completes this area of study must complete a major as well. F or a list of the courses and further details, see page 153.

## SEEK Program

The SEEK Program (Search for Education, Elevation, and Knowledge) is an admissions alternative and educational opportunity program. Its mission is to serve with distinction students with academic aspirations who are educationally under-prepared and low income.

The SEEK Program is designed to help students achieve academic success by providing support and assistance in four major areas: instructional, financial, counseling, and tutorial. The program's offices are located in Delany Hall 128 (997-3100).

## Instructional

Based upon performance on the CUNY Assessment Test, students will register for the required reading, writing, and mathematics courses. These courses, with specialized instruction designed to master learning skills, meet the College's basic skills requirements. Satisfactory completion of basic skills and LASAR requirements will enable students to pursue majors of their choice.

## Financial Aid

To receive financial assistance from the SEEK Program, each student must file a Free Application for Federal Student Aid and the FASIR. These forms are used to apply for the following types of financial aid: 1) Pell; 2) SEEK stipend, books, and fees; 3) College Work-Study Program (CWSP); 4) Perkins L oans; and 5) Supplemental Educational Opportunity Grants (SEOG).

For incoming SEEK students, the documentation presented with the Free Application for Federal Student Aid determines economic eligibility for the SEEK Program. A student is not officially accepted until economic eligibility
has been verified.
It is mandated by the state that all SEEK students must apply for TAP and Pell before receiving financial assistance from the SEEK Program.

Financial Aid Counsel ors are located in Powdermaker Hall 127 (997-5100).

## Counseling

Counseling services for each student are an integral part of the program. All students are assigned a counselor when they enter SEEK, and remain with a counselor throughout their college studies. SEEK counselors provide academic, career, and personal counseling services for upper classmen through individual, group workshop, and classroom sessions.

Each incoming freshman is required to register for a Student Life Workshop, which is taught by members of the counseling staff.

SEEK counseling offices are located in Delany Hall 232 (997-3150).

## Tutoring

Tutorial services are offered to SEEK students in all courses. Individual tutoring, group tutoring, and workshops are available. The Learning Skills Center is in Delany Hall 308.

## Pre-Professional and Professional Programs

Education. The School of Education offers undergraduate programs preparing students for teaching in nursery school, elementary school, middle school, junior high school, and senior high school. Because Teacher Education programs qualify students to meet the New Y ork State Certification standards set forth for prospective teachers, students who plan to teach should visit the Department of Elementary and Early Childhood Education and Services (Powdermaker 169, 997-5302), or Secondary Education and Y outh Services (Powdermaker 190, 997-5150) for further information.

Accounting. The Department of Accounting and Information Systems (Powdermaker 109, 997-5070) offers courses in accounting, business law, and taxation required by the New Y ork State Board for Public Accountancy for admission to the CPA examination (see page 72). These must be supplemented by other specified courses, the remainder of the credits needed for graduation, and appropriate experience. A graduate of this program who then passes the Public Accountancy Board's examinations and meets the experience requirements will
be granted a certificate as a Certified Public Accountant. Accounting majors earn the B. A. degree.

Pre-Law. Preparation for the study of law should be as wide as the whole field of human relations, including the social sciences, the humanities, and the technological aspects of contemporary life. There is no particular pre-law curriculum that must be followed. Mastery of both written and spoken English and communication skills will increase the lawyer's effectiveness. Study of the social sciences, with special emphasis on government and economic and social institutions, offers an indispensable background for an understanding of the law.

All entering freshmen and other students contemplating or already committed to careers in law should register with the Law Advisement Committee in Powdermaker 170C (997-3624) or Powdermaker 106E (997-5082). The Committee, which is an interdepartmental undertaking, offers many services to assist students planning to go to law school. Committee members also serve as department law advisers in the political science, economics, English, communication arts and sciences, accounting, history, and sociology departments. All pre-law students will be advised regardless of major concentrations. The Committee holds several general law conferences each year in addition to individual advisement interviews. Guest speakers are frequently sponsored, drawn from the fields of law school admissions officers, practicing attorneys, and persons in the legal support field. There is also the opportunity to participate in a unique undergraduate program that includes M oot Court competitions and publication of a law journal, sponsored by the Bench and Bar Association and the Law Club.

Prospective law students will be advised regarding law school admissions. The Law School Admission Test (LSAT) is given several times a year and is required by virtually all law schools. The LSAT should be taken, if possible, the J une preceding senior year. Applications for the test can be obtained in the Pre-Law Offices.

Doctoral Health Professions. Preparation for the study of medicine, dentistry, podiatry, optometry, veterinary medicine, and chiropractic requires sound basic training in biology, chemistry, mathematics, and physics, as well as a good education in the liberal arts. Chemistry is required through organic chemistry. A minimum of one year each of physics
and biology is required; additional science courses are recommended.

Most medical, dental, and other professional schools expect a college degree for entrance.

Prospective applicants to a healthprofession school may fulfill their concentration requirements in any department. They should apply for approval of their concentrations in the department of their choice by the end of the upper sophomore semester. Regardless of the department of concentration, students should complete, by the end of their junior year, a minimum program including biology, chemistry, mathematics, physics, and English.

The completion by the junior year of some additional upper-level courses in chemistry and mathematics is expected of chemistry and biochemistry majors; additional upper-level courses in biology are expected of biology majors.

All entering freshmen and other students who are contemplating a career in the health professions should see the Chair of the Health Professions Advisory Committee for advice on the preprofessional curriculum. The Committee provides letters of evaluation to health-profession schools and also offers advice and guidance to candidates for admission to those schools. Applications for admission to professional schools should be made in the Summer or very early Fall one full academic year before the student intends to enter. In the Spring semester preceding application to these schools, from February 1, prospective candidates must register with the secretary of the Committee and be interviewed for evaluation by the Committee.

Nationally administered tests are given each year for prospective medical, dental, and other health-profession students. Virtually all professional schools require that applicants take these tests. Applications for the Medical College Admission Test, the Dental Admission Testing Program, and the Optometry Admission Test may be secured from the Health Professions Advisory Committee (Science Building B338, 997-3470).

Non-Doctoral Health Professions. Students considering pharmacy, physical therapy, physician assistant, nursing, and other non-doctoral health professions should consult the health professions adviser (Science Building B338, 9973470).

Post-Baccalaureate - Pre-Health Concentration. The concentration is available to
students who have completed a baccalaureate and wish to complete the admissions requirements for the various health-profession schools. Typically, these requirements are general chemistry, organic chemistry, general biology, general physics, and some mathematics. Many students continue and take some electives in biology or biochemistry.

All students interested in the concentration should consult the health professions adviser (Science Building B338, 997-3470), who will suggest, on an individual basis, the structuring of a suitable curriculum.

Engineering Combined Plans/Pre-Engineering. Although Queens College does not offer an engineering degree, a student can transfer for the junior and senior years to one of several engineering schools upon satisfactory completion of a prescribed plan of courses. Plans have been developed cooperatively with two schools of engineering. They are known as the City College (2-2) Plan and the Columbia University (3-2) Plan. In each case, the first figure in the parentheses represents the number of years spent at Queens on the pre-engineering part of the program. The second figure represents the number of years to be spent at the engineering school. Degrees are awarded by the engineering school, and students must satisfy the requirements of that institution. Detailed requirements and a semester-by-semester schedule of courses in each of these curricula are available from the Physics Department (Science Building B334, 997-3350).

Students who begin the pre-engineering course sequence may transfer to the Queens College Bachel or of Arts program if they decide not to pursue an engineering career. The later a student makes the transfer, the likelier it becomes that more than four years will be necessary to complete all degree requirements.

Students who want to attend engineering schools other than those mentioned above should study the catalogs of these schools to determine their requirements. F or more information, contact the pre-engineering adviser, Prof. Lawrence Ferrari (Science Building B320, 997-3388).

## Academic Skills and Resource Center

 The Academic Skills and Resource Center administers programs in basic academic skills, provides tutoring services, and operates the Office of Assessment Testing.The Office of Assessment Testing (Kiely 231, 997-5680) administers the CUNY Assessment Test in reading, writing, and mathematics, and reports test scores to students. All students are required to take these tests prior to their first registration in the College and to have achieved passing scores on all three before moving on to their 61st credit.

The Academic Skills and Resource Center coordinates the College Reading course as well as the Writing Skills Workshop (Kiely 232, 997-5676) and the Reading Lab (Kiely 131, 997-5677), which provide tutoring and other support services in writing and reading. The Department of Mathematics coordinates the Math Lab (Kiely 331, 9975859), which provides tutoring and other support services in mathematics.

These services are available to all students at the College. The Skills Center is located in Kiely 227 (997-5670), and its director is Dr. Howard H. Kleinmann.

## College Reading and

Study Skills Program
The College Reading and Study Skills Program, also coordinated by the Academic Skills and Resource Center, is designed to help students develop skills that will enable them to prepare, read, comprehend, and complete their college assignments effectively (see page 196).

## College English as a

## Second Language (CESL)

The CESL Program offers credit-bearing courses designed to meet the Eng-lish-language needs of students with limited proficiency in English. Placement into CESL courses is based on performance on the CUNY Assessment Test in reading and writing. Students must see the CESL director in Kiely 227 (997-5670) before registering for any courses.

## Graduate Programs

Queens College offers the Master of Arts degree in applied linguistics, art history, biology, chemistry and biochemistry, communication arts and sciences (including media studies, speech pathology, and audiology), computer science, economics,* English, French, geology, history, Italian, Latin American area studies,* mathematics, music, physics, political science and government,* psychol ogy and psychology: clinical behavioral applications in mental

[^4]health settings, sociology, Spanish, and urban studies. The degrees of Master of Arts in Liberal Studies and the Master of Arts in the Social Sciences are also offered.

The Master of Science degree in Education is offered in Elementary Education (N through 6), Elementary Education: Specialization in Bilingual Education, Secondary School Education (art, English, French, home economics, Italian, mathematics, music, physical education, science, social studies, and Spanish), Counselor Education, Reading,* School Psychology, Special Education, and Teaching English to Speakers of Other Languages.

There are Advanced Certificate (postmaster's) programs in Marriage and Family Counseling,* School Administration and Supervision, School Psychology, and Latin American Area Studies.*

For students who wish to pursue provisional certification as elementary or secondary school teachers, but whose undergraduate degrees did not include the necessary work in education, the College offers an Advanced Certificate (post-baccalaureate) program in Elementary Education and an Advanced Certificate (post-baccalaureate) program in Secondary Education (English, French, Italian, mathematics, music, science, social studies, and Spanish).

The degree of Master of Fine Arts is offered in Studio Art.

A program in Library Studies, leading to the degree of Master of Library Science, is offered with a specialization in school or public, academic, and special librarianship. A post-master's certificate program is also offered.

## Doctoral Programs

Many Queens College faculty are members of the doctoral faculty of the City University. The following Ph.D. degrees are offered through the Graduate Center at 33 West 42 Street, New Y ork, NY 10036: anthropol ogy, art history, biochemistry, biology, biomedical sciences, business, chemistry, classics, comparative literature, computer science, criminal justice, earth and environmental sciences, economics, educational psychology, engineering, English, French, Germanic languages and literatures, Hispanic and Luso-Brazilian literatures, history, linguistics, mathematics, music, philosophy, physics, political science, psychology, social welfare, sociology, speech and hearing sciences, and theatre. The Ph.D. and M.D./Ph.D. degrees are offered in biomedical sciences, and the D.S.W. is offered in social welfare. The D.M.A. is offered in music
performance and composition. F or further information, contact the appropriate departments at Queens. Information can also be obtained from the Graduate Center.

## Continuing Education

The Continuing Education program addresses the educational needs and interests of the adult community. Lectures, workshops, and seminars are offered in the arts and humanities, career and professional studies, and learning skills development. Faculty are drawn from a broad range of artistic, academic, and business professionals who understand and relate to the unique qualities of adult learners. Although no college credit is given, the offerings build upon, interpret, and apply the disciplines generally associated with the liberal arts, business, and the sciences. A Continuing Education Bulletin may be obtained in Kiely Hall 111 or by calling 997-5700.

## English Language Institute

The Queens College English Language Institute provides instruction in the English language for those people for whom English is a foreign language. The program is considered by the United States Immigration and Naturalization Service to be equivalent to full-time study for maintaining student visa status.

## Fees for ELI

Tuition
$\$ 1950$ for international students
$\$ 1650$ for U. S. residents
Application fee
$\$ 60$ (includes $\$ 10$ application fee and \$50 non-refundable deposit toward tuition)
For further information, write or call
for special folder: (718) 997-5720.

## LASAR

## LIBERAL ARTS AND SCIENCES AREA REQUIREMENTS

All students who entered Queens College in September 1981 or later as candidates for a baccalaureate degree must satisfactorily complete courses in seven areas as listed below. Note: Bachelor of Music students should consult the School of Music section of this Bulletin for their area requirements.

## HUMANITIES I:

2 courses (min. 6 credits) in the area of literature and literary criticism.

## HUMANITIES II:

1 course (min. 3 credits) that stresses appreciation and/or participation in the areas of art, music, and/or theatre.

## HUMANITIES III:

1 course (min. 3 credits) involving the study of language, culture, and/or aesthetics.

## PHYSICAL AND BIOLOGICAL SCIENCES:

2 courses (min. 7 credits), one with a participatory laboratory component, stressing the scientific method.

## SCIENTIFIC METHODOLOGY AND QUANTITATIVE REASONING:

1 course (min. 3 credits) in college-level mathematics, computer science, data analysis, statistics, scientific methodology, or logic.

## SOCIAL SCIENCES:

2 courses (min. 6 credits), from different departments, dealing with historical change, the economy, government, decision-making, community structure, and organization.

## PRE-INDUSTRIAL/NON-WESTERN CIVILIZATION:

1 course (min. 3 credits) devoted to the study of Pre-Industrial and/or Non-Western Civilization.
The listing of courses that may be used to satisfy each of the seven areas follows.
Note: Some of the courses listed under the Humanities I, II, III, and Social Sciences areas will also fulfill the Pre-Industrial and/or Non-Western Civilization (PI/NWC) requirement. Such courses are identified by + .

## SPECIAL NOTES

1. Courses used to satisfy the basic and advanced learning skills requirements may not be used to fulfill these area requirements.
2. Any courses that are used to fulfill the requirements of a major may usually be used to fulfill the appropriate area requirements.
3. Transfer students who place in English 95 or above will be granted equivalent credits by the Undergraduate Scholastic Standards Committee unless, after consultation with the appropriate department(s), the transferred courses are found not to meet the spirit of the area requirements.

## ALTERNATIVES TO LASAR

1. Completion of Honors in the Western Tradition satisfies some of the above Liberal Arts and Sciences Area Requirements. See page 153.
2. Satisfactory completion of a specific group of courses by students enrolled in ACE will fulfill the Queens College Basic and Advanced Learning Skills and LASAR. See page 74.

## Humanities

You may not begin the Humanities I requirement until you have successfully com pleted the appropriate English composition requirements. Two courses (minimum 6 credits) in the area of literature and literary criticism are required. To satisfy this requirement you must select one course from the Humanities I, Tier 1, list below and a second course from Tier 2.

## Tier 1

Classical, Middle Eastern \& Asian Languages \& Cultures: +Classics 150
Comparative Literature +101 , 102
English 140, 151,' 152,' 153, 154, 155, 156
European Languages \& Literatures: French 41; German 150; Italian 41; Russian 155
Hispanic Languages \& Literatures: Spanish 41

## Tier 2

Prerequisite: Successful completion of a Tier 1 course.
Africana 234
Classical, Middle Eastern \&
Asian Languages \& Cultures: +Arabic 150; +Chinese 240, 320, 330, 350, 360, 370; +Classics 250; Greek +351, +352, +357, +360; Hebrew 150, 155 $160,+321,+322,+323$, $+324,+325,+326,+327$, $+328,+329,+330,+331$, +332, +345, +346, 351, $352,353,354,356,357$; Japanese 250, 255; Korean +150, 360; +Latin 360; Yiddish 150
Comparative Literature 203, 204, 205, +211, +212, 213, 214, 215, 217, 218, $+220,+221,229,+230$, 231, 333, +334, 335, 336, 341

English $251^{1},{ }^{1}{ }^{12}{ }^{1}, 253,{ }^{1} 254$,
255, +311, +312, +313,
+320, +321, 322, 323,
$324,+330,+331,332$, $333,334,+340,341,344$, $345,346,352,353,354$, 355, 357, 358, 359, 360, $361,+365,370,371,373$, $374,376,+380,+381$, 383, 384, 385
European Languages \& Literatures: French 205, +206, $+320,+330,+340,345$, 350, 360, 363, 366; German 253, 254, 258, 259, $300,+301,+302,303$, 304, 305, 306, 307; Greek 150, 305, 306, 321, 322, 323, +330, 335; Russian 231, 243, 245, 280, 281, 282, 331, 350, 351, 362, 375
Hispanic Languages \& Literatures: Spanish $+320,+333$

## Humanities II

One course (minimum 3 credits) that stresses appreciation and/or participation in the areas of art, music, and/or theatre. Art majors may not apply credit in an art course to fulfill the Humanities II requirement. Music majors may not apply credit in a music course to fulfill the Humanities II requirement.
Art 1, 101, 102, + 110, +111, $+112,113,+114,115$, 151, 153, 161, 162, 181, 182, 201, +203, +204, +205, +206, +207, +211, $+212,+213,+221,+222$, $+223,+225,+227,+228$, 230, +231, 232, 233, 235, $236,+241,+242,244$, +245, 250
Drama, Theatre \& Dance 1, 100, 101, 102, 111, 150 +201, 202, 203, 204, 206, 251, 269, 308
Music 1, 8
Humanities III
One course (minimum 3 cred-
its) that involves the study of language, culture, and/or aesthetics.

Africana 232
American Studies 110
Anthropology 104
Classical, Middle Eastern \& Asian Languages \& Cultures: +Arabic 160, 260; +Classics 120, 130, 140, 240; Korean 120; +Oriental Studies 140, 220, 221; Yiddish 161
Communication Arts \& Sciences 105, 341, +352, 353, 356, 371
Comparative Literature +225 , 240, 337, 340
English 150, 265, 290, 382, 386, 387, 388
European Languages \& Literature: Byzantine \& Modern Greek Studies 100; French 45, 310, 311; German 281, 283, 284, 285, 286; Italian 45; Russian 150
Family, Nutrition \& Exercise Sciences +157, 158
Hispanic Languages \& Literatures: Spanish 45, 310, 312
History $\mathbf{1}^{2}, 2^{2},+117,125,126$, +214, 272, 301, 302
Linguistics 101
Philosophy 101, 106, 110, $111,116,+118,+140$
Religious Studies 101, +102, 212
World Studies 101, 104

## Physical \& Biological

Sciences*
Two courses (minimum 7 credits), one with a participatory laboratory component, stressing the scientific method. You may take either two courses from Group A or one course from Group A and one course from Group B. Unless specific prerequisites are noted, you may take Group A and $B$ courses in any order or concurrently.

If you intend to major in
physics or psychology, then at least one of the two courses used to complete this requirement must be in a department other than the department in which you major. Students completing majors in biology, chemistry and biochemistry, computer science, or geology are considered to have fulfilled these two area requirements.

## Group A

Biology $11^{3}, 12^{4}$
Chemistry \& Biochemistry 10, $16^{5}$ and $17^{5}, 19,112,113$
Geology 101, 102, 110
Physics $1^{6}, 6^{7}, 103^{6}, 104$, $121^{6}, 122,145^{6}, 146 ;$ Astronomy $2^{8}$
Psychology 102 ${ }^{9}, 213$

## Group B

Anthropology 102, 260
Biology $9^{3}, 20,21,22,24,30^{4}$, 31, 51, 52
Chemistry \& Biochemistry $16^{5}$, 59, 114
Family, Nutrition \& Exercise Sciences 121, 161
Geology 3, 6, 7, 8, 9, 11, 12, $15,16,17,18,25,64$
Physics $7^{7}$; Astronomy $1^{8}$
Psychology $101^{\circ}$

## Scientific Methodology

\& Quantitative

## Reasoning*

One course (minimum 3 credits) in college-level mathematics, computer science, data analysis, statistics, scientific methodology, or logic.
Anthropology 238
Biology 230
Communication Arts \& Sciences 283
Computer Science 12, 95, 101, 103
Students who receive permission to take computer science courses at the 200 level or above will be deemed to have satisfied this require-
${ }^{*}$ To meet the Physical and Biological Sciences and the Scientific Methodology and Quantitative Reasoning requirements you must select your three courses (two courses in Physical and Biological Sciences and one course in Scientific Methodology and Quantitative Reasoning) from two or more departments.
ment.
Economics 249
Mathematics 12, 14, 19, 21, 22, 76, 100, 101, 102, 103, 111, 112, 117, 118, 130, 135, 137
Students who receive permission to take mathematics courses at the 200 level or above will be deemed to have satisfied this requirement.
Philosophy 109
Psychology 107
Sociology 205, 212, 333

## Social Sciences

Two courses (minimum 6 credits) dealing with historical change, the economy, government, decision-making, community structure, and organization. You may not take both courses from the same department or course sequence.
Accounting 361
+Africana 101, 102
+Anthropology 101, 103
Communication Arts \& Sciences 110
Economics 1, 101, 151
Education: Elementary Education 104, 105, 106; Secondary Education 216
Family, Nutrition \& Exercise Sciences 151
History $\mathbf{1}^{2}, \mathbf{2}^{2},+101,102,103$, 104, 125, 126
Linguistics 205, 206
Philosophy 104, 123, 221, 222, 226
Political Science 100, 101, 103, 104, 105
Psychology 348

Sociology 101, 103
Urban Studies 101, 102, 105, 106
World Studies +102, 103

## Pre-Industrial and/or

 Non-Western CivilizationOne course stressing pre-industrial and/or non-Western civilization.

Note: Some of the courses listed under the Humanities I, II, III, and Social Sciences areas will also fulfill the PreIndustrial and/or Non-Western Civilization (PI/NWC) requirement. Such courses are identified by + .
+Africana 101, 102
Anthropology +101, +103, 205, 206, 207, 210, 211, 212
+Art 110, 111, 112, 114, 203, 204, 205, 206, 207, 211,
212, 213, 221, 222, 223,
225, 227, 228, 231, 241, 242, 245
Classical, Middle Eastern \& Asian Languages \& Cultures: +Arabic 150, 160, 260; Chinese 250, 251, $+320,+330,340,+350$, $+360,+370$; +Classics 120, 130, 140, 150, 240, 250; +Greek 351, 352,
357, 360; Hebrew +321, +322, +323, +324, +325, $+326,+327,+328,+329$, $+330,+331,+332,335$, $340,341,+345,+346$; +Korean 150; Latin 204, +360; +Oriental Studies 140, 220, 221
+Communication Arts \& Sci-
ences 352
+Comparative Literature 101,
211, 212, 220, 221, 225, 230, 231, 334
+Drama, Theatre \& Dance 201
+English 311, 312, 313, 320, 321, 330, 331, 340, 365, 380, 381
European Languages \& Literatures: +French 206, 320, 330, 340; German 282, +301, +302; Greek 330
+Family, Nutrition \& Exercise Sciences 150, 157
Hispanic Languages \& Literatures: Spanish 320, 333
History 100, +101, 105, 107, 109, 111, 112, 113, 114, 115, +117, 121, 140, 141, 142, 143, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, +214, 215, 216, 225, 230, 239, 291, 300
Music 217, 218, 219, 233, 234, 235, 247, 248
Philosophy $+118,+140,141$, 142, 250, 251, 264
Political Science 236, 237, 239, 240
+Religious Studies 102
Sociology 239
+World Studies 102

[^5]
## Degree and Certificate Programs

The following are officially registered undergraduate degree programs at Queens College, together with their HEGIS (New York State Education Department registration) codes. Students are advised that enrollment in other than registered or otherwise approved programs may jeopardize their eligibility for certain student aid awards.

Most Queens College undergraduate programs are designed to be completed in 120 credits for students who are fully prepared to begin college study. Programs are listed with the range in the number of credits required for fully prepared students and for those students requiring additional coursework to complete their degrees. Students who change their major during their undergraduate career may also need more than 120 credits in their program in order to graduate.

| Program | Degree | HEGIS <br> Code | Credits |
| :---: | :---: | :---: | :---: |
| Accounting | BA | 0502 | 120-128 |
| Africana Studies | $B A^{1}$ | 0305 | 120 |
| American Studies | BA | 0313 | 120 |
| Anthropology | $B A^{1}$ | 2202 | 120 |
| Art | $B A^{2}$ | 0831 | 120-131 |
| Art History | BA | 1003 | 120 |
| Biology | $B A^{1}$ | 0401 | 120-144 |
| Byzantine and Modern Greek Studies | BA | 0399 | 120 |
| Chemistry | BA ${ }^{1}$, BA-MA | 1905 | 120-131 |
| Communication Arts and Sciences | BA | 0601 | 120 |
| Comparative Literature | BA | 1503 | 120 |
| Computer Science | BA, BS, BA-MA | 0701 | 120-122 |
| Drama and Theatre | BA | 1007 | 120 |
| East Asian Studies | BA | 0302 | 120 |
| Economics | $B A^{1}$ | 2204 | 120 |
| Elementary and Early Childhood Education | BA | 0802 | 120-153 |
| English | BA ${ }^{1}$ | 1501 | 120 |
| Film Studies | BA | 1010 | 120 |
| French | $B A^{1}$ | 1102 | 120 |
| Geology | $B A^{1}$ BS | 1914 | 120-137 |
| German | BA ${ }^{1}$ | 1103 | 120 |
| Greek | BA | 1110 | 120 |
| Hebrew | BA | 1111 | 120 |
| History | BA ${ }^{1}$ | 2205 | 120 |
| Home Economics | $B A^{2}$ | 1301 | 120 |
| Interdisciplinary Major | BA | 4901 | 120 |
| Italian | $B A^{1}$ | 1104 | 120 |
| Jewish Studies | BA | 0309 | 120 |
| Labor Studies | BA | 0516 | 120 |
| Latin | BA | 1109 | 120 |
| Latin American Area Studies | $B A^{1}$ | 0308 | 120 |
| Linguistics | BA | 1505 | 120 |
| Linguistics: TESOL | $B A^{2}$ | 1505 | 120 |
| Mathematics | $B A^{1}$ | 1701 | 120 |
| Music | BA, BA-MA | 1004 | 120-127 |
|  | $B A^{2,3}$ | 0832 | 122-147 |
|  | Mus. B. | 0832 | 120-151 |
| Philosophy | BA, BA-MA | 1509 | 120 |
| Physical Education | $B^{2}$ | 0835 | 120-133 |
| Physics | BA ${ }^{1}$, BA-MA | 1902 | 120-121 |
| Political Science and Government | BA, ${ }^{1}$ BA-MA | 2207 | 120 |
| Psychology | BA | 2201 | 120 |
| Religious Studies | BA | 1501 | 120 |
| Russian | BA | 1106 | 120 |
| Sociology | BA ${ }^{1}$ | 2208 | 120 |
| Spanish | $B A^{1}$ | 1105 | 120 |
| Speech Pathology and Audiology | BA | 1220 | 120 |
| Studio Art | BA, BFA | 1002 | 120-138 |
| Theatre-Dance | BA | 1099 | 120 |
| Urban Studies | $B A^{1}$ | 2214 | 120 |
| Women's Studies | BA | 2299 | 120 |

[^6]
# H onors \& A wards 

T
he College recognizes its outstanding students in a variety of ways: placement on the Dean's List, induction into honorary societies, and the granting of general College honors and departmental honors, as well as College-wide awards and scholarships to graduating seniors. College awards and scholarships are presented, and honors status is recognized by the College for graduating seniors, at the annual Baccalaureate ceremony.

THE DEAN'S LIST
The Dean's List is established each semester in accordance with standards set by the Dean of Students. Criteria are as follows:
Undergraduate degreestudents registered for 12 or morecredits a semester. The Dean's List will be promulgated at the end of each Fall and Spring semester. (It is not promulgated for work taken during Summer Session.) To be named to the Dean's List, a student must have an average of 3.5 in 12 credits of quality grades (A+through F, WF , and WU) in that semester. Grades of Inc., Abs., P, NC, W, and Z will be ignored if the basic requirement of 12 credits of quality grades is met. All quality grades will be included in the computation. The credits considered will be those on the student's record of registration at the end of the third week of the semester. The determination of eligibility will be made only at the time the semester grades are posted. It will not be re-determined and awarded retroactively because of grade changes.
Undergraduate degreestudents registered for fewer than 12 credits in the Fall and Spring semester of the same academic year. The Dean's List will be
promulgated in J une on work completed in both semesters, September through J une. In order to be named to the Dean's List, a student must have an average of 3.5 in a minimum of 12 credits of quality grades (A+through F, WF, and WU) during the academic year. Grades of Inc., Abs., P, NC, W, and Z will be ignored if the basic requirement of 12 credits of quality grades is met. All quality grades will be included in the computation. The credits considered will be those on the student's record of registration at the end of the third week of the semester. The determination of eligibility will be made at the time the Spring grades are posted. It will not be re-determined and awarded retroactively because of grade changes.

A notation will be made on the grade report sent to the student at the time of determination of eligibility and on the grade label posted on the student's permanent record. This notation will indicate whether the determination was made on the basis of full- or part-time attendance.

## GENERAL COLLEGE HONORS

General college honors, summa cum laude, magna cum laude, and cum laude, are conferred on graduating seniors who meet standards approved by the faculty. The academic averages required for honors degrees are 3.9 for summa cum laude, 3.75 for magna cum laude, and 3.5 for cum laude. Honors are figured on the total scholastic average, which includes Queens College work and work done at other institutions. To be eligible for honors, a student must have completed at least 60 credits with letter grades (A, B, C, D, F) at Queens College. Students who have taken work at other colleges must be eligible for graduation honors based on the Queens College work. The combined
average may lower the average or make the student ineligible, but may not raise the honor to which the student is entitled.

## DEPARTMENTAL HONORS

Departmental honors are conferred each year on those members of the graduating class who meet standards set by each department.

## honor societies

Phi Beta Kappa, a nationwide organization and the oldest college society still active, honors good character, intellectual enthusiasm, and outstanding scholarship in the liberal arts and sciences. The Sigma Chapter of New Y ork was authorized at the College in Fall 1949 and installed on J anuary 9, 1950. Each year it elects as members a limited number of students whose records in the liberal arts are superior. Election to membership in a student's senior (or, exceptionally, junior) year is a unique distinction. No one may apply to join Phi Beta Kappa, but the nominating committee takes care to find those whose programs live up to the society's ideals. More information may be obtained from members who serve as liaison officers in each academic department.

Golden Key National Honor Society is a national, interdisciplinary, undergraduate, academic honors organization. The purposes of the Society are to recognize and encourage scholastic achievement and excellence in all undergraduate fields of study, to unite with collegiate faculties and administrators in developing and maintaining high standards of education, and to promote scholastic achievement and altruistic conduct through voluntary service. Invitations are extended to junior and senior students, full or part time, who
rank in the top 15 percent of their class.
Sigma Xi, the Scientific Research Society, is a national scientific honorary society whose purpose is to encourage original investigation in pure and applied science. Queens College became a member in 1968. Membership is granted for interest in and contribution to creative work in science as well as for high scholastic achievement.

K appa Delta Pi is the National Honor Society in Education, founded in 1911. The K appa Gamma Chapter was installed at Queens College on December 16, 1963. It encourages excellence in scholarship, high personal standards, improvement in teacher preparation, distinction in achievement, and contributions to education. Invitations are extended to students in education on the basis of their cumulative and education indices and promise in the field of teaching.

Alpha Sigma Lambda, Upsilon Chapter, is the National Evening College Honor Society. Initial eligibility is established by completing 30 course credits with a minimum cumulative average of 3.2 through four semesters as a matriculant in evening classes. At least 15 credits must be completed outside the field of specialization. Ten percent of those eligible are selected annually for induction as new members.

In addition, the following honor societies have chapters at the College:
Beta Delta Chi (Chemistry and Biochemistry) Omicron Delta Epsilon (Economics) Pi Delta Phi (French) Delta Phi Alpha (German)
Phi Alpha Theta (History) Phi Upsilon Omicron (Home Econ.) Pi Mu Epsilon (Mathematics) Pi Kappa Lambda (Music) Pi Sigma Alpha (Political Science)
Psi Chi (Psychology)
Dobro Slovo (Slavic)
Alpha Kappa Delta (Sociology)
Sigma Delta Pi (Spanish)

## BACCALAUREATE AWARDS

Awards are granted to outstanding graduating students at Baccalaureate by the Academic Senate Committee on Honors and Awards. Faculty may nominate students for the awards, and the Committee reviews records of all candidates for graduation with high gradepoint averages. In making its selection, the Committee considers such factors as outstanding achievement in one or more fields of study, high grade-point average, and breadth of courses taken as well as evidence of originality, creativity, and promise of future contribu-
tion to society. Some of the awards have special criteria, such as admission to graduate and professional schools, and contributions to the College and community. No one may apply directly for Baccalaureate awards.

The Baccalaureate awards are as follows:

The Paul Klapper Scholarships are provided annually by the staff of Queens College and other friends in memory of the College's first president to encourage scholarly accomplishment, moral and intellectual integrity, and good citizenship. These awards are made to graduating seniors who plan to enter graduate work.

Queens College Retirees Association Scholarships are presented annually to graduating seniors who have maintained high academic standards, have shown promise of contributing to the quality of life in New York City, and have plans for continued education. These scholarships include:
The Wilbur E. Gilman Scholarship of the Queens College Retirees Association

The Howard A. Knag Scholarship of the Queens College Retirees Association

The Mardel Ogilvie Scholarship of the Queens College Retirees Association
The Lucile Lindberg Scholarship of the Queens College Retirees Association

## The QCRA Scholarship

The A. Joseph Geist Law Fellowship is offered by the A. J oseph and Cecile A. Geist Foundation, Inc. It is to be used for tuition by a Queens College pre-law student, accepted for admission to an accredited law school, who has maintained a high standard in scholarship and in character and has generally contributed to the best interests of the College. This award is presented annually.

The Jeffrey Vigliarolo Scholarship is awarded to a graduating student of high scholastic achievement who plans to attend law school after graduation. It is funded through the J effrey Vigliarolo Scholarship F und established by the family and friends of J effrey, a member of the class of 1981.

The Charlotte S. Garfinkel Memorial Alumni Scholarship is given annually to a graduating senior who has maintained an outstanding academic record and has contributed generally to the best interests of the College.

The Arthur H. Kahn Memorial Law Scholarship is provided annually by the family and friends of Arthur H. Kahn, former Special Counsel to the Board of Higher Education of the City University of New Y ork. It is presented to a graduating senior who has maintained a high academic average, contributed to the best interests of the College, and has been accepted for study at the City University of New York Law School at Queens College.

The Amy and Judi Sturm Memorial Scholarship is provided annually by the family and friends of Amy Sturm, a J une 1982 graduate, and J udi Sturm, a J une 1980 graduate of the College. It is given in their memory to a graduating senior in the liberal arts who has maintained an outstanding record at the College, has made significant contributions in campus affairs, and has been accepted to graduate study in mass communications, preferably at a branch of the City University of New York.

The Alumni Association of Queens College Award is presented annually to a graduating senior who has maintained an outstanding academic record, has contributed to the best interests of the College, and has been accepted for graduate study at Queens College.

The Molly Weinstein Memorial Award is presented annually to a graduating senior who has a superior record of scholarship and who intends to pursue a career in college teaching.

The Martin David Dahlmann Memorial Alumni Scholarship is provided annually by the family of Martin David Dahlmann, a February 1970 graduate of the College. It is given in his memory to a graduating senior who has maintained an outstanding record at the College, has made significant contributions in campus affairs, and has been accepted to medical school.

The Abe Rothenberg Memorial Award is given annually for outstanding academic achievement to a graduating senior who plans to go on to graduate school.

The Judge Charles S. Colden Award is presented to a graduating senior who has maintained a high standard in scholarship and in character and has generally contributed to the best interests of the College.

The Sunny Budow Memorial Scholarship is provided annually by her family and is
given in her memory to a graduating senior in a health-related discipline who has maintained an outstanding academic record at the College, has made significant contributions in campus affairs, and has displayed qualities of concern for others, as Sunny did.

The Queens College Women's Club Award is offered to graduating seniors who complete the baccalaureate degree with academic excellence. Two awards are presented annually.

The Donald E. Kirkpatrick Awards are given annually to graduating seniors of outstanding academic achievement whose activities have been in the best interests of the College and its goals.

The Roarers Memorial Award is presented annually to a graduating senior who has maintained a good academic record and made an outstanding contribution to the College through community service.

The Chaney-Goodman-Schwerner Award is offered annually to a graduating senior who has made a significant contribution in fostering human relations and eliminating divisions that separate peoples.

The Joan Thornton McManus Memorial Prize for Academic Excellence will be made annually to a student with the highest cumulative index upon the completion of the baccalaureate degree. To be eligible, a student must have completed at least 112 credit hours of quality point-bearing grades at Queens College. In case of a tie, the award will be divided equally between or among those eligible.

The Helen T. Hendricks Award is presented annually to a graduating student who has maintained high standards in scholarship, made an outstanding and valuable contribution of service to others in the Queens College community and/or in the community at large, particularly to minority students on campus, and has been accepted to a professional school. The award is made by a group of alumni to acknowledge the contribution made by Helen T. Hendricks, a member of the College staff, to their educational experience.

## The Queens College Campus Ministers

 Scholarship is provided annually by the Queens College Campus Ministers to a graduating senior who has done the most to foster harmony among the various traditions and to promote spiritual and ethical growth on campus.
## PROGRAM AWARDS

Adult Collegiate Education (ACE) students may apply in the ACE Office in Kiely 134A for the following scholarships (unless stated otherwise, all students must maintain a minimum course load of 6 credits): The Doris and J oseph Eisen Scholarship (approximately \$275) is awarded each Spring to a full- or parttime student with a minimum GPA of 3.2. Applicants must be lower sophomores (at least 28 credits) and demonstrate academic potential. The Richard H. Hogan Award of $\$ 100$ is presented annually to a graduating senior from ACE for academic excellence. The AIfred Lewis Award of $\$ 100$ is presented annually to a graduating senior from ACE for academic excellence. The Martin Pinel Solomon Resnik Scholarship for Single Parents (approximately \$500) is awarded each Spring to a part- or full-time student who is a single parent (male or female) and demonstrates academic potential and financial need. The Samuel RoaneMemorial Scholarship for Minority Students (approximately $\$ 200$ to $\$ 500$ ) is awarded each F all to a part- or full-time minority student (i.e., African-American or Hispanic). Applicants must demonstrate financial need and prior community service. TheHelen Rudolph Memorial Scholarship (approximately \$800) is offered each Fall to a part- or full-time junior (at least 61 credits) majoring in J ewish Studies. The Dean Ernest and M arta Schwarcz Scholarship (approximately \$500) is awarded each Fall to a full-time student with a minimum GPA of 3.0. Applicants must demonstrate financial need and academic potential. The May and Samue Usadi Scholarship (approximately $\$ 300$ ) is awarded each Fall to a part- or full-time student. Applicants must demonstrate financial need and academic potential. The Molly Weinstein Memorial Scholarship (approximately $\$ 500$ ) is awarded each semester to a part- or full-time student. Applicants must demonstrate financial need and academic potential.

The Jeffrey B. Berman Memorial Award is presented annually to a graduating senior who has made significant contributions to the needs and interests of students with disabilities on campus.

The Dr. Jeffrey Hollander Memorial Award is presented annually by the Health Professions Advisory Committee to a premedical student who has been accepted to a medical school.

The Phyllis Althea McCoy Annual Award of $\$ 100$ is presented to a QC SEEK prelaw student who has been accepted for admission to an accredited law school. Should there be no such SEEK student, the award will be presented to a prelaw student from a minority group who has been accepted for admission to an accredited law school.

The Phi Beta Kappa Award of $\$ 100$, plus a one-year subscription to The American Scholar, is presented annually by the Sigma Chapter to an outstanding student member of Phi Beta Kappa.

## DEPARTMENTAL AWARDS

The Accounting and Information Systems Department offers the New York State Society of Certified Public Accountants Award each year to at least one graduating senior for superior scholarship in accounting studies, and the Professor Ralph G. Ledley Memorial Award of $\$ 100$ to a student with an outstanding scholastic record in the department who will be attending law school. The student who has contributed the most distinguished service in advancing the department's professional interests receives the Professor Eugene Rosenfeld Memorial Award of $\$ 100$. The Professor Louis Geller Award of $\$ 100$ is given to an outstanding student going on to graduate studies in accounting. Additional grants of \$100 are awarded by the department to one or more students graduating with honors in accounting who intend to pursue graduate studies, and to other appropriately designated students as funds permit. The department also nominates an outstanding woman graduate for the American Society of Women Accountants Award, conferred upon outstanding women graduates in accounting in the metropolitan area. The McGraw-Hill Accounting Award of Excellence of two books and $\$ 100$ is presented to the student with an exemplary scholastic record plus outstanding service to the College and the department. The Wall Street J ournal Award is given to a graduating student for excellence in accounting. The award consists of a oneyear subscription to the Wall Street J ournal and a paperweight.

The Anthropology Department gives four special awards: the Hortense Powdermaker Memorial Award to the graduating student who exhibits the greatest potential for a career in anthropology along with an outstanding scholastic
record; the F aculty Award to the graduating student with the highest grade-point-average in anthropology; the Paul Mahler Memorial Award to the most promising graduating major specializing in physical (biological) anthropology; and the Lynn Ceci Archaeology Award to the most promising graduating major specializing in archaeology. Additional departmental honors are awarded on the basis of superior scholarship. Students who wish to be considered should apply to the department's Chair before the beginning of their senior year.

The Biology Department offers the Donald E. Lancefield Award for excellence in biology, to be awarded to the biology major with the highest grade-point average; the Darwin Prize, to be awarded to the biology major with the next highest grade-point average who has demonstrated an interest in research; and the Laura H. and Arthur L. Col win Prize, for excellence in undergraduate research, to be awarded to a biology major who is not a pre-professional student.

## Byzantine and Modern Greek Studies

 offers the Constantinos Paparrigopoulos Prize of $\$ 750$ annually to a graduating senior for excellence in this subject.The Chemistry and Biochemistry Department awards the following prizes: the Stanley G. Konkol Memorial Award in Chemistry is provided by the parents and friends of Stanley G. K onkol, Queens College Class of 1954; approximately \$500 is awarded to a graduating chemistry major planning to do graduate work in either chemistry or biochemistry. The Herman Schulz Memorial Award in Chemistry $(\$ 1,000)$ is funded by an endowment established by Mrs. Rose Baron Schulz in memory of her late husband. The recipient is to be a graduating departmental major, selected on the basis of excellence in scholarship and leadership, and one who is planning a career in chemistry or biochemistry. The Maxwell L. Eidinoff Scholarship was established by the Eidinoff family, friends, students, and colleagues on the occasion of his retirement after 44 years of teaching at the College; an award of \$250 is offered annually to a graduating senior who has maintained an outstanding academic record, has contributed to the best interests of the department, and is planning to do graduate work. The Ira M. Goldin Memorial Award of $\$ 500$, in memory of a student who died in September 1966, is presented to a graduating major who
has been accepted into medical school. The Trudy Rothman Chemistry Award is provided by Mrs. G. P. Rothman and family to encourage academic excellence. The award is to be presented to a graduating chemistry major, who demonstrated continued improvement, and maintained a very good academic record. The Chemistry and Biochemistry Department Service Award may be given annually to a graduating senior for outstanding service to the department. The American Institute of Chemists Award is a medal awarded on the basis of excellence in scholarship and leadership to students planning careers in chemistry or chemical engineering. The Merck Index Award is given to a graduating chemistry major whose qualifications are determined by the faculty of the department. The LenoreF. Meadows Memorial Award, in memory of a faculty member who died in April 1967, consisting of books selected by the recipient, is provided by the family, faculty, students, and friends.

The Classical, Middle Eastern, and Asian Languages and Cultures Department awards prizes for excellence in language and literature study in the department.

The Communication Arts and Sciences Department presents annually the Dr Stewart E. Gilbert Award in the amount of $\$ 100$ to a student of outstanding performance for scholarship, character, and achievement in the field of communicative disorders; the Arthur J. Bronstein Award in the amount of $\$ 100$, to a student who has distinguished herself or himself in the study of language and phonetics; the Outstanding Scholar Award to a CAS undergraduate major who has made outstanding scholarly contributions to the discipline of communication; the Wilbur E. Gilman Award for outstanding service in the discipline of communication; and the Special Achievement in Multicultural Communication Studies Award to a student with outstanding contributions to the study of women and/or minorities from a media perspective with a grade-point average of 3.6 or above.

The Comparative Literature Department awards the Paul Zweig Memorial Award, which is provided by the parents and friends of Paul Zweig, who taught at Queens College from 1971 to 1984. It is given to the most deserving graduate who majors in Comparative Literature.

The Computer Science Department offers three awards to outstanding students who have been recommended by the department's Honors and Awards Committee. The Philip Drummond Memorial Award is given for excellent academic achievement; the Robert Spector Memorial Award is given for high academic skills and service to other students; and the Departmental Service Award is given for outstanding service to the department.

The Drama, Theatre, and Dance Department presents annually the J udith Paige Hoffmann Memorial Award to a student who has distinguished himself or herself in the Drama, Theatre, and Dance program; the Robin Hirshfield Miller Memorial Award to a student who demonstrates the most promise in acting; the Richard Henry Hommed Award to a student best exemplifying the positive spirit and enthusiasm of the Drama student; the Technical TheatreAward for outstanding work in design and technical theatre; the Dance Award to the most outstanding student in theatredance; and the Bertram L. J oseph Scholarship for a distinguished student going on to graduate study in Drama.

The Economics Department awards the Matthew Simon Memorial Award to a graduating senior who has majored in economics and achieved a record of superior scholarship in the field. The Henry S. Miller Award is presented to a graduating economics major who has contributed the most distinguished service in advancing the department's professional interests. The Arthur D. Gayer Memorial Award is made to a graduating senior who has concentrated in economics and has achieved a record of superior scholarship in the field. The Persia Campbell Award is offered to a graduating economics major who has presented the best undergraduate research paper in economics. The Wall Street J ournal Student Achievement Award is given to an economics major with a record of superior scholarship; preference is given to students planning graduate work in management or public administration. The Steve E. Burdman Memorial Award is given by the Delta Chapter of Omicron Delta Epsilon to a graduating economics major, who is also an active member of Omicron Delta Epsilon, for a combination of scholastic achievement and service. The William Withers Award is given to a graduating economics major who has demonstrated outstanding scholarship,
creativity, and intellectual curiosity.
The School of Education presents the Marc Belth Award for studies in cognition. This annual prize of $\$ 700$ is awarded to a graduating undergraduate or graduate student of the College who has submitted an essay or paper in the areas of philosophical, social, or curriculum theory of education. The work should address an aspect of the thinking process and will be evaluated for its originality (i.e., the use of an unusual perspective); clarity of analysis; and logical defense and/or criticism of any arguments presented. Work should be submitted to the Marc Belth Award Committee, Elayne Bernstein, Chair, Queens College, Kiely Hall 111 (9975739). The Clarence Bunch Award in Art Education (also open to graduate students) is offered to an outstanding art education student intending to continue studies in this field who promotes, contributes, and shows strong dedication to the profession of art education The Herbert Fremont Award in Secondary Education is given to a graduating student with an overall index no lower than 3.6 and who exemplifies brilliance in the teaching of mathematics. The Bertha Friedman Award is granted to a limited number of Elementary Education graduates who show dedication, courage, and integrity in the field of education. The Herbert Schwartzberg Award is granted to an Elementary Education major who exemplifies the positive spirit, enthusiasm, and ability to positively affect young children, for which Professor Emeritus Schwartzberg is remembered.

The English Department awards the following annual prizes: theJ ohn Golden Award of $\$ 1,000$ to the student who shows the greatest literary promise in drama; two prizes for poetry: the J ames R. Kreuzer Poetry Prize of $\$ 100$ to the student who has shown the greatest promise in the field of poetry, and the J ames E. Tobin Award of $\$ 100$ for the best group of poems; the English Faculty Award of $\$ 100$ to the student who demonstrates creative versatility in two or more literary genres; the Claire Bibuld J acobs Prize of $\$ 100$ for the best single work in short fiction; the Clinton Oliver Memorial Prize of $\$ 100$ for the single best work - scholarly, critical, and/or creative - that relates to the African-American experience; the Ernest Schlochauer Prize of $\$ 100$ for the best critical or scholarly essay in Shakespeare and English Renaissance studies; the Norman Silverstein Memor-
ial Prize of $\$ 100$ for the best film criticism; the Helen Viljoen Prize of $\$ 50$ for the best work of non-fictional prose, exclusive of essays in literary criticism or scholarship; the English Club Award of \$50 for excellence in any genre; the Lois Hughson Prize of \$50 for the best essay in the Orwell tradition; the Women's Club Prize of $\$ 50$ for the best work on women's experience; the Myron Matlaw Prize of $\$ 100$ for a work in any genre of wit and intellectual excellence; the Norman Silverstein and Ella Peiser Awards of $\$ 500$ each to juniors, and of $\$ 250$ each to sophomores, for excellence in 1) creative writing, 2) nonfiction, documentary, or biographical writing, and 3) for all-around excellence in English studies; the Sandra Schor Writing Awards of \$500 each for excellence in poetry, fiction, and nonfiction; five Sandra Schor Writing Awards of \$100 each for essays written in composition courses; and the Immigrant Experience Prize of \$50, which will be awarded for the single best work - scholarly, critical, or creative - that relates to the immigrant experience in America.

The European Languages and Literatures Department selects the recipient of the Literary Society F oundation Prize of \$50 for Excellence in the Interpretation of German Literature, which is awarded annually to the graduating senior who is most gifted in the interpretation of German literature, on the basis of the student's performance in German courses. All students of German are eligible, but preference will be given to students who do not have a native German background. The German LanguageAward of the Steuben Society of America - a Steuben Gold Medal, Steuben Award Certificate, and a cash award of $\$ 25$ - will be presented to a full-time student of Queens College for excellence in the study of the German language. Other awards include the Sheila Endler-Landau Memorial Prizein French; the Norman H. Paul Award in French; the Italian Prize; and special departmental awards to students who have excelled in French, German, Italian, M odern Greek, or Russian. Several prizes are offered yearly by Italian business firms and friends of Italian studies at Queens College to graduate students or to graduating seniors who plan to continue their studies in the field of Italian.

The Family, Nutrition, and Exercise Sciences Department offers the following awards to graduating seniors: the Academic Excellence in Health Education Award for a health education major who has demonstrated outstanding scholarship; Family
and Consumer ScienceProgram Award for high scholarship and future promise in family and consumer sciences; Frances P. Hoffman Memorial Award and the Glenn Howard Award for Academic Excellencein Physical Education for two students who have demonstrated superior scholarship in physical education; Margaret Kiely Award for scholarship presented by Family and Consumer Science Alumnae in memory of Dean Margaret Kiely; Hester Gray Award to an outstanding family and consumer science teacher education student; Selma Schwartz Memorial Award for a physical education major who has demonstrated superior scholarship and superior teaching ability; Comstock Michigan Fruit Award to an outstanding student in dietetics; Eula BeCorban Award to an outstanding student of nutrition; Madame Nassanova Award for a physical education major who has demonstrated outstanding ability and performance in dance; Family and Consumer Science Alumnae Service Award for service to family and consumer science clubs, the department, and the College; Margaret A. Gram Award for scholarship and service; and the William Madden ServiceAward for a student from the Exercise Science and Physical Education programs.

The Geology Department confers the Lt . GeorgeC. Gierak Memorial Award in memory of a former president of the Geology Club, who gave his life for his country. The Geol ogy Club of Queens College awards an annual gift to the undergraduate geol ogy major with the second highest scholastic average in the department. The Queens College Economic Geol ogy Club of the American Institute of Mining Engineers presents an award to the graduating geol ogy major showing achievement both scholastically and in the field of economic geology. The Walter S. Newman Memorial Scholarship, donated by the family and friends of the former professor and chair of the department, is a cash award given annually to a promising student to help defray the cost of field camp.

The Hispanic Languages and Literatures Department awards the F aculty Prize for Excellence in Spanish and the Rafaed Rodríguez Memorial Prize in Spanish.

The History Department offers four memorial awards: the Koppel S. Pinson Prize to the graduating senior with the highest record in history courses; the Gaudens Megaro Prize to a graduating senior for distinguished scholarship in

European history; the Sol omon Lutnick Prizeto a graduating senior for distinguished scholarship in American history; and the Richard W. Emery Prize for distinguished scholarship in pre1500 European history. Scholarship keys for distinguished records in history are awarded by the Queens College Chapter of Phi Alpha Theta, National Honor Society in History.

Jewish Studies awards the following annual prizes: Morgenthau Prize of $\$ 250$ for the best essay on a topic related to the H olocaust; William Fenster Memorial Scholarship of $\$ 400$ for J ewish Studies majors (awarded to one or two students each year); Helen Rudol ph Memorial Scholarship of $\$ 400$ for J ewish Studies majors and for those in the ACE program majoring in J ewish Studies.

The Mathematics Department offers each Spring semester the Eva and J acob Paulson Memorial Award, presented to a graduating senior for outstanding work in mathematics; the Thomas A. Budne Memorial Award is given for special talent and creativity in mathematics; and the Doris and Paul Tang Memorial Award is presented for excellence in the study of probability and statistics. The fol lowing awards are also presented to graduating seniors for excellence in mathematics: the Samuel J acobs Memorial Award; the Claireand Samue J acobs Award; the Arthur Sard Memorial Award; and the Banesh H offman Memorial Award. To be eligible for awards, a student must have a high index in mathematics and must have taken courses beyond the minimum requirement for a major

The Aaron Copland School of Music awards the following annual prizes to graduating seniors: the Karol Rathaus Memorial Award for excellence in composition; the Choral Society Award to a nonmusic major who has contributed to the musical life of the College; the Allen Michael Cohen Memorial Award; the Michal J oan Ress Memorial Award to an instrumental major; the Maria and RaffaeleSalerno Memorial Award to a student intending to continue musical education toward a professional career; the Adele Lerner Prizein Chamber Music; and the Claire and Samue J acobs Award to outstanding graduating students. The following annual awards are not restricted to graduating seniors: the ClaireBartels Freshman Award given to a promising music student at the end of the freshman year; the Rathaus Family Memorial Award, distributed according to the wishes of the
music faculty; the Choral Society Award in Music Education to a student showing great promise in teaching; the Mark Kyrkostas Award for distinguished work in piano or composition; the George and Violet Zatkin Scholarship Award for excellence in opera; and the Discimus ut Serviamus Awards for contributing to the musical life of the College. The Copland School also awards annually theJ ohn Castellini Silver J ubilee Award to a distinguished alumnus of the music program.

The Philosophy Department annually offers the Anna K. Edelman Award to an outstanding student in the department; the Nathan Gold Memorial Award to an outstanding graduating major who plans to attend law school; and the Fanny Gold Memorial Award for a student who has done distinguished work in the area of Philosophy of Religion.

The Physics Department offers three prizes: the Paul Klapper Physics Award is given to an outstanding student graduating with honors in physics; the Physics Prize is given to a graduating physics major who has an excellent record in the field; and the Ferdinand $J$. Shore Award is given to an undergraduate physics major doing research with a faculty member in the department.

The Political Science Department annually offers an Award for Academic Excellence to an outstanding student in the department as well as a service award to a student who has made an unusual contribution to the department. Other awards include the Eugene Hevesi Memorial Award for enhancing the political process; the Howard Ira J osel ow Memorial Award for academic excellence; the Michaed Harrington Scholarship Award; Mieczyslaw Mandi Scholarship Award; and the Pi Sigma Alpha, Kappa Chapter Award given to an outstanding student.

The Psychology Department offers the Gre gory Razran Award to the graduating student with the highest grade-point average in psychology; the Robert S. Woodworth Award to the graduating student with the second highest gradepoint average in psychology; and the Arthur Witkin Award for Excellence in Industrial-Consumer Psychology to a graduating student who has shown special scholarship, research, and internship achievement in this area. The Raphell Sims Lakowitz Scholarship of $\$ 1,000$ is offered annually to an undergraduate psychology major who has demonstrated both academic excellence
and the ability to work in the clinical setting, and is intending to pursue a career in clinical psychology.

The Sociology Department offers the folIowing scholarships: J oseph Gubernikoff Memorial Scholarship is awarded to a graduating sociol ogy major who has attained an exceptionally high gradepoint average while taking varied and challenging courses (up to $\$ 500$ ); the Paul F. Lazarsfeld Scholarship in Sociol ogy is awarded to a graduating student who satisfies one or more of the following requirements: 1) A sociology major who will be accepted for admission by Columbia University's Graduate Sociol ogy Department; 2) A social science major who will be accepted for admission by one of Columbia University's Graduate Social Science Departments; 3) A sociology major who will be accepted by a graduate social science department at a major university and who will follow a graduate education following the intellectual traditions established by Paul F. Lazarsfeld (up to \$500); the Patricia Kendall Lazarsfeld Undergraduate Scholarship in Sociology is awarded to an undergraduate sociol ogy major, before he or she is eligible for graduation, who has a high academic average (up to $\$ 500$ ).

Two schol arships for Latino sociology majors are awarded - The New York Times Company Foundation Endowed Scholarship for Latino Students: presented to a Latino sociology major who is not yet a graduating senior; the Graduating Senior Latino Endowed Scholarship: presented annually to an undergraduate sociol ogy major at the time of graduation. Recipients must have academic records consistent with students who receive honors in Sociology. Each award will be for up to $\$ 500$.

Along with the Labor Studies program, Sociology will present the DuBois Schol arship Award and the Sylvia Newman Scholarship Award, each for up to $\$ 500$. Contact either office for eligibility requirements.

## The Student Personnel Department pre-

 sents the Student Activities Award to a student who has made an unusual and outstanding contribution in the area of student activities at the College. The Dean of Students Service Award is presented annually for academic achievement and contribution of services to the student body.
# G eneral Information 

Rules governing grades, credits, retention standards, attendance, leaves, and conduct are among the major topics covered in this section. Since no compendium can anticipate and answer all questions, you should consult the Office of the Registrar, Dean of Students, or Assistant Provost, as appropriate, if you have questions not covered here.

## Student Number

The College uses your social security number as your permanent student identification number. When you apply for admission, you should include your social security number as part of your application. Students without a social security number will be assigned a 9 digit number by the College.

## Placement Examinations

The College gives all newly accepted students writing, reading, and mathematics placement examinations called CUNY Assessment Tests. The results of these examinations determine the courses a student must take to fulfill basic skills requirements (see pages 40-41).

## Advanced Placement

Eligibility for advanced placement is determined by the student's performance on the Advanced Placement Tests given by the College Entrance Examination Board. Students who have taken an Advanced Placement Test may have the results forwarded to the Undergraduate Admissions Office.

## Credit by External Examination

Students may receive college credit for examinations conducted by the New Y ork State Department of EducationCollege Proficiency Examination Pro-
gram and by the College Entrance Examination Board-College Level Examination Program (subject-area exams only). Students should obtain approval to take such examinations from the appropriate Department Chair. They may receive either credit for specific courses or elective credit within the department.

Information about both of these examination programs is available in the Undergraduate Admissions Office.

Courses at Other Institutions (Permit) A Queens College student wishing to take a course at another college (CUNY or other) and transfer those credits to Queens, must first obtain a permit to do so beforetaking the course(s). Permits are authorized by the appropriate department and administered by the Registrar. Permit forms are obtained at the Office of the Registrar () efferson 100). To qualify for a permit, you must meet the following conditions:

- be a degree (matriculated) student with a cumulative GPA of at least 2.00;
- be at least in your second semester of matriculation;
- have successfully completed at least six credits at Queens College.
A department may refuse to authorize a permit if, in its judgment, it is inappropriate to do so.

It is the responsibility of students who study at other institutions on permit to have official transcripts of their work sent to the Office of the Registrar. Such transcripts should be sent to the attention of the Permit Officer, Office of the Registrar (J efferson 100).

## New York/Paris Exchange Program

The New York/Paris Exchange offers Queens College students of all disciplines the opportunity to study for either a semester or year at one of the

Universities of Paris. Requirements include either three semesters of collegelevel French or an equivalent linguistic proficiency. Participants pay their tuition at Queens College and remain eligible during their time abroad for any tuition assistance they receive as CUNY students. They receive QC credit for the work they do in Paris. The program office in Paris assists students in finding housing. Students have the option of spending three weeks in Provence prior to their time in Paris.

Deadline for the Fall semester is April 15; deadline for the Spring semester is November 30. F or further information and applications, stop by the office in Klapper Hall 312 or write to: New York/Paris Exchange Program, Queens College, English Department, Flushing, NY 11367-1597 (997-4608; Fax 997-4636).

## Registration

For complete details about registration dates and course schedules, see the Telephone Registration Guide and Schedule of Classes, available prior to registration at the Information Center (Kiely 101).

## Course and Faculty Evaluation

Every three semesters students complete a course and faculty evaluation form in each class taken. Their re sponses are summarized and printed in the Course and Faculty Evaluation Booklet. This provides information on course requirements and students' reactions to classes and instructors.

These evaluations are the only way the College can learn how students feel about their classes and instructors. Many students use this information to help them when selecting courses.

The Course and Faculty Evaluation Booklet may be purchased at the Col-
lege Bookstore and is always available at the Reserve section of the Rosenthal Library.

## Credits and Credit Load

Equated credits or billable credits are the number of contact hours in remedial, compensatory, and developmental courses, regardless of the number of credits given for these courses. The number of equated credits will exceed the number of degree credits in compensatory, developmental, and remedial courses. All hours of noncredit courses are considered as equated or billable credits. For details, contact the respective department or program.

Matriculated students, not on academic probation, may register for the following maximum number of equated credits as indicated:
Fall and/or Spring semester: 18 equated credits;
Summer Session I: 4 equated credits;
Summer Session II: 7 equated credits.
Academic probationary students may register for a maximum of 13 equated credits per semester.

Non-degreestudents may register for a maximum of 11 equated credits per semester.

Additional Credits. Sophomores, juniors, and seniors who have a cumulative grade-point average of 3.00 or higher, and no temporary grades of ABS, INC, and PEN, can register for a maximum of 21 equated credits. Note: Students who register for more than 18 equated credits will be charged an Accelerated Study Fee. In all cases, the 21 equated credit limits apply to equated or billable credits.

Matriculated students who have a compelling reason and do not meet these requirements may request permission to take additional equated credits in the Office of the Undergraduate Scholastic Standards Committee, J efferson Hall 104, at least three days prior to their scheduled registration date.

Overlapping Courses or Course Conflicts. These are courses whose meeting times are not at least five minutes apart. The College prohibits registration into courses with overlapping schedules or class meetings. Students will not be permitted to register for courses that overlap or conflict. The Registrar will adjust the course schedule and drop one of the courses for all students who are registered in such courses. Exception: Graduating seniors may request permission, at least three days prior to
their scheduled registration date, from the Undergraduate Scholastic Standards Committee to register for overlapping courses.

Classification of Students. The minimum number of degree credits required for membership in each class is:

| Upper Freshman | 12 |
| :--- | ---: |
| Lower Sophomore | 28 |
| Upper Sophomore | 45 |
| Lower J unior | 61 |
| Upper J unior | 78 |
| Lower Senior | 94 |
| Upper Senior | 111 |

Graduation. A student must complete 120 degree credits to be eligible for graduation unless a waiver has been granted to a specific program. (See Requirements for the Baccalaureate De gree, page 39.)

Attendance. By registering in a course, students assume the obligation to fulfill the requirements set for that course by the instructor. Students are responsible for such activities as participation in class discussions, laboratory sessions, field trips, etc.; the preparation of papers and reports; and the taking of quizzes and examinations, any or all of which may constitute a component in the student's final grade for the course. In addition to observing the regulation regarding withdrawal from a course, students are expected, as a normal courtesy, to inform the instructor of prolonged absence or withdrawal. (See Withdrawal from a Course, page 60.)

N ote: While attendance in class may not be required for a final grade in a specific course, students should be aware that attendance may be required to retain eligibility for financial aid.

Inactive Status. Students who do not register for a regular semester (F all or Spring) will be considered inactive. The inactive status is not noted on the official record. Inactive students who wish to return to the College must file an U ndergraduate Reenter Application by the deadline established by the Office of Undergraduate Admissions, Kiely Hall 213 (997-5603).

## GRADES

Passing Grades. Passing grades assigned by faculty are A+through D. (There is no grade of D-.) Grades of A+show on the student's record but are counted as an A in the grade-point average (GPA). Passing grades, once assigned, stand as final evaluations. A passing grade may
not be changed later by additional assignments, retesting, or auditing a class. P (Pass) is assigned in place of a passing grade when a student chooses the P/ NC grading option or when a $P$ is the only legal grade that may be assigned in a course and the instructor has submitted an earned passing grade. $P$ earns credit but is not calculated in the GPA. (See P/ NC Option, page 58.)

Failing Grades. A student who receives a failing grade (F, WU, WF ) will not receive college credit for that course. All failing grades are calculated in the GPA as zero. Grades of NC or R are not calculated in the GPA. (See Warning, below.)

F (Failing) is assigned for work that, in the opinion of the instructor, does not deserve college credit. NC (No Credit) is assigned when the instructor submits an $F$ for a first-semester freshman (see Freshman Grading Policy, page 58) or for a student who has chosen the P/ NC Option. (See P/ NC Option, page 58.)
$\mathbf{R}$ (Repeat) is assigned when the instructor submits an $F$ for a student in a course classified as remedial and developmental. A course in which an R is received is repeated until it is passed.

WF (Withdrawn Failing) is assigned by the Registrar when a student receives permission, from the Undergraduate Scholastic Standards Committee, for an official late current withdrawal, and the instructor's evaluation of a student's coursework is failing at the time of the withdrawal.
wU (Withdrawn F ailing) is assigned by the Registrar when the instructor indicates that there is no record of the student attending the course; or the student stopped attending the course before the end of the semester; or as a result of excessive absences there is no basis to give a final letter grade of A+to $F$, and the conditions for a grade of ABS or INC do not apply. (See Temporary Grades: ABS and INC, page 58.)

The grade WU will also be assigned by the Registrar when a student, after receiving approval for an official late course withdrawal from the Undergraduate Scholastic Standards Committee, fails to submit the instructor's evaluation. The WU cannot be replaced by an NC or R in those courses (remedial and developmental) in which an NC or R would replace an F.

Warning: Students should be advised that other colleges and universities, as well as other institutions and agencies, may evaluate grades of $P$ as $C$ or $D$, and grades of R and NC as grades
of $F$. This may significantly lower a student's GPA.

Freshman Grading Policy. A first semester freshman, for the purpose of the conversion of an earned $F$ to the NC or $R$ grade, is defined as a student who is:
A) A full-time student in his or her first semester at Queens College with less than 12 credits from any institution of higher learning. The only exception is for F all semester entrants who attend the immediately preceding Summer Session. In this case only, an NC or R will cover all $F$ grades submitted by an instructor both for that Summer Session and the immediately following F all semester; or
B) A part-time student during that time in which his or her first 12 credits are attempted at Queens College, and who has less than 12 credits from any institution of higher learning.

All grades of $F$ submitted by an instructor for first-semester students will be converted to NC or R. Grades of WU and WF remain on the student's record. If a grade of $A B S$, INC, or PEN is not resolved, they will convert to FAB, FIN or FPN, respectively, and will remain on the student's record. (See F ailing Grades, page 57, and Resolution of Temporary Grades, page 59.)

Pass/No Credit (P/NC) Option. Students may select one course each semester and one course in either Summer Session I or Summer Session II for grading under the P/ NC Option. (Note: Summer Session I and II are considered as one semester.) No more than 21 credits of P/ NC may be applied toward the baccalaureate degree. Courses in which students may only earn a P or NC are not included in the 21 attempted P/ NC credit limit.

Exceptions to the P/NC Option. Students may not take the following courses under the P/ NC Option:
ACE Seminar Courses
English 95, 110, 120
Mathematics 4.24, 6.13
SEEK 1; 4.25, 4.26, 6.14, 99, 101, 102,
111, 120, 121, 122, 123
Any course in a student's major or major concentration.
In joint majors and in specialized majors within departments, the determination of courses constituting the major for purposes of the P/ NC Option will be made by the student's concentration adviser. Students who have recei ved a P in a course that later becomes part of their major, may appeal to the Under-
graduate Scholastic Standards Committee to have the $P$ replaced by the earned grade originally assigned by the instructor.

Selecting the P/NC Option. Students may select the P/ NC Option by using a touchtone telephone in accordance with the procedures described in the Telephone Registration Guide and Schedule of Classes. This option must be selected by the end of the eighth week of the Fall or Spring semester or by the end of the second week of Summer Session I or the equivalent of the eighth week of Summer Session II. Please consult the Summer Session Bulletin for this date.

Second-semester students may select the P/ NC Option until the end of the fourteenth week of the Fall and Spring semesters, or until the next to last day of either Summer Session. A second-semester student, for the purpose of the P/ NC Option, is defined as:
A) Full-time and matriculated students during their second semester at Queens College who entered with fewer than 12 credits from another institution of higher learning. Summer Session I and II do not count as a semester.
B) Part-time and matriculated students who have completed more than 9 but fewer than 18 credits.
C) Transfer degree students with more than 11 but fewer than 28 credits from any institution of higher learning during their first semester at Queens College. Summer Session I and II do not count as a semester.

Changing the P/NC Selection. Students may revoke their choice of the P/ NC Option by using a touchtone telephone, in accordance with the procedures in the Telephone Registration Guide and Schedule of Classes, at any time before the deadlines for the Fall, Spring, and Summer sessions (see above). After the calendar deadline, the selection of the P/ NC Option becomes final and the choice or course cannot be changed or revoked.

Instructors cannot submit a grade of P or NC except in courses where these grades are the only legal grade. All earned passing grades will be converted to $P$ and $F$ grades will be converted to NC.

The NC grade is only assigned when an $F$ is submitted by the instructor. If a student does not attend the course or if, as a result of excessive absences, the instructor has no basis on which to submit a final grade, a grade of WU may be assigned. The grade of WU will not be converted to an NC. Only an earned
failure is converted to an NC. WU and WF grades in courses taken under the P/ NC Option remain on the student's record.

## Temporary Grades (ABS, INC, PEN)

The College grading policy interprets the submission of an ABS, INC, or PEN as implied obligations or contracts to assist the student in resolving the grade. Instructors who do not intend to assist students should not submit a grade of ABS, INC, or PEN. They may submit a letter grade of $F$ when there is no reasonable expectation that the student can pass the course even if the missing final exam or coursework is made up.The temporary grades of ABS, INC, and PEN are not calculated in the GPA.

In some cases, instructors may believe that a grade of ABS is in order, even though they will not be available to administer a make-up exam. In these cases, instructors may submit the grade of ABS if the department will be able and willing to administer a make-up exam during the semester to follow. Instructors who will not be availableto receive outstanding coursework should not submit an INC or PEN grade and contract. When instructors do not intend to assist in resolving INC or PEN grades, they should submit a letter grade, calculated without the missing work.

ABS (Absent from final examination) is a temporary grade that may be assigned at the discretion of the instructor when a student meets all of the following conditions: has a reasonable chance of passing the course by completing the final examination; the final examination is the only work the student has not completed; the student has notified the instructor of the extenuating circumstances for missing the final examination; and the student is absent only from the regularly scheduled final examination.

If the instructor or department chair is not satisfied that the final examination was missed for good reason, the ABS grade may be denied. A grade for the course (passing or failing) may be calculated and submitted without the final examination.

The submission of a grade of ABS is an implied obligation for the instructor or department to provide a make-up final examination for a student. In some cases, instructors may believe that a grade of ABS is in order, even though they will not be available to administer a make-up exam. In these cases, instructors may submit the grade of ABS if the department will be able and willing to administer a make-up
exam during the next regular semester to follow. The ABS grade will not be assigned if: other work is outstanding or if the missed final examination was not "regularly scheduled" (e. g., was given in class or as a take-home examination); or a student's attendance was at issue. In these cases a WU grade will be assigned.

INC (Incomplete) grade is not automatic. It is a temporary grade that may be assigned by faculty when a student has requested an INC and meets all of the following conditions: some of the course requirements other than but possibly including the final examination have not been satisfied for good and sufficient reason as determined by the instructor; and there is a reasonable expectation that a student can pass the course by submitting the outstanding work by the end of the next regular semester, Spring or Fall. (Summer Session I and II do not count as semesters in this case.) The assignment of the INC constitutes an agreement with the student that the instructor or department will receive, evaluate, and submit a grade for the missing course requirements, upon submission of the outstanding work by the student. (SeeResolution of Temporary Grades, this page.)

The INC grade is not to be assigned if: it is not requested by a student; or there is no reasonable expectation that the missing work can be completed, submitted, and graded by the end of the next regular semester, Spring or Fall (Summer Session I and II do not count as semesters); or a student would receive a failing grade in the course even if the missing work was completed, submitted, and graded. In these instances, the instructor must assign a grade based on a student's work for the semester. If there is insufficient information due to a student's attendance, the WU grade will be assigned.

PEN (Pending) is a temporary grade assigned by the Registrar when the instructor has failed to submit a valid grade for a student. Students who receive a PEN on their semester grade re port should immediately contact the instructor or department for clarification.

WA (Withdrawal, Administrative) is assigned by the Registrar when a student is not in full compliance with the College's immunization requirements. Students receiving this grade should immediately contact the Dean of Students Office, Powdermaker Hall 116.

Z (No Grade) is assigned by the Regis-
trar when an instructor has failed to submit grades for the entire class. Students who receive a $Z$ on their semester grade report should contact the instructor or the department as soon as possible.
w (Withdrawn Passing) is a grade that can only be issued by the Registrar when students: complete the course withdrawal procedure, via the touchtone telephone system, from the third to the end of the eighth week of the F all or Spring semester or the first to third week of Summer Session II (there is no telephone course withdrawal for Summer Session I); or receive permission from the U ndergraduate Scholastic Standards Committee for a course withdrawal and the instructor's evaluation of a student's course work is passing at the time of the withdrawal.

Resolution of Temporary Grades. The grades of ABS, INC, and PEN cannot be resolved through a second registration and/or repetition of the courses. Many students graded ABS, INC, or PEN register for the course a second time, receive a letter grade, and then request a retroactive withdrawal from the course graded ABS, INC, or PEN. Approval of such retroactive withdrawals would be unfair to students who complete their coursework on time. This practice, if permitted, would give some students an unwarranted repetition of coursework, to the disadvantage of students who conscientiously complete courses on time despite the risk of a low or failing grade. The temporary grades ABS, INC, and PEN can beresolved only by making up the missing work; that is, a final examination must be taken and/or the missing work must be submitted by the end of the next regular semester (Fall or Spring).

If the grade of ABS, INC, or PEN is not completed by the end of the next regular semester, the temporary grades will be converted to FAB, FIN, and FPN, respectively, and remain on the student's record. Students must resolve a temporary grade by the end of the next regular semester, even if they are not registered for classes at the College. Students are not permitted to audit, sit in on, or register for the course again as a condition for resolving a temporary grade This, if permitted, would be unfair to other students by allowing some students to take the course twice for only one grade. Once a FAB, FIN, or FPN has been assigned, students may not resolve the course by submitting missing work or taking a final make-up
examination. Faculty may not accept late or outstanding work nor administer a late final make-up examination. The Registrar will reject and return all grades submitted by faculty for courses assigned FAB, FIN, or FPN. (See Temporary Grades Converted to $F$, below.)
A) Students are expected and required to take examinations as scheduled. To resolve ABS grades, students should obtain one MakeUp Examination Form for each ABS received, from the Registrar's Office, J efferson Hall 100. A $\$ 15$ fee is required for the first approved final make-up examination, a $\$ 5$ fee for each additional examination. The maximum charge for all final make-up examinations in one semester is $\$ 25$.
B) To resolve an INC grade, students must submit the missing work by the end of the next regular semester (Fall or Spring).
C) To resolve a PEN grade, students should contact the instructor or department immediately upon receiving their semester grade report.

## Extensions of Temporary Grades. If stu-

 dents, for serious reasons, are unable to resolve an ABS, INC, or PEN grade before the end of the next regular semester (Fall or Spring), they should request permission from the Undergraduate Scholastic Standards Committee to defer the conversion of the ABS, INC, and PEN to failing grades. Students should be advised that denial of their request is possible. In the event of denial, students should be prepared to locate and notify their instructors as soon as possible to make arrangements to resolve the grade before the end of the final examination period, when these grades will be converted to FTemporary Grades Converted to F. If the ABS, INC, or PEN grade is resolved on time (by the end of the next regular semester) but the Report of Change of Grade is not submitted to the Registrar before the temporary grades convert to FAB, FIN, or FPN, the Registrar may accept the grade provided that the instructor and department chair confirm, in writing, that the student submitted the completed work by the deadline (end of the next regular semester).

Extensions of FAB, FIN, and FPN Grades. If, for serious reasons, students are unable to resolve a temporary grade of ABS, INC, or PEN before conversion to FAB, FIN, or FPN, they may request special permission from the Undergraduate Scholastic Standards Committee to
complete the course. Instructors who are asked by former students to resolve an ABS or INC grade that has been converted to an $F$ should direct the student to the Undergraduate Scholastic Standards Committee to file an appeal before making arrangements for a make-up exam or receipt of outstanding coursework. If permission to resolve the grade is given, students may then complete the course with the instructor. If permission to resolve the course is denied, the grade will remain on the student's record as an $F$.

Questioning Grades. The following procedure has been established when a student wishes to appeal an earned grade:

1. First discuss the grade with the instructor.
2. If dissatisfied, the student may make an appointment to discuss the grade with the department chair or program director.
3. If the matter is not resolved after step 2, the student may make an appointment to discuss the grade with the divisional dean.

Only after all three steps have been exhausted will the Undergraduate Scholastic Standards Committee consider a formal appeal of an earned grade. The Committee's role in the appeal is one of mediation or recommendation. Students may obtain additional information in J efferson Hall 104.

Repetition of Courses. Students may repeat a course either because they initially failed it or because they need to improve a passing grade to meet a departmental or major requirement. In such cases, all grades earned will be recorded on the student's official transcript, but only the most recent grade for that course will be calculated in the GPA. (See Grade Replacement Policy, below.) There are courses that may be repeated for credit if the course title (content) is different. Please consult the Queens College Undergraduate BulIetin. Each grade recorded in such courses will be counted in a student's GPA.

Grade-Replacement Policy. When students repeat a course, all previous grades will remain on their record, but only the most recent grade will be computed in the cumulative GPA. The Grade-Replacement Policy applies to courses first taken in F all 1984 and later, and first repeated in F all 1991 and later. Note: Any grade in a course first taken before Fall 1984 and repeated after Fall 1991
will not be deleted from the cumulative GPA. Any course repeated before Fall 1991 will not cause the deletion of an earlier grade from the cumulative GPA.

No more than 16 credits may be deleted from a student's GPA under the Grade-Replacement Policy. After a student has repeated courses totalling 16 credits, any further repetition will result in the grades for both courses being averaged into the cumulative GPA.

The following information is extremely important for students who are deciding to repeat courses:
A) New York State prohibits the use of repeated courses that were previously passed in the determination of financial aid eligibility, unless the repeat is needed to obtain a minimum required grade. F or example, if you are registered for a total of 14 credits, three credits of which represent a course that is a repeat of one passed previously, you are registered for only 11 credits for New York State financial aid awards.
B) The evaluation of your transcript for admission to other undergraduate and graduate programs, both within and outside CUNY, may include all courses and grades in the calculation of your cumulative grade-point average, including those courses and grades that are not calculated into your Queens College GPA because of the Grade-Replacement Policy.

Courses with temporary grades ABS, INC, and PEN cannot be resolved under this policy. If students repeat courses in which they have a temporary grade, these grades will be converted to FAB, FIN and FPN and will remain on the student's record. (See Resol ution of Temporary Grades, page 59.) However, if temporary grades convert to FAB, FIN, and FPN, these may be deleted from the cumulative GPA under the Grade-Replacement Policy.

## Dropping and Withdrawing from Courses

Students should not drop or withdraw from courses except for serious reasons.

Dropping a Course. Courses may be dropped by using the touchtone telephone system, beginning with the first three weeks of the Fall and Spring semesters and the first week of Summer Session I. F or Summer Session II, students may drop a course by the touchtone telephone system in accordance with the procedures described in the Summer Session Bulletin. Dropping a course is a program adjustment and the
course will not appear on the student's record.

Course Withdrawals: Fall and Spring Semesters. Beginning with the fourth week through the end of the eighth week of the semester, students may withdraw from a course by using the touchtone telephone system in accordance with the procedures described in the Telephone Registration Guide and Schedule of Classes. An instructor's evaluation is not required during this period and the grade of W will appear on the student's official record.

Beginning with the ninth week through the last day of classes of the semester, students may withdraw from courses only with the permission of the Undergraduate Scholastic Standards Committee, J efferson Hall 104. Such permission may be granted only for the most pressing and urgent reasons, not in the expectation of a failing or low grade. Students must provide, in writing, the serious reasons for requesting a withdrawal, and in all cases submit nonreturnable documentation. If permission is granted, the student's work in the course must be evaluated by the instructor. Students whose work is passing will have the grade of W entered on their record; students whose work is failing will have the grade of WF entered on their record.

Course Withdrawals: Summer Sessions I and II. There is no telephone course withdrawal for Summer Session I. Please consult the Summer Session Bulletin for the exact instructions and dates to withdraw from a class. Beginning with the second week of Summer Session I, students may withdraw from a course only with the approval of the Undergraduate Scholastic Standards Committee.

Beginning with the second week and until the end of the third week of Summer Session II, students may withdraw from a course by using the touchtone telephone system in accordance with the procedures described in the Summer Session Bulletin. A grade of W will be entered on the student's record. Beginning with the fourth week of Summer Session II, students may withdraw from a course only with the permission of the Undergraduate Scholastic Standards Committee.

Important: Please consult the Summer Session Bulletin for the exact dates for course withdrawal.
Unofficial Course Withdrawals. Students who stop attending a course without completing the steps necessary to drop
or withdraw from it will receive a disciplinary grade of WU. (See Dropping and Withdrawing from a Course, page 60, and Failing Grades, page 57.)

Withdrawal from All Courses. Students who register and pay their bills and then drop all of their courses during the program adjustment period (from the first day of classes to the end of the third week of the semester) will have these dropped courses removed from their record. Students who withdraw from all courses beginning with the fourth week to the end of the eighth week of the F all or Spring semester will have the grade of W entered on their record for courses registered for that semester. Students in either category above are not considered inactive and do not have to apply for readmission in order to register for the next regular semester.

Leave of Absence. A leave of absence is permitted only during the Fall and Spring semesters. F or Summer Sessions, a withdrawal from all courses is not a leave of absence, and follows the procedures outlined for course withdrawals. (See Course Withdrawals, page 60.)

Students who wish to request a leave of absence should go to the Counseling and Advisement Office, Powdermaker Hall 128, beginning with the fourth week and until the end of the fourteenth week of the Fall or Spring semester. There will be an exit interview with a counsel or from the Office of the Dean of Students. The grade of W will be entered on the student's record. Students granted a leave of absence
may register for the next semester without filing a Reenter Application.

Students on academic probation may request a leave of absence in the same way. However, a leave of absence will result in an academic dismissal, appealable to the Undergraduate Schol astic Standards Committee.

There is no refund for an approved withdrawal from all classes or approved leave of absence beginning with the fourth week of the semester.

Second or Subsequent Leave of Absence. Beginning with the ninth week of a regular semester (F all or Spring), students with a prior leave of absence who wish to withdraw from all of their courses must get the approval of the Undergraduate Scholastic Standards Committee. Students may be required to obtain the instructor's evaluation for each registered course before a second or subsequent leave of absence may be approved. If permission is granted, the grade of W will be entered; however, if an instructor's evaluation is failing, a grade of WF will be entered and calculated in the cumulative grade-point average as zero. The WF will not be converted to an NC or R.

Retention Standards, Academic Probation, Academic Dismissal, and Reentry

Retention Standards. These standards are a result of policies mandated by the Board of Trustees, interpreted by the CUNY Chancellor's Office, and passed by the Council of Presidents.
Required Grade-Point Average (GPA) or Cumulative Index

How to Compute the Cumulative Grade-Point Average

|  | Numerical |  | Quality |
| :--- | :--- | :--- | :---: |
| Grade | Value | Credits | Points |
| A+ | 4.0 | $\times 2=$ | 8.0 |
| A | 4.0 | $\times 6=$ | 24.0 |
| A- | 3.7 | $\times 4=$ | 14.8 |
| B+ | 3.3 | $\times 3=$ | 9.9 |
| B | 3.0 | $\times 6=$ | 12.0 |
| B- | 2.7 | $\times 2=$ | 16.2 |
| C+ | 2.3 | $\times 3=$ | 4.6 |
| C | 2.0 | $\times 3=$ | 6.0 |
| C- | 1.7 | $\times 1=$ | 6.8 |
| D+ | 1.3 | 41 | 3.9 |
| D | 1.0 |  | 1.0 |
| F, WF, or WU | 0.0 |  | 0.0 |
|  |  |  | The cumulative grade-point |
| Quality Points | $107.2=2.614$ |  | average is 2.614. |


| Credits Attempted | GPA Required |
| :--- | :---: |
| $1-12$ | 1.50 |
| $13-24$ | 1.75 |
| 25 and above | 2.00 |

For the purposes of retention, the GPA is based only on grades earned at Queens College. Credits attempted are the total number of all recorded registered courses, regardless of grades earned. Grades of ABS, F, INC, NC, PEN, R, W, WA, WF , WU, and Z are all counted as credits attempted.

All undergraduate students will have their academic records reviewed at the end of each Fall and Spring semester. At this time, students whose cumulative GPA does not meet the above retention standards will be placed on academic probation for the following semester.

Cumulative Grade-Point Average or Index. The cumulative grade-point average (or index) is calculated by computing the earned grades and credits attempted in each course in the following manner:

1. The number of credits in each course is multiplied by the numerical value of each grade earned in the course. Add these products. Their sum is the total of quality points earned. (See the chart on this page.)
2. Add the total number of credits. This sum includes credits of courses failed (FAB, FIN, FPN, WF, WU, or F) as well as courses passed with the grades A through D. This sum does not include courses with the grades of $P$, NC, R, ABS, INC, PEN, W, WA, or Z.
3. Divide the sum obtained in step 1 by the results obtained in step 2 . This is the cumulative GPA.

Academic Probation. Students who, at the end of a Spring or Fall semester, do not meet the retention standards will be placed on probation for the following semester. Grades earned in Summer Session and grade changes during the semester do not immediately affect probationary status, which is reassessed only at the end of the regular semester, in J anuary and in J une. Students whose cumulative GPA has risen to meet the retention standards may file a special appeal with the Undergraduate Scholastic Standards Committee to be removed from probation, no later than the last day of the regular semester. All students on probation remain eligible for federal financial aid.
Rules for Students on Academic

## Probation

A) Students on academic probation may not register for more than 13
equated credits. Those students who register for more than 13 equated credits before they are placed on probation must reduce their equated credits to 13 by dropping courses. Failure to do so will be held against students who later appeal their academic dismissal.
B) It is strongly recommended that students on academic probation seek assistance from the Counseling and Advisement Center, Powdermaker 128 (997-5420). SEEK students must see their Academic Counsel or in Delany 231 (997-3150).
C) Students on academic probation who officially withdraw from all courses or take an official leave of absence will be academically dismissed at the end of the semester. They will receive a notice of academic dismissal but may file an appeal with the Undergraduate Scholastic Standards Committee.
D) At the end of each regular semester (F all and Spring) the record of each student on probation will be reviewed and one of the following actions will be taken:

1. A student whose cumulative GPA meets the retention standards will be removed from probation.
2. A student whose cumulative GPA does not meet the retention standards but earns a semester cumulative grade-point average of 2.25 or higher and has no grades of ABS, INC, PEN, or WU will automatically be placed on extended probation.
3. At the end of the Fall semester there is no academic dismissal, so students who fail to meet the conditions in D. 1 and 2 above will be placed on continuing probation for the following Spring semester only! Students assigned continuing probation who do not register for the following Spring semester, or drop all of their courses before the end of the third week of the semester, will be academically dismissed.
4. At the end of the Spring semester, those students who do not meet the conditions in D. 1 or 2 above will be academically dismissed

## Academic Dismissal

A) Dismissed students will receive a notice of academic dismissal printed on their grade report, followed by a letter and the Appeal of Academic Dismissal Form.
B) Students dismissed at the end of the Spring semester may attend Summer Session and also are encouraged to attempt to resolve any temporary grades. However, any grades earned during that Summer Session cannot be
considered in an appeal of academic dismissal. Spring dismissals take effect for the following F all semester.
C) Dismissed students who can cite and document extenuating circumstances may appeal their dismissal to the Undergraduate Scholastic Standards Committee. A deadline date for appeals (early in J uly) will be stated in the dismissal letter and on the appeal form. Appeals received after the deadline date will not be reviewed.
D) Dismissed students whose appeals are granted will be placed on extended probation and must adhere to the rules of probation for students on probation, and any other conditions the Committee may impose. (See Extended Probation, below.)

E ) Dismissed students who are denied reinstatement on appeal will be dropped from all registered classes for the Fall semester, without tuition and fee liability. They are not permitted to request reentry to the College for at least one full academic year. (See Reentry, below.)

F ) Decisions by the U ndergraduate Scholastic Standards Committee on appeals of dismissal are final.

## Extended Probation

More than one semester of extended probation will be granted only if, during the extended probation semester, a student achieves a semester GPA of 2.25 or higher and does not receive grades of ABS, INC, PEN, or WU.

All students on extended probation will have their records reviewed at the end of the extended probationary semester.

Appeals
Students have the opportunity to appeal probation or academic dismissal from the College to the Undergraduate Scholastic Standards Committee. The Committee reviews all appeals and makes exceptions where extraordinary and documented circumstances have made it impossible for the student to meet the retention standards.

Reentry of Academically Dismissed Students. Reentry is not guaranteed. Students permitted to reenter will be placed on academic probation.
A) Students academically dismissed will not be permitted to request reentry to the College for at least one full academic year following their date of dismissal, unless a waiver is granted by the Undergraduate Committee on Admissions and Reentry Standards, Kiely Hall 213 (997-5611).
B) Students who have received more than one notice of academic dismissal, not followed by reinstatement, may not be eligible to reenter the College.
C) Students who wish to reenter the College after a period of one academic year must submit an Undergraduate Reenter Application and Appeal to the Undergraduate Committee on Admissions and Reentry Standards, whose decision is final. To file an appeal, a student must:

1. Have no more than one dismissal as a matriculated student; or dismissal with 24 or fewer credits as a nondegree student.
2. File the Undergraduate Reentry Application postmarked no later than April 15 for the F all semester, and no later than November 1 for the Spring semester. A student approved for reentry for the Fall semester may attend either Summer Session that precedes that Fall semester.
3. Explain and document the reasons why you believe your circumstances have changed so that you would indicate the ability to meet the retention standards, if permitted to reenter. Contact the Undergraduate Committee on Admissions and Reentry Standards for further details.

## Student Integrity

Students found guilty of any form of academic dishonesty, such as plagiarism or cheating on an examination, are subject to discipline, including suspension or dismissal from the College.

## Student Records

The College abides by the provisions of the Federal Education Rights and Privacy Act of 1974. Students have the right to be advised of what student records and information are maintained by the College, who maintains them, who has access to them and for what purposes, policies for reviewing and expunging them, procedures for granting students access and for challenging the records, cost charged for copies, and other rights and requirements under the Act. All of this information is available from the Registrar (J efferson 100) during the hours the office is open.

Queens College will confirm the following information concerning present and former students: name, dates of attendance, major field of study, and degrees and awards received.

Any student or former student may require that any or all of the above information not be released, without the
student's prior written consent, by completion of a form available in the Registrar's Office. The form may be completed, withdrawn, or modified at any time the Registrar's Office is open.

A student whose request for access is denied or not responded to within 15 days of receipt may appeal in writing to J ane Denkensohn, Special Counsel to the President (Kiely 1305), indicating the date of the original request for access, the particular records to which access was requested, the person to whom the request was made, and the reasons why the student believes he or she has a right of access to the record. The appeal will be decided no later than 25 school days after the receipt of the original request for access. A denial of an appeal may be further appealed to the General Counsel and Vice-Chancellor for Legal Affairs of the City University.

## Computer Use

The following regulations are intended for anyone who has been authorized to use a computer owned by or purchased with grant funds administered by the College. This includes students who have registered for courses requiring the use of a computer; faculty and staff who have been assigned computers or computer accounts for the purposes of research or other scholarly activities; administrative and secretarial staff who are required to use computers in fulfilling their responsibilities; anyone who uses the Queens College microcomputer network; and all others permitted access to a computer.

## Regulations Regarding Use of

 Computing FacilitiesQueens College maintains several computers for academic and administrative use. The security and good working order of these tools depend on responsible care and use by those who are accorded the privilege of using them. Proper use, in part, means:

1. Only valid Queens College ID bearer or other authorized persons may use the computing facilities. Users are required to present a valid ID upon request of computing facility personnel.
2. Queens College computing facilities are to be used strictly for those academic or administrative purposes that are established and approved when an account is granted or use is permitted.
3. Users are responsible for maintaining exclusive access to their accounts by ensuring that no one else is permitted the opportunity to learn their passwords. Periodically changing your password to protect your account is
strongly urged. If your account is used improperly by someone else, you may lose the account.
4. Electronic mail or memo facilities shall not be used for transmitting any form of obscene or threatening messages, or to send multiuser-directed advertisements or announcements, or for other illegal purposes.
5. The writing of code or execution of instructions that threaten system integrity or security, cause harm to the system or users' files, or cause excessive or wasteful use of computer resources such as memory, cpu time, or output pages is strictly prohibited.
6. The computer should not be used for pranks or practical jokes or to gain unauthorized entry to other computers.
7. Use of computers for commercial gain is not permitted.
8. Theft or accessory to theft of equipment, documentation, supplies, or another person's files, programs, or output may result in criminal prosecution or other disciplinary action.
9. Users should use and maintain the computing facilities entrusted to them with care and good sense, and must refrain from smoking, eating, and drinking when using computing facilities. Users should be considerate of others.
10. Users are advised that it is Queens College policy that software that is copyrighted may not be copied, reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any human or computer language, in any form or by any means, in any part without prior written permission of the copyright holder. Backup copies with a copyright notation may be kept for that purpose only.

## CONDUCT

The College's policies concerning nondiscrimination, sexual harassment and assault, security and crime prevention, and AIDS are described in detail in the booklet Your Right to Know, which is available at the Information Center, Campus Bookstore, Dean of Students' Office, and at other locations. If you have questions, contact the Dean of Students, Powdermaker 116, 997-5500.

The College handles matters of student discipline through the Dean of Students and the Faculty-Student Disciplinary Committee. Students are required by the Board of Trustees' bylaws to meet punctually all College obligations; to use the property of the institution with care and economy; to obey the laws of the city, state, and nation; and to obey the orders of duly established College authorities. Violation of any of the provisions of this statement may result in disciplinary action.

Since the College is not in a position to supervise the use by student groups of
leased or purchased off-campus facilities, student organizations are responsible for their conduct and for the management of their housing.

## RULES AND REGULATIONS FOR THE

 MAINTENANCE OF PUBLIC ORDER"Each student enrolled or in attendance in any College, School, or Unit under the control of the Board and every student organization, association, publication, club, or chapter shall obey the laws of the City, State, and Nation, and the bylaws and resolutions of the Board and the policies, regulations, and orders of the College." Bylaws, Board of Trustees

The attention of students, faculty, and staff is called to the Rules and Regulations for the Maintenance of Public Order below:

Adopted by the Board of Trustees, J une 23, 1969, with subsequent amendments. The tradition of the university as a sanctuary of academic freedom and center of informed discussion is an honored one, to be guarded vigilantly. The basic significance of that sanctuary lies in the protection of intellectual freedoms: the rights of professors to teach, of scholars to engage in the advancement of knowledge, of students to learn and to express their views, free from external pressures of interference. These freedoms can flourish only in an atmosphere of mutual respect, civility and trust among teachers and students, only when members of the university community are willing to accept self-restraint and reciprocity as the condition upon which they share in its intellectual autonomy.

Academic freedom and the sanctuary of the university campus extend to all who share these aims and responsibilities. They cannot be invoked by those who would subordinate intellectual freedom to political ends, or who violate the norms of conduct established to protect that freedom. Against such offenders the university has the right, and indeed the obligation, to defend itself. We accordingly announce the following rules and regulations to be in effect at each of our colleges, which are to be administered in accordance with the requirements of due process as provided in the Bylaws of the Board of Trustees.

With respect to enforcement of these rules and regulations we note that the Bylaws of the Board of Trustees provide that:

THE PRESIDENT. The president, with respect to his/her educational unit, shall:
"a. Have the affirmative responsibility of conserving and enhancing the educational standards of the College and schools under his/her jurisdiction;
"b. Be the adviser and executive agent to the Board and of his/her respective College committee and as such shall have the immediate supervision with full discretionary power in carrying into effect the bylaws, resolutions and policies of the Board, the lawful resolutions of any of its committees and the policies, programs and lawful
resolutions of the several faculties;
"c. Exercise general superintendence over the concerns, officers, employees and students of his/her educational unit."

## I. RULES

1. Members of the academic community shall not intentionally obstruct and/or forcibly prevent others from the exercise of their rights. Nor shall they interfere with the institution's educational process or facilities or the rights of those who wish to avail themselves of any of the institution's instructional, personal, administrative, recreational, and community services.
2. Individuals are liable for failure to comply with lawful directions issued by representatives of the University/college when they are acting in their official capacities. Members of the academic community are required to show their identification cards when requested to do so by an official of the college.
3. Unauthorized occupancy of University/college facilities or blocking access to or from such areas is prohibited. Permission from appropriate college authorities must be obtained for removal, relocation and use of University/college equipment and/or supplies.
4. Theft from or damage to University/ college premises or property, or theft of or damage to property of any person on University/college premises is prohibited.
5. Members of the academic community or their invited guests have the right to advocate a position without having to fear abuse, physical, verbal, or otherwise, from others supporting conflicting points of view. Members of the academic community and other persons on the college grounds shall not use language or take actions reasonably likely to provoke or encourage physical violence by demonstrators, those demonstrated against, or spectators.
6. Action may be taken against any and all persons who have no legitimate reason for their presence on any campus within the University/college, or whose presence on any such campus obstructs and/or forcibly prevents others from the exercise of their rights or interferes with the institution's educational processes or facilities, or the rights of those who wish to avail themselves of any of the institution's instructional, personal, administrative, recreational, and community services.
7. Disorderly or indecent conduct on University/college-owned or -controlled property is prohibited.
8. No individual shall have in his possession a rifle, shotgun or firearm or knowingly have in his possession any other dangerous instrument or material that can be used to inflict bodily harm on an individual or damage upon a building or the grounds of the University/college without the written authorization of such educational institution. Nor shall any individual have in his possession any other instrument or material which can be used and is intended to inflict bodily harm on an individual or damage upon a building or the grounds of the University/college.
9. Any action or situation which recklessly or intentionally endangers mental or physical health or involves the forced consumption of liquor or drugs for the purpose of initiation or affiliation with any organization is prohibited.
10. The unlawful manufacture, distribution, dispensation, possession, or use of illegal drugs or other controlled substances by University employees in the workplace is prohibited. Employees of the University must also notify the College Human Resources Director of any criminal drug statute conviction for a violation occurring in the workplace not later than five (5) days after such conviction.
11. The unlawful possession, use, or distribution of alcohol by students or employees on University/college premises or as part of any University/college activities is prohibited.

## II. PENALTIES

1. Any student engaging in any manner in conduct prohibited under substantive Rules 1-11 shall be subject to the following range of sanctions as hereafter defined in the attached Appendix: admonition, warning, censure, disciplinary probation, restitution, suspension, expulsion, ejection, and/or arrest by the civil authorities.
2. Any tenured or non-tenured faculty member, or tenured or non-tenured member of the administrative or custodial staff, engaging in any manner in conduct prohibited under substantive Rules 1-11 shall be subject to the following range of penalties: warning, censure, restitution, fine not exceeding those permitted by law or by the Bylaws of the City University, suspension with/without pay pending a hearing before an appropriate college authority, dismissal after a hearing, ejection, and/or arrest by the civil authorities, and, for engaging in any manner in conduct prohibited under substantive rule 10, may, in the alternative, be required to participate satisfactorily in an appropriately licensed drug treatment or rehabilitation program. In addition, a tenured faculty member, or tenured member of the administrative or custodial staff, engaging in any manner in conduct prohibited under substantive Rules 1-11 shall be entitled to be treated in accordance with applicable provisions of the Education Law or Civil Service Law.
3. Any visitor, Iicensee, or invitee engaging in any manner in conduct prohibited under substantive Rules 1-11 shall be subject to ejection and/or arrest by the civil authorities.
4. Any organization that authorizes the conduct prohibited under substantive Rules 1-11 shall have its permission to operate on campus rescinded.

Penalties 1-4 shall be in addition to any other penalty provided by law or the City University.

## APPENDIX

Sanctions defined:
A. Admonition. An oral statement to the offender that he has violated university rules.
B. Warning. Notice to the offender, orally or in writing, that continuation or repetition of the wrongful conduct, within a period of time stated in the warning, may be cause for more severe disciplinary action.
C. Censure. Written reprimand for violation of specified regulation, including the possibility of more severe disciplinary sanction in the event of conviction for the violation of any university regulation within a period stated in the letter of reprimand.
D. Disciplinary Probation. Exclusion from participation in privileges or extracurricular university activities as set forth in the notice of disciplinary probation for a specified period of time.
E. Restitution. Reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.
F. Suspension. Exclusion from classes and other privileges or activities as set forth in the notice of suspension for a definite period of time.
G. Expulsion. Termination of student status for an indefinite period. The conditions of readmission, if any is permitted, shall be stated in the order of expulsion.
H. Complaint to Civil Authorities.
I. Ejection.

Resolved. That a copy of these rules and regulations be filed with the Regents of the State of New York and with the Commissioner of Education.
Resolved. That these rules and regulations be incorporated in each college bulletin.

## Academic Senate Policy on

## Religious Holidays

The Academic Senate recommends that students inform their professors of any religious obligations when such obligations conflict with class attendance or other College responsibilities. Faculty will accommodate students' religious obligations, to the extent possible, provided that advance notice of these obligations is given by the student. It is requested that faculty refrain from giving tests on such class days in order that no student be penalized for his or her religious observance.

The Offices of the Academic Senate will maintain information about religious calendars for the purposes of consultation by faculty wishing information.

## Religious Observance

Education Law 224-a states:

1. No persons shall be expelled from or be refused admission as a student to an institution of higher education for the reason that they are unable, because of their religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days.
2. Students in an institution of higher education who are unable, because of their religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be
excused from any examination or any study or work requirements.
3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to all students who are absent from school, because of their religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which they may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to said students such equivalent opportunity.
4. If classes, examinations, study or work requirements are held on Friday after four o'clock post meridian or on Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study or work requirements held on other days.
5. In effectuating the provisions of this section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to students because of their availing themselves of the provisions of this section.
6. Students who are aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of their rights under this section.

## COMPLAINT PROCEDURES

## Student Complaints

Student complaints are heard initially by the Dean of Students. A student with a complaint is generally able to get an appointment within 72 hours and often sooner. When the student does not want to file a formal complaint or grievance, the Dean will act as an ombudsman or mediator in an effort to work out the problem and obtain a satisfactory outcome or get an answer for the student. To file a formal complaint the student fills out a complaint/ problem sheet with the Dean of Students Office, and the Dean or the appropriate College official(s) then looks into the complaint and provides the student with a response within two weeks, often sooner. The College official(s) providing a final determination will not be a person (or persons) involved in the alleged problem. Filing a complaint can never result in adverse action taken against the student for filing the complaint.

Documentation concerning each formal College complaint and its disposition will be kept for a period of at least six years.

There is also a New York State consumer complaint process, and any student
may file a complaint with the Education Department of the State of New York (see below).

## Consumer Complaints to the State Edu-

 cation Departmenta) Any person who believes he or she has been aggrieved by an institution on or after May 4, 1994 may file a written complaint with the department within three years of the alleged incident, pursuant to this section.
b) Complaints shall be received in a form prescribed by the department.
c) In response to a written complaint, the department shall:

1) send to the complainant a notice acknowledging such written complaint and requesting further information if necessary;
2) when appropriate, advise the institution involved that a written complaint has been received and, when appropriate, the nature of the complaint; and
3) either:
i) conduct a complaint review to respond to the complaint pursuant to the authority in Education Law or the Regulations of the Commissioner of Education, or
ii) dispose of the complaint by referring it to an appropriate entity for resolution.
d) Upon conclusion of the department's complaint review or upon disposition of the complaint by referral to another entity for resolution, the department shall issue a written notice to the complainant and, when appropriate, to the institution involved, describing the disposition of the complaint.
e) All institutions shall adequately publicize this consumer complaint process.
f) The department shall maintain written records of all complaints for a period of six years after final disposition of the complaint.
g) The department shall determine when complaints justify a request of the U. S. Secretary of Education to commence a Title IV review, pursuant to the criteria established in 20 USC 1099a-3 (a) and (b) (United States Code, 1988 edition, Volume 8; Supplement IV, Volume 3 to the 1988 edition; Superintendent of Documents, U. S. Government Printing Office, Washington, DC 20402; 1989, 1993 - available at the Office of Higher and Professional Education, Cultural Education Center, Room 5B28, Albany, NY 12230).
h) Complaints subject to the requirements of section 5003(1) (c) of the Education Law shall be handled in accordance with the requirements of that section.

## U niversity Policies

City University policies concerning discrimination, sexual harassment, and substance abuse are discussed below. (For more information on the College's policies concerning nondiscrimination, sexual harassment and assault, security and crime prevention, drug, al cohol, and tobacco abuse, and AIDS, please refer to the booklet Your Right to Know, which is available at the Information Center, Campus Bookstore, Dean of Students' Office, and at other locations around campus.) If after reviewing this material you find that you have additional questions, please contact Burton Backner, Dean of Students, Powdermaker 116, 997-5500.

## Nondiscrimination

Queens College is an Equal Opportunity and Affirmative Action Institution. The College does not discriminate on the basis of age, sex, sexual orientation, alienage or citizenship, religion, race, color, national or ethnic origin, disability, or veteran or marital status in its student admissions, employment, access to programs, and administration of educational policies.

Valli Cook is the Acting College Director of Affirmative Action. Her office is in Kiely 1311 (997-5554).

Christopher Rosa is the College's Section 504/ADA Compliance Coordinator. His office is in Kiely 171 (997-5870).
$J$ ane Denkensohn, Esq., is the College Coordinator for Title IX, which prohibits sex discrimi-
nation in federally assisted education programs. Her office is in Kiely 1305 (997-5725).

## DISCRIMINATION ON THE

 BASIS OF SEXQueens College complies with Title IX of the Educational Amendments Act of 1972, which protects persons from discrimination on the basis of sex in the operation of its educational programs.

## Procedures

College procedures provide that any member of the staff or student believing himself or herself aggrieved because of discrimination prohibited by Title IX may file a grievance. All grievances should be initiated through the Step I Informal Complaint procedure set forth below.

## Step I: Informal <br> Complaints

A student or employee claiming that the College has failed to act in accordance with the provisions of Title IX may filea formal complaint, either orally or in writing, with the College Coordinator for Title IX in Kiely 1305. The complaint should be made within 30 working days of the date of the alleged occurrence(s), except for extenuating circumstances. upon receipt of such complaint, the Title IX Coordinator shall conduct an inquiry in an attempt to resolve the complaint. The Title IX Coordinator shall take necessary action to resolve the situation, including recommendations to appropriate College officials. The complainant shall be notified by the Title IX Coordinator of the disposition of the complaint
when the informal stage has concluded. Any settlement, withdrawal, or disposition of a complaint at this informal stage shall not constitute a binding precedent in the settle ment of similar complaints or grievances.

If the complaint is resolved, no further action will be taken and all records will remain confidential. If the complaint is not resolved within 60 working days of the filing of the informal complaint, or is not resolved to the satisfaction of the complainant, any complainant wishing to pursue the matter to formal grievance who is eligible to do so must file a formal grievance within 10 working days following notification of the disposition of the informal complaint, or within 70 working days of the filing of the informal complaint. Employees covered by collective bargaining agreements that include gender discrimination as a ground for grievance, must utilize the grievance procedure provided in their respective agreements.

The Title IX Coordinator is responsible for keeping a record of all complaints filed and dispositions thereof.

## Step II: Formal Grievances

Formal grievances shall be filed with the Title IX Coordinator in Kiely 1305, on forms available in that office. The grievance must be presented in writing, setting forth the nature of the grievance, the evidence on which it is based and the redress being sought. The President shall appoint the members of the Title IX review committee and shall designate a chairperson. The review committee shall be convened by the chairperson
promptly upon receipt of a grievance from the Title IX Coordinator. The review committee shall schedule a meeting with the grievant within 20 working days after the grievance is filed with the Title IX Coordinator, or as soon there after as is practicable, and shall investigate the complaint as appropriate. The committee shall thereafter send its recommendation(s) to the College President. The President shall consider the recommendation(s) of the review committee, and shall render a written decision on the matter, which shall be sent to the grievant. The President shall take any action deemed appropriate to redress the grievance. There shall be no further recourse within the College for appeal of the grievance.

Persons seeking further information about Title IX matters should contact the Title IX Coordinator, J ane Denkensohn, Esq., Kiely 1305, 997-5725.

## Sexual <br> Harassment

$\square$he following is the text of the City University of New York's Policy Against Sexual
Harassment, which became effective throughout the City University as of October 1, 1995.

Policy Statement
It is the policy of the City University of New York to promote a cooperative work and academic environment in which there exists mutual respect for all University students, facul-
ty, and staff. Harassment of employees or students based upon sex is inconsistent with this objective and contrary to the University policy of equal employment and academic opportunity without regard to age, sex, sexual orientation, alienage or citizenship, religion, race, color, national or ethnic origin, handicap, and veteran or marital status. Sexual harassment is illegal under Federal, State, and City laws, and will not be tolerated within the University.

The University, through its colleges, will disseminate this policy and take other steps to educate the University community about sexual harassment. The University will establish procedures to ensure that investigations of allegations of sexual harassment are conducted in a manner that is prompt, fair, thorough, and as confidential as possible under the circumstances, and that appropriate corrective and/or disciplinary action is taken as warranted by the circumstances when sexual harassment is determined to have occurred. Members of the University community who believe themselves to be aggrieved under this policy are strongly encouraged to report the allegations of sexual harassment as promptly as possible. Delay in making a complaint of sexual harassment may make it more difficult for the college to investigate the allegations.

## Prohibited Conduct

It is a violation of University policy for any member of the University community to engage in sexual harassment or to retaliate against any member of the University community for raising an allegation of sexual harassment, for filing a complaint alleging sexual harassment, or for participating in any proceeding to determine if sexual harassment has occurred.

## Definition of Sexual Harassment

For purposes of this policy, sexual harassment is defined as unwel come sexual advances, requests for sexual favors, and other oral or written communications or physical conduct of a sexual nature when:

1) submission to such conduct is made either explicitly or implicitly a term or condi-
tion of an individual's employment or academic standing;
2) submission to or rejection of such conduct by an individual is used as a basis for employment or academic decisions affecting such individual; or
3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or abusive work or academic environment.

Sexual harassment can occur between individuals of different sexes or of the same sex. Although sexual harassment most often exploits a relationship between individuals of unequal power (such as between faculty/staff member and student, supervisor and employee, or tenured and untenured faculty members), it may also occur between individuals of equal power (such as between fellow students or coworkers), or in some circumstances even where it appears that the harasser has less power than the individual harassed (for example, a student sexually harassing a faculty member). A lack of intent to harass may be relevant to, but will not be determinative of, whether sexual harassment has occurred.

## Examples of Sexual

Harassment
Sexual harassment may take different forms. Using a person's response to a request for sexual favors as a basis for an academic or employment decision is one form of sexual harassment. Examples of this type of sexual harassment (known as quid pro quo harassment) include, but are not limited to, the following:

- requesting or demanding sexual favors in exchange for employment or academic opportunities (such as hiring, promotions, grades, or recommendations);
submitting unfair or inaccurate job or academic evaluations or grades, or denying training, promotion, or access to any other employment or academic opportunity, because sexual advances have been rejected.

Other types of unwel come conduct of a sexual nature can also constitute sexual harassment, if sufficiently severe or
pervasive that the target does find, and a reasonable person would find, that an intimidating, hostile, or abusive work or academic environment has been created. Examples of this kind of sexual harassment (known as hostile environment harassment) include, but are not limited to, the following:
sexual comments, teasing, or jokes;

- sexual slurs, demeaning epithets, derogatory statements, or other verbal abuse;
- graphic or sexually suggestive comments about an individual's attire or body
- inquiries or discussions about sexual activities;
- pressure to accept social invitations, to meet privately, to date, or to have sexual relations;
- sexually suggestive letters or other written materials;
- sexual touching, brushing up against another in a sexual manner, graphic or sexually suggestive gestures, cornering, pinching, grabbing, kissing, or fondling;
■ coerced sexual intercourse or sexual assault.


## Consensual Relationships

Amorous, dating, or sexual relationships that might be appropriate in other circumstances have inherent dangers when they occur between a faculty member, supervisor, or other member of the University community and any person for whom he or she has a professional responsibility. These dangers can include: that a student or employee may feel coerced into an unwanted relationship because he or she fears that refusal to enter into the relationship will adversely affect his or her education or employment; that conflicts of interest may arise when a faculty member, supervisor, or other member of the University community is required to evaluate the work or make personnel or academic decisions with respect to an individual with whom he or she is having a romantic relationship; that students or employees may perceive that a fellow student or co-worker who is involved in a romantic relationship will receive an unfair advantage; and that if the relationship
ends in a way that is not amicable, either or both of the parties may wish to take action to injure the other party.

F aculty members, supervisors, and other members of the University community who have professional responsibility for other individuals, accordingly, should be aware that any romantic or sexual involvement with a student or employee for whom they have such a responsibility may raise questions as to the mutuality of the relationship and may lead to charges of sexual harassment. F or the reasons stated above, such relationships are strongly discouraged.

For purposes of this section, an individual has "professional responsibility" for another individual at the University if he or she performs functions including, but not limited to, teaching, counseling, grading, advising, evaluating, hiring, supervising, or making decisions or recommendations that confer benefits such as promotions, financial aid or awards or other remuneration, or that may impact upon other academic or employment opportunities.

## Academic Freedom

This policy shall not be interpreted so as to constitute interference with academic freedom.

## False and Malicious

 AccusationsMembers of the University community who make false and malicious complaints of sexual harassment, as opposed to complaints which, even if erroneous, are made in good faith, will be subject to disciplinary action.

## Procedures

The University shall develop procedures to implement this policy. The President of each constituent college of the University, the Deputy Chancellor at the Central Office, and the Dean of the Law School shall have ultimate responsibility for overseeing compliance with this policy at his or her respective unit of the University. In addition, each dean, director, department chairperson, executive officer, administrator, or other person with supervisory responsibility shall be required to report any complaint of sexual harassment to an individual or individuals to be designated in the procedures.

All members of the University community are required to cooperate in any investigation of a sexual harassment complaint.

## Enforcement

There is a range of corrective actions and penalties available to the University for violations of this policy. Students, faculty, or staff who are found, following applicable disciplinary proceedings, to have violated this Policy are subject to various penalties, including termination of employment and permanent dismissal from the University.

## Sexual Harassment Panel

The President has designated the following persons to serve on the College Sexual Harassment Panel. Complaints of sexual harassment may be made to any member of the panel.

## D r. E lizabeth M cC affrey

## Coordinator

Counseling and Advisement
Powdermaker 128
997-5421

## Professor H elen C airn

Deputy Coordinator
Communication Arts and Sciences
G Building, Room 100A
520-7079

## M s. V alli C ook

Director of Affirmative Action
Kiely Hall, Room 1311
997-5554

## Professor E laine L udman

Family, Nutrition, and Exercise Sciences
Remsen Hall, Room 306
997-4150

## M r. R obert W eller

Director, ACE Program
Kiely Hall, Room 134B
997-5717
Two students also serve on the panel. Please contact the Dean of Students' Office for their names.

## Confidentiality

The privacy of individuals who bring complaints of sexual harassment, who are accused of sexual harassment, or who are otherwise involved in the complaint process should be respected, and information obtained in connection with the bringing, investigation, or resolution of complaints should be handled as confidentially as possible. It is not possible,
however, to guarantee absolute confidentiality and no such promises should be made by any member of the Panel or other University employee who may be involved in the complaint process.

## Making a Complaint of

 Sexual Harassment Any member of the University community may report allegations of sexual harassment to any member of the Panel. Employees who are covered by collective bargaining agreements may either use their contractual grievance procedures, within the time limits provided in those agreements, to report allegations of sexual harassment; or, they may report such allegations directly to a member of the Panel as provided in these Procedures. Members of the University community who believe themselves to be aggrieved under the Policy are strongly encouraged to report the allegations of sexual harassment as promptly as possible. Delay in making a complaint may make it more difficult for the college to investigate the allegations.
## Responsibilities of

## Supervisors

a. E ach dean, director, department chairperson, executive officer, administrator, or other person with supervisory responsibility (hereinafter "supervisor') is responsible within his or her area of jurisdiction for the implementation of the Policy and must report to the Panel Coordinator any complaint of sexual harassment made to him or her and any other incidents of sexual harassment of which he or she becomes aware or reasonably believes to exist. Having reported such complaint or incident to the Panel Coordinator, the supervisor should keep it confidential and not disclose it further, except as necessary during the complaint process.
b. Each supervisor shall arrange for the posting, in his or her area, of the University policy against sexual harassment; the names, titles, telephone numbers, and office locations of college Panel members; and any other materials provided to him or her by the Sexual Harassment Education Committee for posting.

Responsibilities of the University Community-At-Large Members of the University Community who become aware of allegations of sexual harassment should encourage the aggrieved individual to report the alleged sexual harassment to a member of the Panel.

## Substance Abuse

$\square$he following program, in compliance with the Drug-Free Schools and Campuses Act Amend-
ments of 1989 (Public Law 101226), has been adopted and implemented at Queens College to prevent the illicit use of drugs and abuse of al cohol and tobacco by students and employees. Copies of this state ment will be made available to all Queens College students and employees.

## Smoke-Free Policy

The City University has adopted a no smoking policy that prohibits smoking in all buildings throughout the CUNY system.

## Drug, Alcohol, and Tobacco Use

Standards of Conduct: The legislature of the State of New Y ork and federal statutes have made the possession, sale, or purchase of certain drugs without authorization a crime. New York law prohibits selling or giving alcohol to any "visibly intoxicated person." The possession and consumption of alcohol is illegal under state law for those under 21 years of age.

All members of the College community are expected to abide by the laws of the city, state, and federal government (Board of Trustees Bylaws, Article XV, Section 15.1). The College will not serve as a sanctuary and cannot insulate its members from the consequences of illegal acts. Queens College will not protect students or other members of the College community from prosecution under the law. All members of the College community are expected to abide by the city, state, and federal statutes that have made the possession, sale, or purchase of illegal drugs a crime. Students are expected to comply with the Rules and Regulations for the Maintenance of Public Order,
which appear on page 63.
It is illegal to sell tobacco products to any person under the age of 18 in New York State.

Sanctions - Students: Any student found in violation of the abovementioned Rules and Regulations may be subject to disciplinary action. Sanctions for violation may include admonition, warning, censure, discipline, probation, restitution, suspension, expulsion, complaint to civil authorities, and ejection. These sanctions are defined on page 64.

A student who is experiencing difficulty with alcohol or chemical dependency may be referred to the Dean of Students or the Counseling and Advisement Center by members of the instructional staff or may seek assistance directly. The Dean of Students may take disciplinary action as required or may recommend that the student meet with a counselor for appropriate referral or assistance through selfhelp organizations or other outside intervention agencies. Serious health risks, documented by the medical community, accompany the use and abuse of alcohol and drugs.

Sanctions - Employees: The unlawful manufacture, distribution, dispensation, possession, or use of illegal drugs or other controlled substances and the unauthorized use of alcohol by employees in the workplace are prohibited. Employees of the University must also notify the Director of Human Resources of any criminal drug statute conviction for a violation occurring in the workplace not later than five days after such conviction

Employees who are experiencing difficulty with alcohol or chemical dependency will, at the request of their supervisor, be asked to meet with a counselor. The counsel or, after the interview, may recommend appropriate assistance through self-help organizations or other outside intervention such as drug rehabilitation or employee assistance programs. Employees may also seek assistance on their own. Serious health risks, documented by the medical community, accompany the use and abuse of al cohol and drugs.

Employees found in viola-
tion of the Standards of Conduct referred to in this policy may be subject to discipline under the provisions of their Union contract and/or applicable College and University policy. The sanctions that will be imposed may include, in addition to those found in the various contracts, verified attendance and successful participation in a drug/alcohol assistance program.

Criminal Sanctions: The unlawful possession, use, or distribution of illicit drugs and alcohol is punished by harsh sanctions by the United States government and by the State of New York, which range from completion of an appropriate rehabilitation program through imprisonment.

Regarding illicit drugs, the seriousness of the offense and the penalty imposed upon con-
viction usually depend upon the individual drug and the amount of the drug held or sold. For example, in New York State the possession of four ounces of cocaine is a class A-1 felony, punishable by a minimum of 15 years and a maximum of life in prison. The sale of two ounces of cocaine will be similarly treated. The possession of more than eight ounces of marijuana is a class $E$ felony, punishable by up to four years in prison, as is the sale of 25 grams of marijuana. It is important to be aware that, in New York, a gift of drugs, including marijuana, is treated as a sale. Federal penalties are similar to those assessed by the State.

Criminal penalties may also result from the misuse of alcoholic beverages. In New York, if you give or sell an alcoholic beverage to a person less than

21 years old, you are committing a class B misdemeanor, punishable by up to three months in jail and a $\$ 500$ fine. Any sale of any kind of alcoholic beverage without a license or permit is also a misdemeanor punishable by a fine, a jail term, or both. If you are under the age of 21 , you are prohibited from possessing alcoholic beverages with intent to consume them. Each violation is punishable by a $\$ 50$ fine. The beverages may also be seized and destroyed by internal or external authorities. You can be fined up to $\$ 100$ and required to perform community service if you are under 21 and present a falsified proof when attempting to purchase alcoholic beverages, and you can have your driver's license suspended for up to 90 days if you use the license to try to purchase alcohol illegally.

These are only examples of the penalties that can be assessed against you. You should also know that it is the University's policy to discourage violations of federal, state, and city laws. Where appropriate, the University will refer persons who violate such laws for prosecution to the relevant governmental authorities and will cooperate fully with such authorities.

## CAMPUS/COMMUNITY

bASED SERVICES
These services and information centers for alcohol and drug abuse are available to all member of the College community: Counseling and Advisement Center - Powdermaker Hall 128 (997-5420); Health Service Center - FitzGerald Gym 204 (997-2760); Office of Human Resources - Kiely Hall 163 (997-4455).



Course information in this Bulletin is included as of April 1996. F or information about new courses that may not be included here, and for further details concerning course descriptions, consult the department office. For possible changes and for details on courses designated "uncertain" ( $\dagger$ or $\dagger \dagger$ ), consult the current semester's Tel ephone Registration Guide and Schedule of Classes, available at the Registrar's Office and Information Center just before registration periods.

Courses noted as being "in Reserve" at the end of a department listing are courses that have not been offered at the College for at least five years.

Queens College's numbering system classifies courses according to level as follows:

0-99. These are courses unclassified with regard to level, and may or may not have prerequisites. They are offered by a department as a service to the College community or to other departments. Many satisfy LASAR. They are not part of a student's major in the department offering the course, but may be part of majors in other departments.

100-199. Freshman-level courses not having prerequisites, although they do assume that the student has reading, writing, and mathematical skills required for entrance to the College.

## C ourses of Study

200-299. Intermediate-level courses normally taken after the freshman year. They may have prerequisites, but in general assume that the student has some appropriate background knowledge and familiarity with college-level work.

300-399. Advanced or upper-level courses not usually taken before the junior year. They may have prerequisites or corequisites at the intermediate level or above, but in general students are expected to have or to provide themselves with the background information implied by the course title and description. These courses also require more responsibility, initiative, and independence than lower-level courses, and students must use the scholarly skills they have been introduced to in earlier courses. A student should take several courses at this level as part of the major.

400-499 (Aaron Copland School of Music only). The most advanced courses of a long sequence of courses begun in the freshman year and completed in the senior year.

500-599. Graduate-level courses offered by the various disciplines for teachers. They may be used in partial fulfillment of a master's degree program in education or for continuing education credit. Normally they do not require that the student has followed an undergraduate concentration in the discipline. A 500-level course may be taken by well-qualified undergraduates with the permission of the department offering the course.

600-699. First-level courses in master's degree programs. A 600-level course may be taken by exceptional undergraduates with permission of the department offering the course.

700-799. Upper-level courses in master's degree programs. A 700-level
course may be taken by outstanding undergraduates only with the permission of the department and the Office of Graduate Studies; or the department and the Dean of the School of Education in the case of graduate courses in Education.

In certain circumstances, it is possible for an undergraduate student to apply course credits taken during the undergraduate course of study toward the master's degree instead of toward the undergraduate degree. In such circumstances, the graduate course credits must be in excess of the 120 credits required for the undergraduate degree. In addition, the graduate courses cannot be counted as undergraduate major requirements. For additional information, students should consult with the Department Chair or graduate adviser.

Please note: Effective September 1, 1996, all bachelor's degree programs require a maximum of 120 credits for graduation. The CUNY Office of Academic Affairs may grant waivers for undergraduate degree programs that require additional credits for certification or accreditation from outside professional organizations or for other compelling educational reasons.

## A cademic Skills

See Special Sequences and Courses, page 196.

## A ccounting \& Information Systems

## Chair: Israel Blumenfrucht

Deputy Chair for Day Studies: Arthur H. Adel berg
Deputy Chair for Evening Studies: March. Levine
Consultant-Coordinator of Computer Applications: Louis Geller

Assistant Chair for Information Systems and Research: Abraham J. Simon
Assistant Chair for Summer Session: David Hornung

Assistant Chair for Advisement: Marvin F. Milich

College PreLaw Adviser: David Saft
Dept. Office: Powdermaker Hall 109, 997-5070
Professors: Adelberg, Geller, Levine, Siegel, Simon; Associate Professors: Blumenfrucht, Leibowicz, Milich; Assistant Professors: Kim, Qureshi, Zhou; Instructor: Erlach; Lecturers: Dauber, Hornung, Klinger, Saft; Department Secretaries: DePierro, Trimboli

Please note: At the time this Bulletin went to press, the Department of Accounting and Information Systems was planning to add a minor and a second major in Accounting \& Information Systems. Students should check with the department for the latest information concerning the minor and the second major.

## The Majors

## Accounting Major

The department offers courses in accounting, information systems, business law, and taxation for accounting majors and other students.

Accounting majors may prepare themselves for a career in public, private, or governmental accounting, or for
the teaching of accountancy in secondary schools.

Majors study a complex discipline concerned with and responsive to the changing economic, social, and legal institutional arrangements necessary to the functioning of modern societies. The functions of accountants encompass ever-broadening spheres of activity. Transactions occurring between an economic entity - be it a family unit, small business firm, complex corporate organization, governmental organization, nonprofit organization, or national economy - and its environment constitute the raw materials of accounting. These must be converted by processes of classification and analysis to meaningful data so that their effects on the entity being subjected to the accounting process may be measured, interpreted, and communicated. Computerized systems are being used extensively in accounting applications, transaction processing, data analysis, and auditing. Computer applications are integrated into course work. Courses in Information Systems, Analysis, Design, and Implementation have been available since 1982.

The informational outputs of this process must meet the needs of various user groups in society. Among the users of accounting information may be internal decision makers, owners, creditors, investors, workers, managers, economists, and representatives of governmental agencies.

The decision process, organization theory, communication and information systems and theories are areas of interest and concern to students and researchers in accounting. Sophisticated mathematical models (especially with the development of computer science) are being used by accountants. E conomic theory and analysis constitute basic tools for accountants. An understanding of the laws governing economic and financial relationships is essential. A knowledge of tax laws and procedures must be added to the accountant's store of information.

The Department of Accounting and Information Systems has a formal advisement program. All majors are assigned an adviser. Majors must see their adviser as part of registration.

Accounting majors must file a concentration form with the department no later than the lower junior semester.

Students majoring in accounting qualify for admission to the Uniform CPA Examination and must comply with the requirements of the New York State Board of CPA examiners, as set forth below:
credits
Accounting 101 through 322.25
Accounting 361, 362, 363. Business Law 9
Accounting 367. Taxation 4
Economics 101 and 102. Introductory Economics 6
Economics 215. Money and Banking 3
Economics 241. Corporate Finance
E conomics 249. Statistics 3

Three approved elective courses in addition to the above are required. These may be chosen from the following:

Accounting and Information Systems Department courses
Computer Science 12 preferred, 101 acceptable (but not both), and other approved computer science courses; (only two computer science courses may be used as electives unless the student is a computer science minor)
Economics 205, 206, 382, and other approved economics courses
Geology 25
History 238 and 275
Mathematics 21, 22, and other approved advanced mathematics courses
Political Science 211, 223, 224
Psychology 226, 245
Sociology 224, 228
Urban Studies by approval of Chair
Students must read the specific department listing for prerequisite requirements. There are additional limitations on electives. Consult with the department.

## Dual Major: Accounting and Economics

Students majoring in accounting may also receive a major in economics by completing 30 credits in the latter. All of the economics courses required for the accounting degree may be included for the concentration in economics. E conomics 205, 206, and 382 must be part of the 30 credits in economics.

## COURSES

All students taking courses in the Department of Accounting and Information Systems must earn a minimum grade of $C$ - in any course taken in the department to advance to the next course in the sequence. Students earning a grade of $D+$ or less must retake the course in which the D+or less was earned. Students who repeat a course in accounting are reminded that credit can be received only once.

A student must obtain a minimum grade of $C$ - in each course in the depart-
ment that will be used to meet the major requirements.

Students must earn a C average (2.0) for all courses usable for the major (i.e., accounting, economics, and other electives that qualify as part of the major).

## 100. Financial and Managerial Ac-

 counting. 4 hr.; 3 cr . Prereq.: Business and Liberal Arts 100 and permission of the BALA Director. This is a course in the theories and principles of financial and managerial accounting. Financial accounting includes the study of the preparation and interpretation of commonly used financial statements. Managerial accounting deals with the use of accounting data for managerial control and planning. Students will be introduced to the use of accounting systems programmed for the microcomputer, and to managerial decision making based on mathematical modeling. Not open to accounting majors.
## 101. Introduction to the Theory and

 Practice of Accounting I. 4 hr.; 3 cr. Prereq.: Upper freshman standing. First course for accounting majors. Also gives nonmajors a fundamental understanding of the language of business as expressed in financial reports. Fall, Spring102. Introduction to the Theory and Practice of Accounting II. 4 hr.; 3 cr. Prereq.: Accounting 101 and sophomore standing. Continuation of Accounting 101. Fall, Spring
103. Intermediate Accounting I. 4 hr.; 4 cr. Prereq.: Accounting 102 and sophomore standing. Intensive study of the theories of financial accounting, generally accepted accounting principles, and applications thereof. Relevant opinions and statements of the AICPA, FASB, and SEC. Fall, Spring
104. Intermediate Accounting II. 3 hr.; 2 cr. Prereq.: Accounting 201 and junior standing. Continuation of Accounting 201. Relevant mathematical principles and applications thereof to accounting. Relevant opinions and statements of the AICPA, FASB, and SEC. Fall, Spring
305, 306. Cost Accounting. Accounting 305: 3 hr.; 2 cr.; Accounting 306: 4 hr.; 3 cr Prereq.: F or Accounting 305, Accounting 201 and junior standing; for Accounting 306, Accounting 305, E conomics 241, Economics 249, and junior standing. The theories and methods of accounting for costs of manufacturing and selling, with their prac tical application in different types of cost systems. Accumulation, presentation, and uses by management of various cost data. Quantitative analysis for decision making, including linear programming and capital budgeting models. Fall, Spring
105. Advanced Accounting. 4 hr.; 3 cr. Prereq.: Accounting 202 and junior standing. Theory of accounting applicable to problems peculiar to large-scale business operations, including the problems of accounting for installment sales, consign-
ment sales, branch operations, mergers, insolvencies, liquidations, and the preparation of consolidated financial reports. Relevant opinions and statements of the AICPA, FASB, and SEC. Fall, Spring

321, 322. Auditing. Accounting 321: 4 hr .; 3 cr.; Accounting 322: 3 hr.; 2 cr. Prereq.: For Accounting 321, Accounting 311 and senior standing; for Accounting 322, Accounting 321, Economics 249, and senior standing. Auditing procedures, including applications to computerized systems, principles, and standards relevant to the practice of professional accountancy. Introduction to statistical sampling. Pronouncements, research bulletins, and statements of auditing procedure issued by the AICPA, SEC, and AAA. F all, Spring
331. Advanced Accounting Problems. 4 hr.; 3 cr. Prereq.: Accounting 306 and 311. Emphasis on theory, analysis, approach, and techniques. Fall, Spring

## 341. Accounting Information Systems.

 3 hr.; 3 cr. Prereq.: Computer Science 101 or equivalent, and Accounting 201 and 305. This course focuses on methods and techniques for the analysis and evaluation of the design of accounting information systems, including computer-based systems. Topics covered will include an introduction to accounting systems theory, analysis of accounting systems, including documentation and design theory, accounting file structure, hardware/software selection and impact on accounting systems, system life cycle, including accounting controls, and systems implementation and maintenance from the auditor's standpoint. This course will require some use of computer resources. Fall, Spring
## 343. Microcomputer Applications in

 Accounting. 3 hr.; 3 cr . Prereq.: Computer Science 101 or Computer Science 12 and Computer Science 100, Accounting 202 and 305. This course deals with specific uses of microcomputers as tools in the discipline of accounting in the following areas: transaction processing, analysis, and report preparation using commercial accounting systems; and mathematical and statistical analysis models that are used for managerial and financial accounting purposes. Software used includes data base management systems with translation utilities, permitting transfer of data from one commercial system to another through the use of Data Interchange F ormats. Integrated packages are used to prepare reports incorporating analyzed data and graphics.
## 350. Financial Statement Analysis. 3

 hr.; 3 cr. Prereq.: Accounting 202. Analysis is made of financial statements from the perspective of users and preparers of financial reports including investors, creditors, auditors, accountants, and management. Financial statements and related disclosures will be analyzed to gain a perspective on the company's health.355. Accounting in International

Environments. 3 hr.; 3 cr. Prereq.:

Accounting 306, 311, and senior standing. This advanced-level course takes up the accounting, tax, and control problems and procedures arising from the flow of goods, services, money, and investments across national frontiers.

## 368. Trust and Estate Accounting. 2

hr.; 2 cr. Prereq.: Accounting 367 or junior standing. Special emphasis on preparation of fiduciary reports and principles of audits of fiduciaries

## 372. Governmental and Institutional

 Accounting. 2 hr.; 2 cr. Prereq.: Accounting 102 and junior standing. Survey of the systems, theory, and applications of the principles of fund accounting; emphasis on municipal, public, and nonprofit institutions. Fall, Spring
## Courses in Law Related to

Business and Taxation
361. Business Law I. 3 hr.; 3 cr. Prereq.: J unior standing. Introduction to the law. Seeks to provide majors and nonmajors with an understanding of the law and the social forces that shape it. The basic structure through which law is implemented and enforced is reviewed, in addition to the specific rules of law relating to contracts, trusts, and estates. Fall, Spring
362. Business Law II. 3 hr.; 3 cr. Prereq.: Accounting 361 and junior standing. The law relating to forms of business organizations. F ocus centers on agency and partnership relationships, corporate structure, and the role of government in business. Also considered are landlord relationships and bailments. Fall, Spring
363. Business Law III. 3 hr.; 3 cr. Prereq.: Accounting 362 and senior standing. The law relating to commercial transactions. Focus of the course is the Uniform Commercial Code, with particular emphasis on sales law, commercial paper law, and the law of secured transactions. Also considered are the laws relating to bankruptcy and insurance. Fall, Spring

## 367. Federal and New York State

 Taxes on Income. 4 hr.; 4 cr. Prereq.: Accounting 102 and senior standing. An introduction to the federal income tax as it relates to individuals. Particular emphasis is given to the basic multitiered tax structure. The underlying concepts of basis, inclusion, exclusion, deduction, and defined, utilizing the Internal Revenue Code and related material. Special classes of taxpayers including partnerships, estates, trusts, corporations of various types, and foreign taxpayers are considered as well as accounting and procedural rules.369. Gift and Estate Taxation. 2 hr.; 2 cr. Prereq.: Accounting 367 or 368 . The

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
†Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
aws and regulations of the federal and New York State governments governing taxes on gifts and at death. Considers both theory and practice; includes discussion of procedure.

## Seminars and Special Problems

381. Seminar in Advanced Financial Accounting Theory. 3 hr.; 3 cr. Prereq.: Accounting 202 and 311 (senior standing recommended). Fall
382. Seminar in Advanced Managerial Accounting Theory. 3 hr .; 3 cr . Prereq.: Accounting 202 and 306 (senior standing recommended).
383. Seminar in Law and Taxation. 3 hr.; 3 cr. Prereq.: Permission of department.

391, 392. Special Problems. 391.1-391.3, 1-3 hr.; 1-3 cr.; 392.1-392.3, 1-3 hr.; 1-3 cr. Open to students of advanced standing who receive permission of the department to register. Recommended for students of high academic standing who want to undertake some special research topic related to accounting.
393. Seminar in Accounting. 3 hr.; 3 cr . Prereq.: Successful completion of Accounting 391, 392, and permission of department.

## Courses in Reserve

365. Federal and New York State Taxes on Income.
366. Federal and New York State Taxes on Income.

## A dult <br> C ollegiate <br> Education

Assistant Provost: M. Hratch Zadoian<br>Director: Robert C. Weller<br>Assistant Director: Colette Golinski<br>Office: Kiely 134A, 997-5717<br>Professors: Alteras, Hallmark, Orenstein, Pine; Adjunct Associate Professors: J acobowitz, M ohan; Adjunct Assistant Professors: Bergman, Brown, Sirlin; Adjunct Lecturers: Abramson, Chustek, Einsohn, Goodman, Krest, Miceli, Moskowitz, Percival, Weller; Department Secretaries: Brantley, Roganti<br>The Adult Collegiate Education (ACE)

curriculum provides an opportunity for adults 25 years or over to obtain the baccalaureate degree. The foundation of ACE is a special series of seminars, both conventional and interdisciplinary, in the arts, sciences, and social sciences, which satisfies a good portion of the College's Liberal Arts and Sciences Area Requirements (LASAR). Successful completion of this series of seminars will constitute about a third of the work for the degree. The remaining credits required for graduation will be distributed between the student's chosen field of concentration, the balance of LASAR courses, and elective offerings. Students may also qualify for a maximum of 36 life achievement credits.

The seminars are conducted by panels of faculty members from different departments, and draw upon the maturity and experience of the adult student, while at the same time encouraging the student to engage in independent study

The courses described below are open only to students formally admitted to ACE. These courses may not be taken with the P/ NC (Pass/No Credit) option.

ACE 95. Introduction to College Writing ACE 1. English Composition
ACE 3. Studies in Literature
ACE 4. Studies in Visual Arts and Music ACE 9. The Physical Sciences
ACE 15. Social Science Seminar I
ACE 16. Social Science Seminar II Biology 8. Fundamentals of Biology Chemistry 11. Chemistry for Today Psychology 101. General Psychology

For details of admission requirements and procedures, write to the Director of ACE.

COURSES
ACE 95. Introduction to College Writing. (formerly ACE 01) 4 hr .; 3 cr . E mphasis will be on a variety of writing forms, including narration, description, and analysis; attention will be given to matters of grammar, syntax, punctuation, and diction.

ACE 1. English Composition. 4 hr.; 3 cr.
Prereq.: Passing grade on the CUNY Assessment Test or its equivalent as approved by the department. Emphasis will be on clear, correct, and effective writing. Students will be introduced to methods of research and documentation.
ACE 3. Studies in Literature. 3 hr . plus conf.; 6 cr. Prereq.: ACE 1. Close reading and critical analysis of American and British fiction and poetry of various periods. This seminar combines a study of literature with continued training in clear and effective written expression. Conferences with the instructor will be scheduled.

ACE 4. Studies in Visual Arts and
Music. 3 hr. plus attendance at selected concerts and museums; 6 cr . The many convergences between music and the visual arts will be studied as they reflect aesthetic concerns common to both arts.
ACE 9. The Physical Sciences. 4 hr.; 4 cr. A course designed to give students a qualitative and quantitative view of the physical world. Topics chosen, primarily from physics (and, to a lesser extent, astronomy), include force, motion, gravitation, planetary motion, work and energy, heat, light, and electricity. During the study of each topic, selected numerical problems are solved. These problems, in addition to illuminating the subject matter, develop the student's skills in algebra, geometry (both plane and analytic), and trigonometry.
ACE 15. Social Science Seminar I. 3 hr.; 6 cr . A study of the history of ideas in Western civilization from classical antiquity to the Reformation, from the perspective of the disciplines of history and philosophy, and related social sciences. Through an analysis of sources, both original and secondary, emphasis will be placed on political developments, philosophical trends, religious movements, and social institutions. Extensive independent reading under faculty supervision; oral and written presentations, research papers, and final examination.

ACE 16. Social Science Seminar II. 3 hr.; 6 cr. Prereq.: ACE 15. A continuation of the study of the historical development of Western civilization from the Reformation to modern times, through an analysis of sources, both original and secondary. In addition to the perspectives of the older, well-established disciplines of history and philosophy, the course will draw upon the insights of the newer social sciences: economics, sociology, and political science.

Biology 8. Fundamentals of Biology. 2 lec., 2 lab. hr.; 3 cr . (ACE students are required to take either Biology 8 or Chemistry 11.) A survey course in biology designed for students in ACE. The areas of cell biology, heredity, development, physiology, ecology, and evolution are covered. Emphasis will be placed on human-related topics such as health, the environment, and current developments in biology. No previous knowledge of biology or chemistry is assumed. Not open to students who have taken Biology 11. MAT charge, \$25.

Chemistry 11. Chemistry for Today.
(formerly Chemistry 15) 2 lec., 2 lab. hr.; 3 Cr. (ACE students are required to take either Biology 8 or Chemistry 11.) A nonmathematical introduction to chemistry to provide some understanding of the chemical aspects of issues that confront today's citizen. The laboratory class will provide

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). tOffered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
firsthand experience in various chemical techniques. MAT charge, \$25.
Psychology 101. General Psychology. 4 hr.; 4 cr . An introduction to the chief facts, principles, methods, and theories of psychology. Topics discussed include the history of psychology, sensory and perceptual processes, motivation and emotion, behavior development, learning and cognition, psychometrics, personality, psychopathology, and social behavior.

## Health and Physical Education

## Physical Education 32. Adult Fitness

Through Diet and Exercise. 3 hr .; 3 cr . A specialized lecture/laboratory course that satisfies the physical education require ment for ACE students. Topics include body image, healthful food intake, and physical fitness. Through an individualized nutritional survey, an in-depth activity profile, and a thorough assessment of body constitution and physical fitness status, an exercise program will be planned to meet individual needs.

## LASAR and Basic Skills

## Requirements

Satisfactory completion of the Basic
ACE Seminars by students enrolled in
ACE will fulfill the Queens College Basic and Advanced Learning Skills and most of the LASAR. These requirements became effective for students enrolling in ACE in September 1983 and thereafter. Transfer students, as a rule, may not apply courses taken at other institutions as substitutes for ACE seminars.

U pon completion of the Basic ACE Seminars, ACE students must also take one course from the current list in each of the following LASAR categories:

Humanities I, Tier 2
Humanities III
Scientific Methodology and Quantitative Reasoning
Some courses in these categories are offered by ACE during Summer Session.

## Foreign Language Requirement

Queens College requires that all baccalaureate students attain a knowledge of a foreign language at a level equivalent to three semesters of study. ACE subscribes to the view that the satisfactory completion of the foreign language requirement is an essential element of a liberal education. The ACE administration is also confident that adult students are fully capable of acquiring competence in a foreign language and encourages students to meet the College requirement by completing three semesters of a foreign language.

Students may be exempted from this requirement by having successfully com-
pleted the third level (three years) of foreign language instruction at the high school level, or by prior completion of three semesters of a foreign language at an accredited college, or by having achieved a passing grade on the New Y ork State Regents Comprehensive Language Examination (Level 3). In addition, students who have studied a foreign language or whose native language is not English may be exempted from part or all of this requirement by passing competency exams given or approved by the foreign language departments at the College.

ACE students may satisfy the foreign language requirement in one of the following ways:

1) Successfully complete three semesters of a foreign language. This is the normal Queens College requirement; see page 41.
2) ACE students who matriculated in F all 1983 or thereafter and do not satisfy the language requirement by taking three semesters of foreign language may exercise the following option:
A) They must complete the firstlevel course of a foreign language of their choice (e. g., French, Spanish, Italian, Hebrew).
B) They must also successfully complete Linguistics 101, Introduction to Language.
C) They may then choose three other courses distributed in literature in English translation or in the culture and history relating to their chosen foreign language. Lists of authorized courses are regularly updated.

Courses used to satisfy the language requirement may not be used to satisfy any other requirement toward a major or LASAR.

Courses taken to satisfy the language requirement may be taken P/ NC (Pass/No Credit). The ACE language option is available only to students who are formally registered for and complete ACE.

## ACE Senior Awards

The ACE program offers the following cash awards to graduating seniors during the ACE graduation ceremonies each Spring: Richard H. Hogan Award for Academic Excellence; Sybil Leigh Award for Academic Excellence; Alfred Lewis Award for Academic Excellence; Haleem Rasheed Award for Community Service; S. Gary Schiller Award for Excellence in Political Science; Micheline Weisbroat Award to a Foreign-Born Student; and the Aaron Weiss Award. Funds are pro-
vided by various memorials and endowments established for this purpose. Graduating seniors are asked to submit biographical and academic data, which is used by ACE faculty/administration selection committees for making these awards.

## A fricana Studies

## Director: J une Bobb

Advisory Committee: Agbeyegbe, Andrews, Habtu, Markovitz, OfuateyK odjoe, Sanjek

College Assistant: Wanda Gebrehiwot
Office: Kissena Hall 340, 997-2845
The program offers a structured body of courses leading to a major or a minor in Africana Studies. It is designed to provide knowledge of the civilization, history, literature, culture, and institutions of the peoples of Africa, and peoples of African descent in the Caribbean and North America. Offerings consist of courses generic to Africana Studies as a whole as well as the following concentrations: Africa, the Caribbean, and the Afro-American experience.

Africana Studies should be of special interest to students who have either a cultural or professional interest in the African, Afro-Caribbean, or Afro-American experience. It should also be of interest to students who seek to understand a culture or civilization other than their own. It provides the background for graduate work in African, Caribbean, or Afro-American Studies, and may lead to careers in education, community organization and development, social work, business, media, and international service. Because the program draws from several disciplines, it is an excellent choice for a second major or a minor.

## The Major

Students who major in Africana Studies must take a minimum of 36 credits from the offerings listed in the program. At least 18 of these credits must be in the required core curriculum. At least 3 credits must be in a seminar offered by Africana Studies or an approved depart-
mental seminar. At least 9 credits must be in the area of concentration.

In addition, students who major in the program will be required to take three semesters of Arabic, French, Italian, Portuguese, or Spanish or pass a proficiency examination in an African language equivalent to the intermediate level. Students who have satisfied the College's foreign language requirement in any of these languages do not have to take another language.

Students who intend to major in Africana Studies must consult the Director and file a concentration form before enrolling in AFST 102 or 201.

Students who major in Africana Studies must take a total of 30 credits as follows:
A) Required Core Courses ( 21 credits) AFST 101; AFST 102 or 201; AFST 232 or 234; History 277 or 278; Political Science 277 or 278 ; Sociology 271,272 , or 273; AFST 300.
B) Three courses (9 credits) in one of the following concentrations, provided they have not been taken to fulfill the required core:

1) Africa: AFST 102, 201, and 234; History 111; Anthropology 211; Art 245; Economics 209; Political Science 237 and 256; Sociol ogy 273.
2) The Caribbean: AFST 232; History 118, 119, and 243; Puerto Rican Studies 203, 204, 208, 242; Sociology 261 and 274; Special Studies 94.
3) African-American: AFST 102, 201, 202, 203, 234; Drama 206, 248; E conomics 219; English 354 and 355; History 277 and 278; Sociology 211, 271, and 272.
C) Two courses ( 6 credits) to be selected from those in $B$ above which have not been already selected or from the additional electives below:

Anthropology 233
Ethnic Studies 310
Music 5, 239, 240
D) Consult Director for other courses that may satisfy elective credit for the major.

## The Minor

Students who minor in Africana Studies must take a minimum of 21 credits from the offerings listed in the program. At least 12 of these credits must be in the required core curriculum.

## COURSES

101. Survey of African Civilization I. 3 hr.; 3 cr . An interdisciplinary survey of African civilization from the earliest times
to the sixteenth century. The course will focus on the origins and development of civilization in Africa (Egyptian, Sudanic, Ethiopic, Malian, Ghanaian, Songhai, Zimbabwean, etc.).

## 102. Survey of African Civilization II.

$3 \mathrm{hr} . ; 3 \mathrm{cr}$. An interdisciplinary survey of African civilization from the sixteenth century to the present. The course will focus on the impact upon African civilization, culture, politics, and society of European expansion and colonialism in Africa.
201. Introduction to Black Cultures. 3 hr.; 3 cr . The course will focus on the concept of culture as it relates to specific cultures in West Africa, the Caribbean, and the United States.
202. The Black Urban Experience. 3 hr.; 3 cr. Prereq.: AFST 101 and 102 or permission of instructor. An interdisciplinary study of the experience of black Americans in urban areas from World War I to the present. Special attention will be given to the effect of economic, political, and social factors on the black community and its institutions.
203. The Black Church in America. 3 hr.; 3 cr. Prereq.: AFST 101 and 102 or permission of instructor. The course examines and analyzes the social and historical development of the black church in America. It attempts to show the role of the church in the struggles of black Americans. The formation of independent black denominations, sects, and cults will also be evaluated.
232. Caribbean Literature. 3 hr.; 3 cr .

Prereq.: Sophomore standing or permission of instructor. This course will examine how major writers of the Caribbean address questions of cultural and national identity in their poetry, fiction, essays, and drama.
234. Black Women Writers. 3 hr.; 3 cr. Prereq.: Sophomore standing or permission of instructor. This comparative study of women writers from Africa, the Caribbean and the United States will examine the ways in which these writers re-envision history and challenge traditional conceptions of gender, race, and class.
300. Seminar in Africana Studies. 3 hr.; 3 cr . Prereq.: J unior standing and permission of instructor. Topics to be announced.

## Joint Offerings

Students may also plan a joint program in Africana Studies and either anthropology, economics, education, history, linguistics, political science, sociology, or urban studies. Students must take 24 credits of required courses in Africana Studies and 24 credits in the other department. Six of the 24 credits in the other department must be related to Africana Studies. See the appropriate department listing for credit information, description, and course scheduling.

## Community Service Program

Africana Studies involves its students in a program of meaningful service to the black community of Queens in the context of a fieldwork course.

## A merican Studies

Director: Frederick Buell
Advisory Committee: Allen, Bowen, Clark, Gambino, Kelly, Lyons, Schechter, Tucker, Warren, Weidman, Wreszin

Office: Klapper Hall 631, 997-4666
The past decades have seen the growth of a variety of heated controversies about culture, history, and social structure in the United States. A number of factors have contributed to this development: the awareness that U. S. history is a creation of many different peoples and interests; the perception that social forms are the product of contest as well as consensus; the elaboration in different disciplines of new methods and perspectives for the study of U. S. society, culture, and history; and the realization that a changing global setting has a great deal to do with the changing characters and characteristics of different nations.

The aim of this major is to devel op a multifaceted understanding of the society of the United States: its origins, its histories, its economic, social, and political institutions; its philosophies; its distinctive cultures; its global settings and connections; and its artistic and intellectual achievements. American Studies is an interdisciplinary major, offering students the opportunity to design an individualized course of study of a number of subject areas and enabling them to obtain a broad knowledge of U. S. culture, history, and society.

## The Major

American Studies majors are required to complete a minimum of 36 credits on the American experience. Specifically, majors must complete:
A) American Studies 110;
B) 9 additional credits in American

Studies courses, including one 300-level course;
C) 12 credits from the list of courses in one of the three Perspectives on American Experience (Artistic, Historical, and Social);
D) 6 credits from the list of courses in each of the other two Perspectives.

Students who plan to major in American Studies must have a minimum grade of B in American Studies 110.

Interested students should meet with the Director to plan their course of studies as early as possible in their college careers. They should file their concentration form with the Director by their lower junior semester. American Studies 110 should be taken by majors as soon as possible and normally precedes courses taken in each of the three Perspectives on American Experience. Students must maintain a cumulative 2.0 gradepoint average in courses applicable to the major.

Honors in American Studies will be granted to majors who maintain a cumulative 3.5 grade-point average in American Studies and write an honors essay approved by the Advisory Committee.

## The Minor

The minor in American Studies consists of 18 credits, of which 9 must be in American Studies courses and 9 in courses drawn from one of the Perspectives on American Experience. Students must maintain a cumulative 2.0 gradepoint average in these courses.

## Perspectives on American <br> Experience

As an interdisciplinary program, American Studies draws on the resources of other departments and programs in the College. The following list offers students a wide range of choices within which to satisfy the requirements for a major or minor in American Studies.
Perspectives on American Arts Art 232
Drama, Theatre, and Dance 206
English 350, 351, 352, 353, 354, 355,
356, 357, 358, 359, 360, 361, 393, 395
Music 5, 236, 237, 238, 239, 240, 241
Perspectives on American History History 103, 104, 257, 258, 259, 260,
261, 262, 263, 264, 265, 266, 272, 273,
274, 275, 276, 277, 278, 279, 280, 282,
283, 284, 285, 286, 288, 331, 332
Philosophy 147, 148
Perspectives on American Society
Anthropology 207, 213, 214
Economics 214, 219, 223, 224, 242, 246

Political Science 100, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 229, 273, 381
Sociology 103, 210, 211, 218
Urban Studies 14, 107, 202, 251
COURSES
110. Introduction to American Society and Culture. 3 hr.; 3 cr. Prereq.: Lower sophomore standing. An interdisciplinary study of the creation of the cultures of the United States. The course will explore a range of cultural activities and experiences in America from the seventeenth century to the present, including: the production of art and literature; the construction of national ideol ogies; the structuring of economic, political, and social life; and the changing significance of the environment.
210. American Lives. 3 hr.; 3 cr. Prereq.: Upper sophomore standing and English 120. A study of how different Americans describe their own lives in autobiographies and other kinds of personal documents. The course will explore how "the American character" expressed itself at different times in different places and how various writers - both famous and obscure - tried to present themselves as unique individuals and as representative Americans.
212. The Popular Arts in America. 3 hr.; 3 cr. Prereq.: Upper sophomore standing and English 120. The growth and development of the popular arts in America, with particular emphasis on such forms as popular literature, photography, film, and advertising. The course will consider how popular art affects large audiences, how it succeeds as art, and how it yields a broad range of insights into our national life. The emphasis of the course will vary from semester to semester, but it may not be repeated for credit.
214. An American Decade. 3 hr .; 3 cr . Prereq.: Upper sophomore standing and English 120. A study of the significant political, social, and cultural currents through one decade of American life. This interdisciplinary course leads to a richer understanding of the manners, morals, tastes, and general ideas of a particular period in American life. This course may be repeated once for credit provided the decade is different.

## 216. Myths and Ideologies in the Unit-

 ed States. 3 hr .; 3 cr . Prereq.: Upper sophomore standing and English 120. This course will focus on one or more components of U. S. national mythology, such as the United States as the land of opportunity and success, the United States as the nation of nations, the United States as a new land free of history, and the United States as a light to all nations. The course will consider the origin and development of such myths, their deployment in a number of different areas of U . S. culture and social life, and their truth or falsity.218. Native American History and Culture. 3 hr.; 3 cr. Prereq.: Upper sophomore standing and English 120. A study of the history and cultures of Native American peoples, hemispheric in scope and interdisciplinary in method. The particular focus of the course will vary from semester to semester, but may include such topics as language, literature, art, religion, and social organization. The course may be repeated for credit if the subject matter is different.

## 220. Gender, Race, Ethnicity, and

Class in the United States. 3 hr .; 3 cr . Prereq.: Upper sophomore standing and English 120. An interdisciplinary study of gender, race, ethnicity, and class in U. S. society and cultures. The particular focus of the course will vary widely from semester to semester, emphasizing different issues (i.e., gender, race, ethnicity, immigration, and class), different periods, different disciplines and texts, and different aspects of U.S. society (for example, its social structures, histories, cultures). The course may be repeated for credit if the subject matter is different.
222. The United States in Its Global Setting. 3 hr.; 3 cr. Prereq.: Upper sophomore standing and English 120. An interdisciplinary study of $U$. S. society and cultures in an international perspective. The particular focus of the course will vary considerably from semester to semester, emphasizing cross-cultural analysis and/or theoretical work on U. S. society and culture in one or more of the following contexts: the Americas; col onialism and nationalism; contemporary globalization; and global diasporas and population flows. The course may be repeated for credit if the subject matter is different.

## 300. Selected Topics in American

Studies. 3 hr.; 3 cr. Prereq.: Upper sophomore standing and American Studies 110. Designed to provide advanced study of a selected topic in American Studies. The topic will vary from semester to semester and will be announced in advance. This course may be repeated for credit provided the topic is different.

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule

# A nthropology 

Chair: Patricia S. Bridges

Assistant Chair: J ames A. M oore
Assistant Chair for Evening Studies: Michael D. Steffy
Dept. Office: Powdermaker 234, 9975510

Professors: DeBoer, Gregersen, Hansen, Rassam, Spencer; Associate Professors: Bridges, Moore, Sanjek, Stinson, Waterbury, Welch; Assistant Professors: Bak, Birth, Chatterjee, Karakasidou; Adjunct Assistant Professor: Steffy; Adjunct Lecturer: Meltzer; Higher Education Assistant: Steffy; Department Secretaries: Belferman, K otler; Professor Emerita: Slater; Professors E meriti: Meggitt Owen

The department aims to give students a knowledge of human origins and development, the varieties of human cultures, and cultural and social complexities of our species in both primitive and multicultural settings.

A major in anthropology provides the necessary preparation for graduate work in the field, as well as valuable background for careers in education, international studies, medicine and allied professions, sociology, and social work, and for participation in community organizations.

## The Majors

Students wishing to major in anthropology may choose between two tracks: general anthropology and preprofessional anthropology.

The general anthropology major requires 33 credits distributed as follows:
A) Four required courses: Anthropology 101, 102, 103, 200.
B) One course from Anthropology 201, 240, 260.
C) One course from Anthropol ogy 201 (if not taken for requirement B), 205219; 241-249.
D) Two 300-level courses.
E) Three additional courses, two of which must be 200 or above.

The pre-professional major requires 39 credits distributed as follows:
A) Five required courses: Anthropology 101,102, 103, 200, and 238.
B) One course from Anthropology 201, 240, and 260.
C) One course from Anthropology 201 (if not taken for requirement B), 205219, 241-249.
D) One course from Anthropology 320, 340, 360.
E) Two additional 300-level courses.
F) Three additional courses, two of which must be 200 or above.

Note: All courses which are applied to the major in Anthropology must be completed with a grade of C- or better.

Students must declare their intention to major in anthropology by requesting a department adviser and by completing a concentration form in consultation with the adviser. Pre-professional majors are especially encouraged to work closely with a faculty adviser. Although course requirements are designed to prevent premature undergraduate overspecialization, there is sufficient flexibility to permit a student to emphasize cultural, biological, or archaeological anthropology. The selection of elective courses in the field of interest (both from within and outside the department) should be done in consultation with a faculty adviser from the respective subdiscipline. In special cases, some requirements listed above may be waived with the approval of the Chair.

Anthropology is an excellent complement to majors such as Latin American Area Studies. Interdisciplinary majors also may be arranged (see page 154).

## The Minor

The department offers a minor in anthropology requiring 18 credits.
A) Three courses from Anthropology 101, 102, 103, 104.
B) One course from Anthropol ogy 201, 235, 240, 260.
C) Any two additional courses from Anthropology 200 or above.
Note: All courses applied to the minor in anthropology must be completed with a grade of C - or better.

## Department Honors and Awards

Department honors at commencement are awarded to majors and minors on the basis of academic average and other indicators of excellence. Students with gradepoint averages of 3.5 or better who would like to recei ve High Honors in Anthropology, should apply to the department beforethe start of their senior year for permission to write an honors thesis on a subject chosen by them in consultation with a member of the faculty. The department gives eight awards:
Hortense Powdermaker Award Given to the most promising graduating major specializing in cultural/linguistic anthropology.

Faculty Award
Given to the student graduating with the highest grade-point average in anthropology.
Paul Mahler Memorial Award
Given to the most promising graduating major specializing in physical (biological) anthropology.
Lynn Ceci Archaeol ogy Award
Given to the most promising graduating major specializing in archaeology. Service Award
Given to a graduating student in recognition of service to the department. Honors
Given to graduating students with a grade-point average greater than 3.5. High Honors
Given to graduating majors upon successful completion of a Senior Honors
Thesis (Anthropology 390).
Student Award
Given to the most promising student (major/minor) currently enrolled in the anthropology program.

## Sequence of Courses

Anthropology courses are numbered as follows:

101-104: Introductory-level courses with no prerequisites.

200-279: Intermediate courses in the various subdisciplines of anthropol ogy: cultural anthropology (200-239), biological anthropology (260-279), and archaeology (240-259). Prerequisites: Six credits in social science or sophomore standing. (N ote special requirements for Anthropology 200, 229, 235, 238, 250, 251, 253, 259, 260, 270, 272, 275, and 279. See entries under these numbers.)

301-397: Advanced courses (usually for majors) requiring junior standing and often having special requirements. (See entries under these numbers.)
Note: Anthropology 219, 239, 249, 259, and 279 are "selected topics" courses to be offered from time to time. These courses are for special interest and/or experimental offerings in the various subdisciplines of anthropology. Information about selected topics courses to be offered each semester will be distributed in the Department Announcement of Course Offerings, which is available in the department office prior to the registration period.

## COURSES

101. Introduction to Cultural Diversity. 3 hr .; 3 cr . The anthropological concept

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
tOffered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
of culture is employed to address cultural diversity around the world, including the United States. The goal of the course is to explore scientific explanations for why par ticular ways of life came into existence, how they are maintained, and why they change or disappear. Hunting and gathering bands, as well as tribal herding and farming societies, along with ethnic groups, subcultures, and dominant cultural majorities and minorities found in developing and developed multicultural nation-states are considered from the cross-cultural perspective of cultural anthropology. Fall, Spring
102. Introduction to Human Evolution. 3 hr .; 3 cr . This course presents students with the evidence of human evolution, the relation between humans and other primates, and the facts of biological variation Through selected readings, students will explore the nature of the scientific process and the relationship between the fossil record and the varied interpretations within the scientific community of the development of the human species. Fall, Spring

## 103. Introduction to Archaeology. 3

 hr.; 3 cr . This lecture course traces the major developments in human history and illustrates the methods archaeol ogists use to study the past. The origins of cultural behavior, the invention of agriculture and its consequences, and the development of civilization are examined. Fall, SpringNote: Either Anthropology 101, 102, or 103 may be taken alone, and if all are taken there is no necessary sequence. However the three courses together are designed to give a meaningful survey of anthropology and are a recommended sequence.
104. Language, Culture, and Society. 3 hr.; 3 cr . The role of Ianguage as a significant aspect of culture as well as language and culture diversity around the world are considered in this survey of anthropological linguistics. Fall, Spring
200. History of Anthropology. 3 hr.; 3 cr. Prereq.: 6 credits in anthropology or permission of instructor. A survey of anthropological theories, methodologies, and practitioners from anthropology's inception to the present.
201. Essentials of Cultural Anthropol-
ogy. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. Ethnography - the descriptive study of peoples - is the cornerstone of anthropological endeavor. This course explores the relationship between intensive examinations of small populations and broad interpretations of the human condition. Emphasis is placed on close analyses of ethnographies representing differing theoretical positions. Fall, Spring
203. Human Sexuality. 3 hr.; 3 cr. Sexuality is examined from the perspective of both physical and cultural anthropology. Topics covered include: an examination of Western approaches to sexuality; the history of sexology with particular reference to the contributions of anthropologists; the
evolution of sexual reproduction (with spe cial reference to distinctively human aspects); sexual practices and ideology considered cross-culturally. Fall, Spring

## Cultural Area Courses

(Note: The department publishes specific descriptions of its "Regional Peoples" courses each semester they are offered that are appropriate for the specific faculty member or adjunct offering the course.)
205. Peoples of Mexico and Guatemala. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. $\dagger$
206. Peoples of South America. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. $\dagger$
207. Native North Americans. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. Fall, Spring
208. Peoples of Asia. 3 hr .; 3 cr . Prereq.: Six credits in social science or sophomore standing. $\dagger \dagger$
209. Peoples of E urope. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Six credits in social science or sophomore standing. $\dagger \dagger$
210. Peoples of E ast Asia. 3 hr .; 3 cr Prereq.: Six credits in social science or sophomore standing. $\dagger \dagger$
211. Peoples of Africa. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. $\dagger \dagger$
212. Peoples of the Middle E ast. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. $\dagger \dagger$
213. Peoples of the Contemporary United States. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. $\dagger \dagger$
214. Peoples of New York City. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. $\dagger \dagger$
215. Peoples of the Caribbean. 3 hr .; 3 cr. Prereq.: Six credits in social science or sophomore standing. $\dagger \dagger$
219. Topics in Cultural Area Studies. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. Topics will be announced. Course may be repeated provided the topic is not the same. $\dagger \dagger$
222. Sex, Gender, and Culture. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. This course will examine the social construction of gender in a wide range of cultures. Beginning with the question of the degree to which gender roles are biologically determined, we will focus our attention on the divergence of gender roles and the nature of gender inequality throughout the world. We will analyze power dynamics between men and women at the household level, the community level, and in the larger context of the state for a variety of societies ranging from hunter gatherers in Africa, to peasants in China, to professionals in the United

States. We will discuss the ways in which women in different cultures obtain degrees of autonomy and power within their cultural contexts. The course will draw on theoretical and ethnographic readings dealing primarily with non-western societies. $\dagger$
223. Family, Kin, and Friends. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. The goal of this course is to understand the changes occurring in contemporary family, kin, and friend relationships by an evolutionary and comparative examination of such structures from other times and other cultures. $\dagger \dagger$
224. Religion: Belief and Ritual. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. $\dagger \dagger$
226. Psychological Anthropology. 3 hr .; 3 cr. Prereq.: Six credits in social science or sophomore standing. $\dagger \dagger$
227. E ducational Anthropology. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. Anthropological approaches to the study of education and culture transmission in this and other soci eties. A consideration of education as a cul tural institution from the cross-cultural perspective. $\dagger \dagger$
229. Practicing Anthropology. 3 hr.; 3 cr. Prereq.: Nine credits in anthropology or instructor's permission. This course offers a brief overview of the field of Practicing (Applied) Anthropology. Beginning with a history of the field and through selected case studies, it examines the reciprocal relationship between general theory and practice, looks at the ethical and intellectual problems confronted by anthropologists when they make or enable government policy, and describes the various areas health, education, intercultural communication, business, social services, government, law - which currently employ anthropologists to solve problems. $\dagger \dagger$
232. Ethnographic Photography. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. This course will develop perceptual and technical skills to enable students to document field research by successfully depicting some aspect of the human condition in the medium of black and white photography.
233. Race, Class, and Ethnicity. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. Physical differences among human populations are complex, continuous, and include many more invisible than visible traits. After brief consideration of human genetic variation around the world, we examine cultural schemes that segment and compress this diversity into a small number of "races." Racial systems emerge in particular historical and cultural settings, always involve differences in power, and vary from society to society. Readings and lectures focus on inequality and its relationship to concepts of race, ethnicity, and class in different parts of the world. $\dagger \dagger$
234. Food and Culture. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. This course introduces students to anthropological concepts and research that bear on the subjects of food, eating, nutrition, and disease. Topics covered include origins of human food-related behaviors; changing dietary patterns as revealed by archaeology and physical anthropology; cultural aspects of diet, disease, and malnutrition; the relationship between diet and social organization, as well as symbolic aspects of human food taboos and preferences. $\dagger$
235. Essentials of Practical Culture Study. 3 hr.; 3 cr. Prereq.: Anthropology 101, 102, and 104. Through classroom instruction and practical exercises, both in Anthropology's Cultural Diversity Laboratory and in the field, students will develop the practical skills, specific abilities, and anthropological perspectives essential for successfully conducting and reporting the ethnographic field experience. $\dagger$
238. Research Design and Method. 3
hr.; 3 cr. Prereq.: Six credits in anthropolo gy. This course shows students how anthropol ogists go about answering the questions they ask. We look at how research is designed, how data are collected and analyzed, and how empirical results are presented. Students will learn the fundamentals of sampling, descriptive and inferential statistics, and techniques for displaying relationships graphically. $\dagger \dagger$
239. Topics in Cultural Anthropology. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. Topics will be announced. Course may be repeated provided the topic is not the same. $\dagger \dagger$
240. Essentials of Archaeology. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. An examination of archaeol ogical techniques and methods of interpretation that provide the basis for reconstruction of the lifeways of past cultures. Fall, Spring
241. Archaeology of Mesoamerica. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. Examines the development of Mesoamerican cultures. $\dagger \dagger$
242. Archaeology of E urope. 3 hr .; 3 cr . Prereq.: Six credits in social science or sophomore standing. This lecture course traces the major themes in the cultural devel opment of Europe. From the florescence of Paleolithic art through the spread of the Indo-E uropean language to the impact of the Roman Empire on the Celtic world, this course tracks the changing forms of social integration. $\dagger \dagger$

## 243. Archaeology of North America. 3

 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. Examines the devel opment of North American cultures from the arrival of humans on the continent through the impact of European colonization. $\dagger \dagger$245. Archaeology of South America. 3
hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. Examines the development of cultures from the first peopling of South America to the arrival of the Europeans. $\dagger \dagger$

## 246. Anthropology of Ancient Egypt. 3

 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing. Using data from archaeology, hieroglyphs, and cultural anthropology, this course provides a dynamic portrait of the way of life of ancient Egypt. It also sheds light on changing attitudes towards Egypt and explains our fascination with this ancient culture through the centuries. Illustrated with slides and films, this course requires field trips to museum collections. $\dagger \dagger$
## 249. Topics in Archaeological Area

Studies. 3 hr.; 3 cr. Prereq.: Six credits in social science or sophomore standing or permission of instructor. Topics will be announced. Course may be repeated provided the topic is not the same. $\dagger \dagger$

## 250. Field Methods in Archaeology.

250.1-250.6, 1-6 hr.; 1-6 cr. Prereq.: Anthropology 103 or 240 . Field training in archaeological survey and excavation in actual selected field sites. Basic archaeological field techniques will be taught and students will develop skills in scientific data-recording procedures. Prehistoric sites will be located, mapped, and described, and cultural materials will be recovered in the field for subsequent laboratory analysis. $\dagger \dagger$
251. Archaeological Analysis of Pottery. 3 hr.; 3 cr. Prereq.: Anthropology 103 or 240 . This course provides students with "hands on" experience in lab analysis of archaeological pottery. Enrollment is limited to $12 . \dagger \dagger$

## 253. Archaeological Analysis of Stone

Tools. 3 hr.; 3 cr. Prereq.: Anthropology 103 or 240 . With a combination of lectures, labs, and field trips, this course shows how archaeol ogists analyze stone tools. Trips to prehistoric quarries, experiments with stone tool production and use, and lab analysis of excavated stone tools provide "hands on" experience. Enrollment is limited to $12 . \dagger$
259. Topics in Archaeology. 3 hr .; 3 cr . Prereq.: Anthropology 103 or 240 . Topics will be announced. Course may be repeated provided the topic is not the same. $\dagger \dagger$
260. Essentials of Biological Anthropology. 3 hr.; 3 cr. Prereq.: Anthropology 102 or any college biology course. Focuses on the process of human biological evolution. Fall, Spring
262. Introduction to Primates. 3 hr.; 3 cr. Prereq.: Anthropology 102 or permis sion of department. A comprehensive overview of the Order Primates from both a biological and a behavioral/ ecological focus, this course examines the similarities and differences between human and primate behavior and biology and their implications for human evolution. $\dagger$
270. Human Disease. 3 hr.; 3 cr. Prereq.: Anthropology 102 or any college biology course. This course is an introduction to the principles and methods used by epidemiol ogists to determine the causes and study the distribution of diseases in human populations. Cultural aspects of disease are integrated with archaeology and physical anthropology in a broad historical survey to illustrate the impact of disease on historic populations. $\dagger$
272. The Human Skeleton. 3 hr.; 3 cr. Prereq.: Anthropology 102 or any college biology course. Using an anthropological and evolutionary perspective, this course combines an anatomical and functional approach in order to acquaint students with the human skeleton and identification of skeletal remains. Also introduces students to metric studies and to the use of osteometric and anthropometric instruments. $\dagger \dagger$
275. Disease in Prehistory. 3 hr.; 3 cr. Prereq.: Anthropol ogy 102 or any college biology course. Health and biocultural adaptations in prehistoric populations will be explored by examining the effects that stressors such as infectious disease, poor nutrition, traumatic injury, and occupational hazards have on the skeletal system

## 279. Topics in Biological Anthropol-

ogy. 3 hr.; 3 cr. Prereq.: Anthropol ogy 102 or 260 or any college biology course. Topics will be announced. Course may be repeated provided the topic is not the same. $\dagger \dagger$
302. E cology and Culture. 3 hr.; 3 cr. Prereq.: Nine credits in anthropology and junior standing. This seminar focuses on the question, why do cultures change? Taking ethnographic and archaeological examples of foragers, herders, and farmers, the class will examine the relationship between environmental change, human population growth, technological change, the organization of the economy, and the exercise of power. $\dagger \dagger$
304. Anthropology of Development. 3 hr.; 3 cr . Prereq.: Twelve credits in anthropology including 200 and 201 as prerequisites or corequisites or permission of instructor. Third world and indigenous peoples are being incorporated more fully into the modern world system by means of processes generally labeled as "develop ment." Through an examination of several cases, this course will analyze the economic, political, cultural, demographic, and ecological impacts of this process. $\dagger \dagger$
305. Symbolic Anthropology. 3 hr.; 3 cr. Prereq.: Twelve credits in anthropology including 200 and 201 as prerequisites or corequisites or permission of instructor. This course focuses on an analysis of the systems of meaning that humans create that allow them to place themselves in relationships with each other and with the world. The emphasis is on the public nature of meaning and the symbols used to communicate status, power, gender, group memberships, etc. $\dagger \dagger$
306. Anthropology of Religion. 3 hr.; 3 cr. Prereq.: Twelve credits in anthropology including 200 and 201 as prerequisites or corequisites or permission of instructor. This course explores theoretical debates in anthropology concerning religion. In doing so it addresses both the issue of general theories of religion and their applicability in specific cultural contexts. $\dagger$

## 307. Anthropology of Cross-Cultural

 Teaching. 3 hr.; 3 cr. Prereq.: Permission of instructor. Anthropological approaches to multicultural education and cross-cultural teaching and training in pluralistic societies. A consideration of anthropological perspectives on and concepts for the process of cultural transmission in mul ticultural/multiracial environments. $\dagger \dagger$308. Urban Anthropology. 3 hr.; 3 cr. Prereq.: Twelve credits in anthropology including 200 and 201 as prerequisites or corequisites or permission of instructor. An introduction to cities in historical and global perspective, this course examines urban origins, theories of development of preindustrial cities, transformations of urban life in the industrial revolution, and the interplay of race, ethnicity, class, and gender in contemporary cities around the world. Final focus is on U. S. centers and forms of cultural and economic integration that mark all settlements in the contemporary global arena. $\dagger$

## 320. Contemporary Anthropological

 Theory. 3 hr .; 3 cr . Prereq.: Twelve credits in anthropology including 200 and 201 as prerequisites or corequisites or permission of instructor. This course provides an overview of contemporary anthropological theory, including symbolic, interpretive, Marxist, post-structuralist, postmodern, feminist, and historical anthropology. We will read articles by leading theorists and ethnographies which utilize contemporary theory. $\dagger \dagger$330. Seminar in Cultural Anthropology. 3 hr.; 3 cr. Prereq.: Twelve credits in anthropology including 200 and 201 as prerequisites or corequisites or permission of instructor. Course may be repeated for credit provided the topic is different. Spring
331. Archaeological Method and Theory. 3 hr.; 3 cr. Prereq.: Twelve credits in anthropology, including 240 and at least one course numbered 241 to 259, and junior standing. In this seminar, students will examine the theories that have guided archaeol ogical research, and the methods devel oped to pursue these goals. Spring

## 342. Origins of Complex Society. 3 hr.;

 3 cr . Prereq.: Nine credits in anthropology, including at least two courses numbered 200 or higher. This course examines the appearance and development of institutionalized inequalities, and the major forms of political organization humans have devised. Proposed explanations for these phenomena will be evaluated against ethnographic and archaeological examplesof complex societies. $\dagger \dagger$
350. Seminar in Archaeology. 3 hr.; 3 cr. Prereq.: Twelve credits in anthropology, including at least one course numbered 240 to 259 and junior standing. Course may be repeated for credit provided the topic is different. $\dagger \dagger$
360. History of Biological Anthropology. 3 hr .; 3 cr. Prereq.: Twelve credits in anthropology including at least one course numbered 260 to 279 and junior standing or permission of instructor. The primary target of this course is to provide a comprehensive overview of the history of scientific inquiry into the origin and variation of the human species. A central theme is the development of evolutionary thinking, which involves a consideration of changing scientific views of nature and Homo from the Renaissance to the Enlightenment which set the stage for Darwin's work in the 19th century - and the subsequent emergence of the modern evolutionary synthesis. Readings and lectures are directed to an understanding of not only specific concepts and the debates they have engendered, but also the nature of the scientific enterprise. $\dagger \dagger$
361. Human Variation. 3 hr.; 3 cr. Prereq.: Anthropology 260 or two college biology courses and junior standing. $\dagger$
362. Human Paleontology. 3 hr.; 3 cr . Prereq.: Anthropology 260 or two college biology courses and junior standing. $\dagger$
370. Seminar in Biological Anthropology. 3 hr .; 3 cr . Prereq.: Twelve credits in anthropol ogy including at least one course numbered 260 to 279 and junior standing. Course may be repeated for credit provided the topic is different. $\dagger \dagger$
390. Senior Honors Thesis. 3 hr.; 3 cr Prereq.: Major in anthropology, junior standing, at least 21 credits completed, a grade-point average of 3.5, and departmental permission. All majors who have received a grade-point average of 3.5 or better and who would like to receive high honors in anthropology may apply to the department in their upper junior year for permission to write an honors thesis on a subject chosen by them in consultation with a member of the faculty. A faculty member will work with them to help them develop an appropriate research project, prepare a bibliography, and establish a research design appropriate to the project. Students who complete this project with a B or better will receive high honors in anthropology. Fall, Spring
395. Directed Studies in Anthropology. 395.1-395.6, 1-6 hr.; 1-6 cr. Prereq.: Anthropology major with at least 24 credits in anthropology and junior standing or permission of instructor. The student undertakes a topic of study on an independent basis and pursues it under the supervision of a member of the faculty. May be repeated for up to six credits provided the topic is not the same. No more than 6 credits can be taken in the 395 series. $\dagger \dagger$
397. Directed Research in Anthropolo gy. 397.1-397.12, 1-12 hr.; 1-12 cr. Prereq.: Anthropology major with at least 24 credits in anthropology and junior standing or permission of instructor. The student undertakes an individual research problem and pursues it under the supervision of a member of the faculty. Maximum of 12 credits applicable to Baccal aureate Degree. No more than 12 credits can be taken in the 397 series.

## Course in Reserve

225. Medical Anthropology.

## Art

Chair: Marvin Hoshino
Art History Deputy: J udy Sund
Studio Art Deputy: Tyrone Mitchell
Art Education Adviser: Lawrence Fane
Dept. Office: Klapper Hall 172, 997-4800
Art History: Klapper Hall 168, 997-4803
Studio Art: Klapper Hall 172, 997-4800
Professors: Andrews, Birmelin, Carlson, Chave, Clark, Cohen, Connor, F ane, Kramer, Lane, Porter, Ruffins, Saslow, Slatkes; Associate Professors: Davis, H ofsted, Hoshino, Lewine, Magid, Snider, Sund; Assistant Professors: Lin, Mitchell; Lecturer: Percival; Administrative Assistant: Gershoff; Department Secretary: Perlman; Physical Plant: Krest, Smith

The department offers major programs in two areas: Art History and Studio Art. Both programs provide training in these disciplines within the framework of a liberal arts curriculum. It is assumed that further professional and scholarly developments will take place after the Bachelor of Arts degree, according to the needs and objectives of the individual student.

A Bachelor of Fine Arts program in Studio Art is now being offered in addition to the Bachel or of Arts program. Interested students should consult the B.F.A. adviser. See requirements under Studio Art, below.

Students majoring in art must fulfill department requirements as outlined below, as well as particular prerequisites as indicated in the course descriptions. They may apply to be exempted from taking a course required for the major by passing the examination in the course (in Art History), or by obtaining the Examining Committee's approval of a portfolio of work (in the Studio Art area). Exempted students will take a more advanced course instead.

Students majoring in other fields may have the prerequisites waived for any art courses. However, they should consult with a department adviser to ascertain the nature of course demands, and receive advice on courses best suited to their interests.

## The Majors

All students majoring in art are required to take Art 101 and 102, except that students who elect to become art majors after having taken Art 1 should
take either Art 101 or 102 in addition. No more than six credits from these three courses may be applied to the baccalaureate degree requirements.
Note: Art majors may not satisfy the LASAR Humanities II category with an art course, and must take Music 1 or 8 ; or Drama, Theatre, and Dance 1,100 , 101, 102, 111, 150, 201, 202, 203, 204, 269, or 308.

## Art History

The major in Art History requires 36 credits, in addition to which there is a special foreign language requirement. The credits are distributed as follows:
Art H istory - 30 credits, including:
Art 101 and 102. (Art 1 may be substituted for one of these if taken before the student has elected to major in Art History.)

Art 340, Senior Colloquium, to be taken during the senior year.

21 credits in Art History, selected from Art 115, Art 200-250, and Art 335343. In order to take more than three art history courses in any one semester, students must have written permission from the art history adviser.
H istory - 6 credits, chosen in consultation with the adviser.
Foreign $L$ anguage - to be satisfied by one of the following options: through course level 4 in French, German, or Italian; or through course level 3 in one of the above languages, plus a reading course in a second of these languages (or if a reading course is not offered, a beginning course in the second language may be substituted); or through course level 2 in Ancient Greek or Latin, and a reading course in French, German, or Italian (or if such a course is not offered, a beginning course in one of these languages).

Students who have satisfied the College foreign language requirement in a language other than one of those listed above will normally be expected to complete the departmental requirement as well. Consult the art history office for further information.

Transfer students who want credit toward the major in Art History must have taken courses equivalent to those required at Queens College. Requests for transfer credit will be evaluated by the department.

## Studio Art

The department offers a Bachelor of Arts and a Bachelor of Fine Arts in Studio Art. Both prepare a student for creative or professional work in various
media. The B.A. also provides part of the necessary background for the teacher of art in secondary schools (see below). Students interested in the teaching of Studio Art in college should apply for the B.F.A. program and plan to attend graduate school in an approved Master of Fine Arts curriculum.

For either the B.A. or the B.F.A. in Studio Art, or the B.A. in Art Education, a student must complete the following basic sequence:

Prescribed Basic C ourses (G roup A ):
Art 151, 153, 161, 162, 181, 182-18 credits. Students must complete these basic courses before registering for intermediate and advanced studio courses. They may, however, take no more than two upper-level courses before finishing the basic Group A sequence.
A rt H istory - 12 credits including Art 101 and 102. (Art 1, if taken before the student elects to major, may be substituted for one of these.)

In general, the art courses listed above should be taken by the end of the third semester of residence. The student's achievement is then evaluated by the department's J unior Conference Committee, composed of Studio Art faculty. This committee, along with the student, then plans a sequence of courses for the upper two years of residence, which conforms to the student's needs, abilities, and interests. A concentration form listing these courses is filed with the department office. A student wishing to apply for the B.F.A. program should do so at this time by petition to the J unior Conference Committee.

The B.A. program is completed with a total of 42 credits in Art, to include 10 credits of Studio Art electives and Art 391, Senior Project, to be completed in the seventh or eighth semester. Students may not register for more than 42 credits in art without permission of the department. At least one semester of recommended studio work must intervene between the completion of the basic Group A courses and registration for Art 391.

The B.F.A. program is completed with a total of 72 credits, distributed as follows:

Studio A rt E lectives - 35 credits.
Art 350, Studies in Comparative Analysis.
Art 391 and 392, Senior Project.

## Art Education

Students planning to teach art in junior or senior high schools are required, for certification in the State of New York
and for licensing in New Y ork City, to complete 42 credits in art plus prescribed courses in secondary education. The requirements are similar to those of the B.A. in Studio Art, except that Art 235 or 236 should be included in the 12credit Art History requirement. Required secondary education courses are SEYS 201, 221, 222, 333, 365, and 375.

## Transfer Students

Transfer students who want to major in Studio Art, Art Education, or Drama \& Theatre and Art must present a transcript and portfolio to the Transfer Credit Evaluation Committee of the Art Department. They may be credited with up to 6 credits in Studio Art on the basis of transcript only, or up to 15 credits on the basis of transcript and portfolio. In addition, a transfer student may receive as many blanket credits in studio work as the committee considers justified. Except as the committee may exempt them, transfer students will take all of the prescribed basic courses and senior project at Queens College. Transfer students should defer the taking of Art 391 or 392 to their final semester in residence at Queens College.

## The Minors

The minor in Art History requires 18 credits, which should include Art 101 and 102 (Art 1, if already taken, may substitute for either). Four elective courses, which must include one course from at least three of the general areas of art history - ancient, medieval, renaissance, baroque, and modern - to be selected from Art 115, Art 200-250, and Art 335-343.

The minor in Studio Art consists of 21 credits: five courses selected from the six basic courses in drawing, painting, design, and sculpture (Art 151, 153, 161, 162, 181, 182), one introductory course in art history (Art 101, 102, or 1), and 3 credits of studio electives.

## COURSES

## Introductory Course

1. Introduction to Art. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. An introduction to art, dealing with the basic concepts of painting, sculpture, and architecture and their formal, symbolic, and expressive functions. The lectures are illustrated with slides. Fall, Spring

## Art History

No more than 6 credits in introductory courses (Art 1, 101, 102) in Art History may be applied to the baccalaureate degree.

101, 102. History of Art I, II. 3 hr.; 3 cr. each semester. A survey of the history of Western art, studied in historical sequence and in greater depth than in Art 1. Fall, Spring
110. Survey of Ancient Art. 3 hr.; 3 cr. $\dagger \dagger$
111. Survey of Medieval Art. 3 hr.; 3 $\mathrm{cr} . \dagger \dagger$
112. Survey of Renaissance and Baroque Art. 3 hr.; $3 \mathrm{cr} . \dagger \dagger$
113. Survey of Modern Art. 3 hr.; 3 cr. $\dagger \dagger$
114. Survey of Non-Western Art. 3 hr.; 3 cr. $\dagger \dagger$
115. Principles of Architecture. 3 hr.; 3 cr. $\dagger$
200. Studies in the History of Art. 3 hr .;

3 cr . Topic to be discussed changes each semester. May be repeated for credit. Fall, Spring
201. Studies in the History of Architec-
ture. 3 hr .; 3 cr . Topic to be discussed changes each semester. May be repeated for credit. $\dagger$
203. Art and Archaeology of the Ancient Near East. 3 hr .; $3 \mathrm{cr} . \dagger \dagger$
204. Art of Ancient Egypt. 3 hr.; 3 cr. $\dagger \dagger$
205. Art of Early Greece. 3 hr .; $3 \mathrm{cr} . \mathrm{t} \dagger$
206. Art of Archaic, Classical, and Hellenistic Greece. 3 hr .; $3 \mathrm{cr} . \dagger \dagger$
207. R oman Art. 3 hr .; 3 cr . $\dagger \dagger$
211. Early Christian and Byzantine

Art. 3 hr.; 3 cr. $\dagger \dagger$
212. Early Medieval Art in Western Europe. 3 hr .; 3 cr . Fall
213. Gothic Art. 3 hr.; 3 cr. Spring
221. Art in Italy: The Fourteenth Century. 3 hr.; 3 cr. $\dagger \dagger$
222. Renaissance Art in Italy: The Fifteenth Century. 3 hr .; $3 \mathrm{cr} . \dagger \dagger$
223. Renaissance Art in Italy: The Sixteenth Century. 3 hr .; 3 cr . $\dagger \dagger$
225. Painting in Northern E urope: The Fifteenth Century. 3 hr .; $3 \mathrm{cr} . \dagger \dagger$
227. Baroque Art in Italy. 3 hr.; 3 cr. Fall
228. Baroque Art in Northern Europe. 3 hr.; 3 cr. Spring
230. Principles of City Planning. 3 hr.; $3 \mathrm{cr} . \dagger \dagger$
231. The Eighteenth Century in E urope. 3 hr.; $3 \mathrm{cr} . \dagger \dagger$
232. American Art. 3 hr.; 3 cr. $\dagger \dagger$
233. Modern Architecture. 3 hr.; 3 cr. $\dagger$
235. Modern Art I: Nineteenth Century. 3 hr.; 3 cr. Fall, Spring
236. Modern Art II: Twentieth Century. 3 hr.; 3 cr. Fall, Spring
237. Themes and Concepts in Modern Art. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. The course will treat the history of modern (late 19th- and 20th-century) Western art by identifying and investigating in depth certain themes and concepts that have been particularly central to its development. Students will be assigned term papers on selected objects in New York City museums. May be repeated if topic varies.
241. Art of India and Southeast Asia. 3 hr.; 3 cr. $\dagger \dagger$
242. Art of China and J apan. 3 hr.; 3 cr. $\dagger \dagger$
244. Latin American Art. 3 hr.; 3 cr. $\dagger \dagger$
245. African Art. 3 hr.; 3 cr. $\dagger \dagger$
250. History of Graphic Art. 3 hr.; 3 cr. $\dagger \dagger$
335. Late Modern Art. 3 hr.; 3 cr. Pre req.: Art 235 and 236 are recommended preparation. Surveys of twentieth-century art tend to stress early modern issues. By contrast, this course focuses on the late modern period, beginning with late surrealist issues in Europe and Regionalist art in America. $\dagger \dagger$
336. The History of Modern Sculpture. 3 hr.; 3 cr. Prereq.: Art 235 and 236 are recommended preparation. $\dagger \dagger$
337. The History of Photography. 3 hr .; 3 cr. Prereq.: Art 235 and 236 are recommended preparation. $\dagger \dagger$
338. Museum Studies. 3 hr.; 3 cr. Prereq.: At least one Art History class beyond the survey level (Art 200-250). This course will acquaint students with museum work by providing supervised participation in the functioning of the Godwin-Ternbach Museum. Students will engage in such museum activities as the preparation of exhibitions and care of the collection. Practical experience will be supplemented by lectures on the history of the art museum and the concerns of the contemporary museum world, and by behind-the-scene visits to other museums. A term paper on a particular object in the Museum's collection is required.
340. Senior Colloquium in the History of Art. 3 hr.; 3 cr. Prereq.: Departmental approval. An introduction to the tools of art historical scholarship. Problems of organization of research, bibliography, iconography, and stylistic analysis. Survey of the history of art-historical concepts and their effects. Fall
342. Internship in Art History. 342.1342.4, 1-4 hr.; 1-4 cr. Prereq.: 3.0 department average; a letter of acceptance detailing the research project from the program to which student is applying; permission of the art history adviser. An independent course in which a student

Note English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). tOffered either Fall or Spring; see Class Schedule. $\dagger \dagger$ May be offered; see Class Schedule
works for a semester as an intern in a museum or an agency dealing with works of art. The course permits the student to devel op and undertake a special research project related to the internship under the supervision of a department adviser. Evaluation of the student will be based on report from supervisor on student's work and a written report on the project.
343. Special Problems. 6 hr.; 3 cr. Prereq.: College average 2.75, department average 3.4. Open to a limited number of qualified students who want to do independent work in the history of art. Written application for permission to enroll, stating in detail the nature and scope of the proposed project, must be submitted to the department Chair at least one month prior to the date of registration. Fall, Spring

Studio Art
151. Drawing I. 4 hr .; 3 cr .
152. Drawing II. 4 hr.; 3 cr. Prereq.: Art 151.
153. Two-Dimensional Design I. 4 hr.; 3 cr.
161. Introduction to Painting. 4 hr.; 3 cr. Introduction to fundamental concepts of painting, both abstract and representational. Space and surface compositions from nature, volumetric representation showing the function of color, value scale, placement, and proportion.

## 162. Color I. 4 hr.; 3 cr.

181. Modeling from Life. 4 hr.; 3 cr. Sculpture based on forms in nature including the human figure. Work is done in clay or wax.
182. Introduction to Sculpture. 4 hr.; 3 cr. Introduction to sculptural concepts relating to both representational and abstract imagery. Consideration of form, space, and scale through the use of a variety of materials (clay, plaster, wood, etc.), with some investigation of historical precedents.
183. Three-Dimensional Design. 4 hr.; 3 cr. Investigation of form, space, and structure in three dimensions using a variety of materials, including paper, plaster, wood, metal, etc. Students are instructed in the use of hand tools and shop machinery.
184. Graphic Representation I. 4 hr.; 3 cr. Projection drawing. $\dagger \dagger$
185. Graphic Representation II. 4 hr.; 3 cr. Prereq.: Art 251. Projection drawing. $\dagger \dagger$
186. Drawing III. 4 hr.; 3 cr. Emphasis on the individual student's concerns and contemporary issues in drawing. $\dagger \dagger$
187. Illustration I. 4 hr.; 3 cr. Prereq.: Art 151, 153 or permission of instructor. The visual interpretation of words using drawing, painting, and collage with application to editorial illustration, artists' books, graphic design, and art direction.
188. Painting II: Composition. 4 hr.; 3 cr. Prereq.: Art 161.
189. Watercolor I. 4 hr.; 2 cr. Prereq.: Art 161. Fall
190. Water Color II. 4 hr.; 2 cr. Prereq.: Art 261. Spring
191. Two-Dimensional Design II. 4 hr.; 3 cr. Prereq.: Art 153. Extension of the material of basic two-dimensional design to an examination of contemporary concep tions of two-dimensional organization in terms of painting and decorative design. $\dagger \dagger$
192. Painting III. 4 hr.; 3 cr. Prereq.: Art $260 . \dagger \dagger$
193. Woodcut. 4 hr.; 3 cr. Prereq.: Group A courses. $\dagger \dagger$
194. Intaglio. 4 hr.; 3 cr. Prereq.: Group A courses. $\dagger \dagger$
195. Lithography. 4 hr.; 3 cr. Prereq.: Group A courses. Development of original lithographs using a wide variety of drawing methods and printing techniques. $\dagger \dagger$
196. Photography I. 4 hr.; 3 cr.
197. Photography II. 4 hr.; 3 cr. Prereq.: Art 275.
198. Computer Imaging I. 4 hr .; 3 cr . Introduction to computer graphics using commercially available software. (No previous computer experience necessary.)
199. Procedures in Sculpture. 4 hr .; 3 cr. Prereq.: Art 102, 151, 181, 183. $\dagger \dagger$
200. Ceramics I. 4 hr.; 3 cr.
201. Ceramics II. 4 hr.; 3 cr. Prereq.: Art 281.
202. Sculpture II. 4 hr.; 3 cr. Prereq.: Art 181, 182, 183. More advanced projects and traditional and contemporary issues in sculpture, such as space definition, relation of sculpture to gravity, volume and weight, gesture, and imagery. Though a variety of materials are employed, there is an emphasis on the use of clay and plaster in the essential crafts of mold-making and casting. $\dagger \dagger$
203. Sculpture III. 4 hr.; 3 cr. Prereq.: Art 283. Sustained and individualized work by advanced students in a variety of materials and conceptual formats. Technical vocabulary is enlarged with instruction in such areas as welding, woodworking, and stone carving. Emphasis may vary with the interests of each instructor. $\dagger \dagger$
204. Graphic Design and Typography $1.4 \mathrm{hr} . ; 3 \mathrm{cr}$. Introduction to use of word and image in advertising, communication design, packaging, book and magazine typography, and corporate identity. The study of printing types and their uses, copyfitting, typerendering, computer typography, and various printing processes such as offset lithography. Practice in layout, paste-up, and mechanicals.
205. Graphic Design and Typography II. 4 hr .; 3 cr . Prereq.: Art 293. An extension of Art 293 with an emphasis on improved hand skills and on historical and contemporary practice in graphic design and its role in the development of a person-
al style. Further practice in the analysis and solution of design problems. Field trips to printers and relevant exhibitions. Fall Spring
206. Graphic Design and Typography III. 4 hr.; 3 cr. Prereq.: Art 294. An extension of Art 294, leading to the devel opment of a graphic design portfolio, including advertisements, posters, displays, editorial design, lettering application, books, brochures, and design for video and film. Fall, Spring
207. Advertising Design. 4 hr.; 3 cr. Prereq.: Art 153. $\dagger \dagger$
208. Applied Design. 4 hr.; 3 cr. Prereq.: Group A courses. $\dagger \dagger$
209. Studies in Comparative Analysis for Studio Majors. 3 hr.; 3 cr. Prereq.: Group A courses, Art 101, 102, and one art history elective. Discussions of selected topics in the history of art, cutting across historical sequences to compare fundamen tal strategies, structures, techniques, and their associated values. A language of description and analysis is developed through specific distinctions between individual works and across the range of the topics. These include perception, conception, approaches to subject matter, spatial construction and articulation, color rendering, materials, and techniques. $\dagger$
210. Advanced Drawing. 4 hr.; 3 cr. Prereq.: Group A courses. $\dagger \dagger$
211. Visual Imagery. 4 hr.; 3 cr. Prereq.: Group A courses.
212. Art of the Book. 4 hr .; 3 cr . Prereq.: Group A courses and Art 352. Research study and practice of the handbound book as an art form. Advanced work in interpre tive and narrative drawing for artists interested in illustrating books for publication.††
213. Photography III. 4 hr.; 3 cr. Prereq.: Art 276.t†
214. Illustration II. 4 hr.; 3 cr. Prereq.: Art $258 . \dagger \dagger$
215. Illustration III. 4 hr.; 3 cr. Prereq. Art 358.t†
216. Computer Imaging II. 4 hr.; 3 cr. Prereq.: Art 277. $\dagger \dagger$
217. Computer Imaging III. 4 hr.; 3 cr Prereq.: Art 360. $\dagger \dagger$
218. Color II. 4 hr.; 3 cr. Prereq.: Group A courses. $\dagger \dagger$
219. Abstract Painting. 4 hr.; 3 cr. Pre req.: Group A courses. Continuation of basic two-dimensional design into abstract easel and wall painting. $\dagger \dagger$
220. Specialized Topics in Painting. 4 hr.; 3 cr. Prereq.: Group A courses. Offered with a different topic each semester. May be taken three times for credit. $\dagger \dagger$
221. Ceramics III. 4 hr.; 3 cr. Prereq.: Art 282.
222. Sculpture in Plaster. 4 hr.; 3 cr. Prereq.: Group A Courses. Workshop in sculpture with emphasis on plaster as a casting, modeling, and constructing material.††
223. Sculpture in Metal. 4 hr.; 3 cr. Prereq.: Group A courses. $\dagger \dagger$
224. Sculpture in Wood. 4 hr.; 3 cr. Prereq.: Group A courses. $\dagger \dagger$
225. Constructed Sculpture. 4 hr.; 3 cr. Prereq.: Group A courses. $\dagger \dagger$
226. Specialized Topics in Sculpture. 4 hr.; 3 cr. Prereq.: Group A courses. Subject will change from semester to semester (when offered) according to the pedagogical needs felt by the department and the availability of faculty with specific interests. Subject and faculty will be announced before registration. $\dagger \dagger$

## 386. New Forms. 4 hr.; 3 cr. Prereq.:

 Group A courses. The exploration of values, concepts, and working methods in the visual arts, which abandon the traditional limits and characteristics of painting, sculpture, and printmaking, to enlarge both formal vocabulary and ways of communicating. The work of selected artists will be discussed as a basis for individual and group projects. $\dagger \dagger$
## 387. Special Workshops in Creative

 Art. 387.1-387.4, 1-4 hr.; 1-4 cr. Technical skills such as welding, woodworking, fresco, and the like are taught in a workshop as a foundation for subsequent aesthetic development. $\dagger \dagger$390. Studies in Contemporary Art. 2 hr.; 3 cr. Prereq.: Permission of department. Colloquium designed to develop critical awareness. May be repeated for credit provided the topic is different. $\dagger \dagger$
391. Senior Project I. 4 hr.; 3 cr. Prereq.: Creative art major with senior standing or department approval. In addition to the studio project, students are required to submit a term paper and a group of drawings as determined through individual consultation.
392. Senior Project II. 4 hr.; 3 cr. Prereq.: Art 391, B.F.A. major with senior standing or department approval
393. Special Problems. 6 hr.; 3 cr. Prereq.: College average 2.75, department average 3.4. Open to a limited number of qualified students who want to do independent work in creative art. Written application for permission to enroll, stating in detail the nature and scope of the proposed project, must be submitted to the department Chair at least one month prior to the date of registration. Fall, Spring

Special Projects in Studio Art. 4 hr.; 3 cr. Prereq.: Completion of basic core (Group A) courses and permission of the instructor. Additional prerequisites for specific projects are listed below. Any title may be repeated for a maximum of six credits with permission of the department.

Special Projects courses are designed for students who want more intensive work in any studio discipline, or to strengthen or advance their basic skills in:

## 254. Drawing SP.

255. Design SP.
256. Painting SP.
257. Color SP.
258. Two-Dimensional Composition SP. Prereq.: Art 260.
259. Three-Dimensional Composition SP. Prereq.: Art 280.
260. Sculpture SP.
261. Graphic Design and Typography SP. Prereq.: Art 293.
262. Computer Imaging SP. $4 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Art 361. May be retaken up to a maximum of 6 credits.
263. Illustration SP. $4 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Art 358. May be retaken up to a maximum of 6 credits.
264. Woodcut SP. Prereq.: Art 271. $\dagger \dagger$
265. Intaglio SP. Prereq.: Art 272. $\dagger \dagger$
266. Lithography SP. Prereq.: Art 273. $\dagger \dagger$
267. Photography SP. Prereq.: Art 275.
268. Ceramics SP. Prereq.: Art 273.

Note that students whose professional objectives and interests indicate the desirability of enrolling for more than 42 credits in intermediate and advanced studio courses must obtain approval of the department. Students are cautioned not to register for studio projects at the expense of required courses.

## Courses in Reserve

291. Calligraphy I.
292. Calligraphy II.
293. Calligraphy III.
294. Calligraphy SP.
295. Film-Making.
296. Watercolor Painting.

# A sian Studies 

Director: Morris Rossabi

Office: King 203, 997-5570
The major in Asian Studies is a flexible program designed for students wishing to gain familiarity with the languages, history, and cultures, as well as the social, religious, and political institutions of the countries of Asia in ways that can be applied to a wide range of fields including law, foreign affairs, international business, secondary education, comparative literature, art history, and a variety of other professions and academic disciplines. Presently, the major focuses on China and J apan, and the languages offered are Chinese, $J$ apanese, and Korean. However, attention is also given to India and Southeast Asia to gain a wider perspective.

Students will be expected to fulfill general requirements for the major and also to choose an area of concentration; in each area of concentration, the student will also be expected to take a course that does not necessarily cover Asian topics but provides exposure to the methodology of the particular field. These areas of concentration might include anthropology, art history, Asian American topics, comparative literature, economics, history, linguistics, music, philosophy, political science, religious studies, sociol ogy, or women's studies. Examples of this are given below, following the description of the major.

Each student plans an individual course of interdisciplinary study in consultation with the Director of Asian Studies. Students are admitted to the major after their plan of study is approved by the Director.

## The Major

## General Requirements

Language, 3 to 14 credits. The language requirement is a fundamental element of the Asian Studies major; it can be fulfilled by completing the elementary and intermediate sequence of four semesters in Chinese, J apanese, or K orean (101, 102, 203, 204). Students who place at a more advanced level, or who have native or near-native proficiency in one of these languages, must take one course at their appropriate level.
Introductory courses, 9 credits. All students must take Oriental Studies 140, Introduction to East Asian Religions (3 cr.). In accordance with their area of concentration, they must take the intro-
ductory sequence in literature: Comparative Literature 220 and 221, E ast Asian Literature I and II; or civilization: Oriental Studies 220 and 221, East Asian Civilization I and II; or history: History 112, Introduction to East Asian History; and one of History 140, China to 1500, or History 141, China after 1500, or History 142, History of J apan.

## Concentration Requirements

An additional 5 courses ( 15 cr .) to be chosen from introductory and specialized topics in Asian Studies, and one course ( 3 cr .) in the discipline of the concentration which emphasizes either another culture or theory.

## SAMPLE PROGRAMS OF STUDY

Concentration in Chinese History
Chinese language requirement
Oriental Studies
140. Introduction to East Asian Religions
220, 221. East Asian Civilization I, II
History

1. Survey of Western Civilization from

Ancient Times to 1715
112. Introduction to East Asian History
140. China to 1500
141. China after 1500

Anthropol ogy
208. Peoples of Asia

Chinese
240. Chinese Fiction in Translation
340. Readings from Chinese History

Concentration in Japanese Literature
J apanese language requirement
Oriental Studies
140. Introduction to East Asian Religions
Comparative Literature
220, 221: East Asian Literature I, II
102. Great Books II; or

English
150. Introduction to Literary Study

J apanese
250. M odern J apanese Fiction in

Translation
255. TheTale of Genji

305, 306. Advanced M odern
J apanese I, II
History
142. History of J apan

## Concentration in Asian Art

Chinese, J apanese, or K orean language requirement
Oriental Studies
140. Introduction to East Asian

Religions
220, 221. E ast Asian Civilization I, II Art
101 or 102. History of Art I, II
114. Survey of Non-Western Art
241. Art of India and Southeast Asia
242. Art of China and J apan

Music
234. Music of Asia; or:

History
143. The History of the Indian Subcontinent

Concentration in Chinese Literature
Chinese language requirement
Oriental Studies
140. Introduction to East Asian Religions
English
150. Introduction to Literary Study

Chinese
240. Modern Chinese Fiction in Translation
250, 251. Introduction to Classical Chinese I, II
Comparative Literature
203. The European Novel; or:
205. Modern Poetry

And two of the following:
Chinese
350. Chinese Fiction
360. Traditional Chinese Literature
370. Chinese Short Story

Comparative Literature
331. Literary Criticism

## Concentration in Korean Studies

K orean language requirement
Oriental Studies
140. Introduction to East Asian Religions
220, 221. E ast Asian Civilization I, II

## Korean

120. Civilization of K orea
121. Readings in Korean; or other upper-level Korean literature courses as offered

History
112. Introduction to East Asian History

Comparative Literature
220, 221. East Asian Literature I, II
Sociology
275. Sociology of Asian Americans

Many other options exist and can be discussed with the Director and faculty advisers.

## Electives

Electives include all the advanced Ianguage and literature courses in Chinese,

J apanese, and K orean, as well as litera-
ture, culture, and civilization courses
given in translation. Other electives
may include the following:
Anthropol ogy
208. Peoples of Asia
210. Peoples of East Asia

Art
114. Survey of Non-Western Art
241. Art of India and Southeast Asia
242. Art of China and J apan

Comparative Literature
220, 221. East Asian Literature I, II
Economics
211. E conomics of Asia

History
112. Introduction to E ast Asian History
140. China to 1500
141. China after 1500
142. History of J apan
143. The History of the Indian

Subcontinent
Music
234. Music of Asia

Philosophy
118. Introduction to Oriental Philosophy

Political Science
238. Politics and Government of East Asia
258. East Asia in World Politics

Religious Studies
102. Introduction to E astern Religions
211. Essentials of Buddhism

Sociol ogy
275. Sociology of Asian Americans

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
†Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.

## Biology

Chair: Uldis Roze
Assistant Chair for Evening Studies: David W. Alsop

Deputy Chair for Undergraduate Studies: H. Roberta K oepfer

Deputy Chair for Doctoral Studies: J eanne Szalay

Master's Program and Secondary Education Adviser: Andrew M. Greller

Director of Laboratories and Chief CLT: Robert Francis

Department Office: SB D346, 997-3400; Fax: 997-3445

Professors: Chabora, Greller, Marcus, Michels, Mundinger, Roze, Szalay, Wasserman; Adjunct Professor: MerIuzzi; Associate Professors: Alsop, Calhoon, K oepfer, Rifkin, Sperling, Zakeri; Adjunct Associate Professor: Bienkowski; Assistant Professors: Magazine, Short; Adjunct Assistant Professor: Bergman; Chief Laboratory Technician: Francis; Laboratory Technicians: Ball, Fay, Giancone, Lawrence, Peers, San Giovanni; Department Secretaries: Pisko, Ross; Professors Emeriti: Aaronson, Berech, Colwin, A., Colwin, L., Hecht,
J ohanssen, Kaplan, Marien; Associate Professor Emeritus: Pierce

The Biology Department offers two major courses of study: the General Biology track and the Biology-Secondary Education track. Students who choose either one must consult with an appropriate program adviser early in their course of studies.

Students following the General Biology track are provided with a foundation for a variety of professional options. U pon graduation, they may find employment as technicians in health-related, industrial, or university laboratories. Those desiring a research career in the governmental, private, or academic sector should plan to continue their education at the graduate level. Such a career may be focused toward work in the field and/or in the laboratory. This track is valuable to those interested in consumer protection services, environmental law, forestry, conservation, and scientific and medical illustration or writing. Government opportunities exist in the Departments of Agriculture, State, Interior, Commerce, Health and Human Services, and Treasury. This track is also the traditional route to professional schools leading to careers in medicine, dentistry, optometry, and other health-related
vocations. Students interested in attending a medical, dental, podiatry, optometry, pharmaceutical, or veterinary school should consult with the College Pre-Professional Health Career Adviser.

The Biology-Secondary Education track, a program of study coordinated with the School of Education, is designed for students who want to meet the requirements for teaching biology in middle, junior high, and senior high schools. Questions concerning this track should be referred to the Biology-Secondary Education Adviser of this department. Students should also consult with the Department of Secondary Education and Y outh Services (SEYS) to determine the education requirements for New Y ork State certification.

## Nonmajor Courses

The department offers survey and topicoriented courses (designated as the 1-99 series) that have been designed for nonmajors and have no prerequisites. Most of these courses have recitation/demonstration sections rather than formal laboratories.

## The Major

Students who choose biology as a major must consult with an appropriate program adviser (the programs are listed below) early in their course of studies. Majors interested in the health professions should consult with the department pre-professional career adviser, and those who are interested in teaching in the secondary schools should consult with the Biology-Secondary Education Adviser.

Students must prepare a concentration plan with an adviser and file this plan with the department by the beginning of the sophomore year. This plan is solely a description of a proposed course of study; it may be changed at any time in consultation with an adviser. The student must also be listed with the Registrar as a biology major or minor. Both the concentration plan and notification of the Registrar are required before a student can take advantage of department preregistration for advanced courses in biology or be graduated.

Students may not have a biology course with a grade below C- credited toward their department major requirements.

No course may be taken more than twice, and credit will be given only once for the same course.

## Course Requirements

1. All of the following requirements
are subject to modification with the written approval of the department Chair. The following courses are generally required of all biology majors:

Biology 107, 108, and 285 (Principles of Genetics) or their equivalents; fulfillment of the Track I or Track II requirements, and:

Thirty-six credits of courses in the following cognate departments: Chemistry and Biochemistry, Computer Science, Geology, Mathematics, Physics. These must include a minimum of a year of Chemistry and Mathematics 111 and 112, or equivalent.
Note: Students wishing to attend health professions schools or to undertake further graduate training must take some or all of the following cognate courses: Chemistry 113, 114, and 251, 252; Physics 121 and 122, or equivalent.

## Track I: General Biology

At least 36 credits in Biology, including the general requirements, with the remainder being in 200- and 300-level courses, of which at least 3 must be 300level courses and at least 5 must be laboratory courses. Research courses (390, 391, 395, 396) may not be applied for fulfillment of the major. Course selection must be made in consultation with a departmental adviser.

## Track II: Biology-Education

1. At least 30 credits in Biology, including the general requirements, with the remainder being in 200- and 300 -level courses, of which at least 2 must be 300-level courses and at least 3 must be laboratory courses. At least 16 of the credits above Biology 107 and 108 must be taken at Queens College. Research courses (390, 391, 395, 396) may not be applied for fulfillment of the major. Course selection must be made in consultation with the Biology-E ducation Adviser.
2. At least 16 credits in major-level courses in the following cognate departments: Chemistry and Biochemistry, Computer Science, Family, Nutrition \& Exercise Sciences, Geol ogy, M athematics, Physics, chosen in consultation with the adviser. These must include a minimum of a year of Chemistry (normally Chemistry 19,59) and M athematics 100 or 101 or 111, or equivalents.
3. A co-major in the Department of Elementary and Early Childhood Education and Services or a minor in the Department of Secondary Education and Youth Services, as prescribed by a subject matter adviser of the pertinent EECE or SEYS Department.

Biology Majors Who are Pre-Medical, Pre-Dental, Pre-Optometry, Pre-Podiatry, or Pre-Veterinary Students
Adviser: D. Marien; Secretary: C. Farley; Office: SB B338
It is recommended that pre-health professions students take several laboratory courses in biology and biochemistry. These courses should be completed before the beginning of the senior year.

## Biology Majors Who Wish to Teach Biology in Secondary Schools

Adviser: A. Greller
Students who want to meet requirements for a certificate to teach biology in middle, junior, or senior high schools, should follow the Track II major and consult with the Department of Secondary Education and Youth Services to determine the education requirements for New York State certification.

## Evening Session

Assistant Chair, Biol ogy: D. Alsop Provides able individuals with the opportunity to acquire a liberal arts education on either a part-time or full-time basis. The following groups are served by the Biology Department through evening offerings:

1. Students who are fully qualified for admission to a baccalaureate degree program but prefer to attend during evening hours.
2. Students who want to pursue planned programs of study for specific professional and vocational objectives on either a part-time or full-time basis.
3. Students interested in continuing their self-development through courses and programs in general education.
4. Students who wish to major in biology but can only attend during evening hours: the Biology Department will offer in the evening session, on a rotating basis, a sufficient number of advanced courses to permit completion of a major in biology within a six-year period.
If permission of the Chair is listed as a prerequisite, evening students should interpret this to mean permission of the Assistant Chair for Evening Studies.

## The Minor

Students who minor in biology must complete Biology 107 and 108 and at least 9 credits of advanced courses (200 level or above). At least two of the advanced courses must be laboratory courses. All of the advanced courses must be taken at Queens College.

## COURSES

## Course Numbering

All courses offered by the Biology Department are numbered according to the following system:

1-99. Courses open to students in all disciplines, but not creditable to the major or minor in biology.

100-199. Introductory courses for majors and minors (freshman level).

200-299. Second-level courses for which the prerequisites are Biology 106 and Chemistry 114 (sophomore level).

300-399. Third-level courses having either a 200 -level biology or advancedlevel chemistry prerequisite (upper-class level).
In addition, the middle digit of all 200and 300 -level course numbers is used to denote the area of study of the course, as follows:

0-Microbiology
1-Botany
2-Zoology
3-Mathematical Biology
4-Community and Ecosystem Biology
5-Genetics and Evolution
6-Cell and Developmental Biology
7-Physiology
8-Variable Content, Seminars, Colloquia
9-Undergraduate Research

## Nonmajor Courses

8. Fundamentals of Biology. 2 lec., 2
lab. hr.; 3 cr. A survey course in biology designed for students in Adult Collegiate Education (ACE) and the LEAP project. The areas of cell biology, heredity, development, physiology, ecology, and evolution are covered. Emphasis will be placed on human-related topics such as health, the environment, and current developments in biology. No previous knowledge of biology or chemistry is assumed. Not open to students who have taken Biology 11. MAT charge, $\$ 25$. Fall, Spring
9. Introductory Biology. 3 lec. hr.; 3 cr. A general introduction to biology in the areas of cell biology, genetics, development, vertebrate physiol ogy, ecology, and evolution. No previous knowledge of biology or chemistry assumed. Not open to students who have taken Biology 8, 11, Chemistry 113,114 , or the equivalent, except with the permission of the Chair.
10. Introduction to College Biology. 3 lec., 3 lab. hr.; 4 cr . A general introduction to biol ogy in the areas of cell biology, genetics, development, vertebrate physiology, ecology, and evolution. No previous knowledge of biology or chemistry assumed. For students in all areas, including physical education majors and prospective biology majors who have not had previous high school biology or chemistry courses. Not open to students who have taken Biology 8 , 9 , Chemistry 113 , 114 , or the equivalent, except with permission of the Chair.

## MAT charge, \$25.

12. Field Ecology of New York. 2 lec., 1 rec., 3 lab. hr.; 4 cr. A course stressing field study, with emphasis on the identification and ecology of the life forms of New York State. Part of the outdoor study may be done at the QC Center for Environmental Teaching and Research at Caumsett. One overnight trip may be scheduled. For nonscience majors. Not open to students who have taken Biology 101 or 102 or the equivalent. MAT charge, $\$ 50$.

## 20. Introduction to the Human

 Embryo. 3 lec. hr.; 3 cr. Study of the development of the human embryo from conception to birth, with reference to human reproductive physiology and human genetics. May not be used to fulfill biology major or minor requirements.21. Introduction to Human Genetics. 3 lec. hr.; 3 cr . Heredity, with special emphasis on human genetics. For non-science majors. May not be used to fulfill biology major or minor requirements.
22. Introduction to Human Physiology. 3 lec. hr.; 3 cr. How the human body works: support and movement, coordination and communication, digestion, excretion, and reproduction. For non-science majors. May not be used to fulfill biology major or minor requirements.
23. Human Biological Origins. 3 lec. hr.; 3 cr . Biology in the fourth dimension. A tour through time to examine our successively more remote ancestors and their relationships to other important groups such as birds and dinosaurs. Includes some trips to museums. F or non-science majors. May not be used to fulfill biology major requirements.
24. Biology and Society. 3 lec. hr.; 3 cr. Prereq.: None, although Biology 11 is recommended. Biology and Society is a nonmajor lecture course (supplemented with video) focusing on selected biological principles in genetics, development, evolution, physiology, and ecology which are discussed in context of their impact on the human population. The approach throughout is to initially provide a scientific background of principles and processes and then relate them to human society in the most global sense. The ethical considerations of many situations, such as genetic testing, pollution influences on developmental disabilities, and humanitarian aid in overpopulation crises, are considered.
25. Ecology and Mankind. 3 lec., 1 rec./ demon., 4 hr .; 4 cr . The natural world and its response to the human influence. Field trips around campus, to local parks, and other areas. For non-science majors. May not be used to fulfill biology major or minor requirements. MAT charge, $\$ 25$.

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). tOffered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
31. The Plant World. 3 lec., 1 rec./ demon., 4 hr .; 4 cr . The relationship of plants to the environment and humanity. Topics considered will be: the nature of plants, plants and humans, plant life through the ages, classification of plants, plant communities, plant geography, and basic plant structure and function. Students will take trips to study plants in local natural areas, and two weekend trips to a museum and a botanical garden. May not be used to fulfill biology major or minor requirements. MAT charge, $\$ 25$.
43. Anatomy and Physiology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biol ogy 11 or 107; Chemistry 10 or 59 or the equivalent. Functional and descriptive anatomy and physiology of the human and other mammals, emphasizing practical aspects. Not open to students who have completed Biology 108, except by permission of the Chair. May not be used to fulfill biology major or minor requirements. MAT charge, $\$ 25$.
44. Food and Human Microbiology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 11 or 107; Chemistry 59 or the equivalent. The student will be introduced to general microbiology. Emphasis will be placed on the microbiology of food and human disease and immunology. The laboratory will deal with the characteristics of microorganisms and their role in the preparation of food. May not be used to fulfill biology major or minor requirements. MAT charge, \$25.
50. Issues in Biomedical Ethics. 2 lec., 1 rec. hr.; 3 cr. Prereq.: Open to both science and non-science students, open to juniors and seniors only; a course in college biology, or written permission of the instructor. A student seminar with exploration of such issues as death and dying, genetic engineering, human experimentation, behavior control, health-care delivery, patients' rights, and biomedical research and war. Concepts from biology, philosophy, history, law, political science, and sociology will be evaluated as a means of broadening perceptions of bioethics in our complex society. May not be used to fulfill biology major or minor requirements
51. Sociobiology. 3 lec. hr.; 3 cr. Prereq.: Open only to juniors and seniors. An evolutionary and ecological analysis of social behavior and communication in humans and animals. Nature and nurture from a modern scientific perspective. Examines the biological and social basis of behaviors such as altruism, male and female reproductive strategies, parenting, generation gaps, cultural patterns, and language. May not be used to fulfill biology major or minor requirements.
52. The Biology of Cancer. 3 lec. hr.; 3 cr. Prereq.: Biology 11 or permission of instructor. How normal cell function and division is controlled as compared to the metabolism and growth of cancer cells. Includes consideration of the factors causing or contributing to cancer formation (chemicals, viruses, radiation, diet, genet-
ics), the classification of cancers, the ratio nale for and description of the different types of cancer therapy, and future directions for cancer research. May not be used to fulfill biology major or minor requirements.

## Introductory Courses for the Major

107. General Biology: Life F orms, EvoIution, and Ecosystems. (formerly Biology 106) 3 lec., 3 lab. hr.; 4 cr. Prereq. or coreq.: Chemistry 113 or the equivalent. The first semester of a two-semester sequence for biology and science majors and minors, pre-health professionals, and those majoring in related areas. The topics include a survey of the kingdoms and an introduction to genetics, evolution, and ecology. MAT charge, \$25.
108. General Biology: Physiology and Cell Biology. (formerly Biology 105) 3 lec., 3 lab. hr.; 4 cr. Prereq.: Biology 107 and Chemistry 113, or the equivalent. The second semester of a two-semester sequence for biology and science majors and minors, pre-health professionals, and those majoring in related areas. Topics include principles of cell biology, physiology,
development, and molecular genetics. MAT charge, \$25.

## 200-Level Major Courses Microbiology

201. General Microbiology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 108; Chemistry 114 or the equivalent. Significance, structure, metabolism, and functions of microorganisms; the basic bacteriol ogical techniques of culture, isolation, and identification. MAT charge, \$25.

## Botany

210. Lower Plants. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 108; Chemistry 114 or the equivalent. Introduction to the biology of the algae, fungi, and bryophytes of the northeastern United States. Laboratory includes several field trips. MAT charge, \$50
211. Fungi. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 108; Chemistry 114 or the equivalent. Survey of the major taxa of fungi, including the slime molds, with emphasis on their morphology, physiology, and taxonomy. The importance of fungi as causal agents in diseases of humans, other animals, and plants, and as experimental tools in genetic, biochemical, and physiological research will be considered. Basic techniques of culturing fungi are used in the execution of individual projects. MAT charge, $\$ 50$.
212. Higher Plants. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 108; Chemistry 114 or the equivalent. Survey of the vascular plants with emphasis on the flowering plants and taxonomic characteristics useful in identification of major plant groups. Laboratories will be devoted to techniques of identification. Students will submit a
plant collection. Field trips comprise a large part of the laboratory component; they will occupy half or whole days. MAT charge, \$50.
213. Field Botany. (formerly Biology 217) 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 108 (or 105); Chemistry 114 or the equivalent. Introduction to local flora and vegetation. Lectures will emphasize the structure and composition of local vegetation. Laboratories will consist mainly of field trips to parks, preserves, and botanical gardens. Students will submit a field trip report and a plant collection. MAT charge, \$50.

Zool ogy
220. Invertebrate Zoology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 108; Chemistry 114 or the equivalent. Evolution, classification, anatomy, and physiology of the invertebrates. Laboratory includes dissection of representative forms and a weekday or weekend field trip. MAT charge, $\$ 50$.
225. Vertebrate Natural History. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 108; Chemistry 114 or the equivalent. The natural history, classification, and autecology of the vertebrates. Field studies of the loca fauna. Usually offered in the Spring or Summer. Overnight field trips in Spring and a 6-day field trip in Summer. MAT charge, $\$ 50$.
226. Comparative Vertebrate Anatomy. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 108; Chemistry 114 or the equivalent. Functional and phylogenetic morphology of the vertebrates. Laboratory includes dissection of representative forms. MAT charge, $\$ 25$.

## Mathematical Biology

230. Introductory Biometrics. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biol ogy 108; Chemistry 114 or the equivalent. Not open to students who have successfully completed any one of the following courses (or their equivalents): Biology 330; Economics 249; Health and Physical Education 165; Mathematics 14, 241; Psychol ogy 107; Sociology 205, 306. Probability models, statisti cal inference, design of experiments, and critical analysis of statistical applications in biology.

Genetics and Evolution
250. Genetics. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 108; Chemistry 114 or the equivalent. An introduction to the fundamental mechanisms of heredity, including the structure and function of genetic material, and the modes of its transmission through the generations. MAT charge, \$25.
251. Genetics Laboratory. 1 rec., 3 lab. hr.; 2 cr. Prereq. or coreq.: Biology 285. Laboratory exploration of the fundamental concepts of genetic analysis utilizing different model organisms. MAT charge, \$25. Cell and Developmental Biology
261. Cell Biology Laboratory. 1 rec., 3 lab. hr.; 2 cr. Prereq. or coreq.: Biology 286. Examination of the many different types of cells and their cellular components, and an introduction to methodologies and techniques employed in cell studies. MAT charge, \$25.
262. Laboratory Techniques in Cellular and Molecular Biology I. 2 rec., 3 lab. hr.; 3 cr. Prereq. or coreq.: Biology 108; Chemistry 114 or the equivalent. Biology 285 is strongly recommended as a prerequisite or corequisite. Introduction to the basic laboratory techniques of molecular biology. MAT charge, $\$ 50$.
263. Laboratory Techniques in CelluIar and Molecular Biology II. 2 rec., 3 lab. hr.; 3 cr. Prereq. or coreq.: Biology 108; Chemistry 114 or the equivalent. Biology 286 is strongly recommended as a prerequisite or corequisite. Introduction to the basic laboratory techniques of cellular biol ogy. MAT charge, \$50.

## Principles Courses

285. Principles of Genetics. 2 lec., 1 rec. hr.; 3 cr. Prereq.: Biology 108; Chemistry 114 or the equivalent. The inheritance, structure, and mode of genetic material.
286. Principles of Cell Biology. (formerly Biology 260) 3 lec. hr.; 3 cr. Prereq.: Biology 108; Chemistry 114. Structure, function, and regulation of cells, including cell cycle, subcellular compartmentalization, signal transduction, and cell-cel interactions.

## 300-Level Major Courses

Botany
312. Morphology and Evolution of

Plants. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 210, or 212, or 213. Comparisons of plant form and function. Lectures will emphasize the structure and origin of plant organs, and the use of this information in classifying major plant groups. Information from paleobotany will be integrated with comparative morphology of living plants. Laboratory includes several field trips. MAT charge, \$50.
also see 343 (Plant E cology), 371 (Plant Physiology), and 380 (Field Biology)

## Zoology

320. Parasitology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 220. Ecol ogy, distribution, pathology, and control of the parasites of humans and other selected animals. Particular emphasis on the evolution of host-parasite relationships, and on the approaches to solving the basic problems of animal parasitism. MAT charge, \$25.
321. Entomology. 2 lec., 1 rec., 3 lab. hr.; 4 cr . Prereq.: Biology 220. Anatomy, physiology, classification, and ecology of the terrestrial mandibulate arthropods, with special emphasis on the insects. Laboratory includes field trips and may require an
insect collection. Students should expect to reside at the Queens College Center for Environmental Teaching and Research, Caumsett State Park, Lloyd Neck, Long Island, for at least one week of the course (dormitory fees will be announced and collected at time of registration). Summer Session only. MAT charge, \$50.
also see 345 (Animal Behavior), 360 (Vertebrate Histology), 365 (Developmental Biology), 372 (Vertebrate Physiology), and 380 (Field Biology)

## Mathematical Biology

330. Design of Experiments. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 230 or an equivalent introductory course in statistics (E conomics 249; Health and Physical Education 165; Mathematics 14, 241; Psychology 107; Sociology 205, 306); or permission of instructor. The design and analysis of biological experiments. Formulation of biological problems in terms of statistical analysis, planning experiments, and anticipating appropriate analyses. Use of computer statistical packages.

## Community and Ecosystem Biology

340. General Ecology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 220 and 212 or 213. Theory and analysis of structure, growth, regulation, and dynamic interactions within and between populations. Composition of biological communities in terms of their structure, species abundance and diversity, interspecific interactions, and integration with the physical environment. MAT charge, $\$ 50$.
341. Plant Ecology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 212 or 213; Geology 101 and/or 102 strongly recommended. Classification, distribution, structure, dynamics, and climatology of plant communities. Emphasis on the vegetal assem blages of North America. Laboratory includes weekday and some weekend field trips to natural areas, botanical gardens, and museums. MAT charge, $\$ 50$.
342. Animal Behavior. 2 lec., 1 rec., 3 Iab. hr.; 4 cr. Prereq.: Biology 250 or 285. Study of animal behavior. Topics include the description, evolution, devel opment, physiol ogical basis, and ecological significance of behavior. MAT charge, \$50.
343. Limnology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 210 and/or 220. Survey of the physical, chemical, and biological properties and features of streams, rivers, and lakes. MAT charge, \$50.
344. Marine Biology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 210 and/or 220. Study of marine organisms and biological oceanography. Short trips scheduled on oceanographic research vessels. Usually offered in Summer. MAT charge, $\$ 50$.
345. Chemical E cology. 2 lec. hr.; 2 cr. Prereq.: Biology 108; Chemistry 251 or equivalent. The chemical mediation of ecological interactions, including chemical
basis of food selection, plant antiherbivore and antifungal defenses, chemistry of mutualistic associations, animal pheromones and defense substances, allelopathy, and chemicals in the environment.
346. Chemical Ecology Laboratory. 4
lab. hr.; 2 cr. Prereq. or coreq.: Biology 348. The use of modern instrumental techniques in chemical ecology: analysis of foods, measurement of nutrient and electrolyte levels of biological materials, isolation and quantification of plant and animal defense compounds.

## also see 380 (Field Biology)

## Genetics and Evolution

350. Molecular Genetics. 3 lec., 1 rec. hr.; 4 cr. Prereq.: Biology 285 and 286; Chemistry 251 or the equivalent. Chemistry majors may substitute Chemistry 375 in lieu of Biology 286. Molecular basis of heredity. Topics include the structure of DNA and RNA, transcription, translation, mechanisms of recombination and mutation, regulation, and transmission genetics of viruses, prokaryotes, and eukaryotes.
351. Evolution. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Any of Biology 212, 220, 226, or 251. Study of the mechanisms and processes by which groups of organisms change through time. MAT charge, $\$ 25$.

Cell and Developmental Biology
360. Vertebrate Histology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 286. Microscopic structure and ultrastructure of vertebrate tissue and organ systems. Laboratory emphasizes identification and analysis of commercially prepared slides of vertebrate tissue. MAT charge, $\$ 25$.
364. Theory and Biological Application of Electron Microscopy. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 263 and 360 . Principles and practice of electron microscope operation and preparation of tissues for fine structure studies. MAT charge, \$50.
365. Developmental Biology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 286. Gametogenesis, fertilization, and embryonic development through organogenesis. Mechanisms of cell differentiation and morphogenesis as revealed by techniques of experimental embryology. MAT charge, $\$ 50$.

## Physiology

371. Plant Physiology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 286; Chem istry 252 or the equivalent. Anatomy, physiology, molecular biology, and development of plants. MAT charge, $\$ 25$.
372. Vertebrate Physiology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Biology 286; Chemistry 252 or the equivalent. F unctioning of the major organ systems of animals, with special emphasis on the vertebrates. MAT charge, \$25.
Variable Content, Seminars, Colloquia
373. Field Biology Studies. 380.3, 9 hr.; 3 cr., $380.4,12$ hr.; 4 cr., $380.5,15 \mathrm{hr} . ; 5 \mathrm{cr}$., 380.6, 18 hr.; 6 cr. Prereq.: Variable prerequisites and requires permission of the instructor(s). A variable content course encompassing field studies in the areas of botany, ecology, entomology, invertebrate and vertebrate zoology, and limnology. Usually offered Summers only, with the 36 credits depending on the subjects included and the time involved. The focus of the course is the comparative study of habitats and their components. Format and destinations are variable and costs reflect the mode of travel, destination, and type of accommodations. MAT charge, $\$ 50$.
381, 382. Colloquium in Biology. 1 hr.; 1 cr. each semester. Prereq.: Senior standing and permission of the instructor.
374. Special Topics in Physiology, Cell, and Developmental Biology. 385.1-
385.4, 1-4 hr.; 1-4 cr. Prereq.: Biology 285 and 286; upper junior or senior standing and permission of the instructor. One area of current interest will be studied in depth each semester. Course may be repeated for credit when the subject changes.

## 386. Special Topics in E cology and

 Evolutionary Biology. 386.1-386.4, 1-4 hr.; 1-4 cr. Prereq.: Upper junior or senior standing and permission of the instructor. One area of current interest will be studied in depth each semester. Course may be repeated for credit when subject changes.
## Undergraduate Research

390, 391. Research in Biology.
390.1, 3 hr. a week; 1 cr. each semester; 390.2, 6 hr. a week; 2 cr. each semester; 390.3, 9 hr. a week; 3 cr . each semester; 391.1, 3 hr . a week; 1 cr . each semester; 391.2, 6 hr. a week; 2 cr. each semester; 391.3, 9 hr . a week; 3 cr . each semester. Prereq.: Two or more courses in biology numbered 200 or above and written permission of a faculty sponsor. Biology majors of exceptional ability may arrange to do research under supervision of a member of the staff.

## 395, 396. Honors Research in Biology.

395.1, 3 hr. a week; 1 cr. each semester; 395.2, 6 hr . a week; 2 cr . each semester 395.3, 9 hr. a week; 3 cr. each semester; 396.1, 3 hr. a week; 1 cr. each semester; 396.2, 6 hr. a week; 2 cr . each semester 396.3, 9 hr. a week; 3 cr. each semester. Prereq.: Biology 390 and senior standing and written permission of a faculty sponsor. Biology majors of exceptional ability may arrange to do honors research under the supervision of a member of the staff. U pon completion of the research, a thesis must be submitted and approved by the faculty sponsor.

The following graduate courses are open to qualified undergraduates with written permission of the department Chair.
501. Recent Advances in Biology. 2 lec.,

2 lab./demo. hr.; 3 cr. Prereq.: One year of general biology. Open only to Master of Science in Education candidates who are concentrating in science education. Selected topics in the life sciences. Not open to candidates for the Master of Arts degree in Biology. $\dagger \dagger$
510. Selected Topics. 2-4 hr.; 2-4 cr. Prereq.: One year of general biology. Open only to Master of Science in Education candidates who are concentrating in science education. Lectures in a selected area of biology, concentrating on current concepts May be taken for credit more than once provided topic changes. Not open to candidates for the M.A. degree in Biology.
610. Lower Plants. 2 lec., 1 rec., 3 lab. hr.; 4 cr . A survey of algae, bryophytes, and fungi of the northeastern United States, with an emphasis on identification, morphology, physiology, and ecology. A library or field research paper is required.
614. Mycology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: One semester of genetics and permission of instructor. A survey of the major taxa of fungi, including slime molds, with emphasis on their morphology and taxonomy. The importance of fungi as causal agents in diseases of man, other animals, and plants, as experimental tools of genetic, biochemical, and physiological research will be considered. Basic techniques of culturing fungi will be utilized in the execution of individual projects. MAT charge, $\$ 25 . \dagger$
617. Field Botany. 2 lec., 1 rec., 3 lab. hr.; 4 cr . Prereq.: A course in plant biology or its equivalent. The biology and ecology of the local flora. Summer Session only. MAT charge, $\$ 50$.
621. Entomology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Course in invertebrate zoolo gy. Anatomy, physiology, and ecology of insects. Identified insect collection required of each student. Students should expect to reside at the QC Center for Environmental Teaching and Research, Caumsett State Park, Lloyd Neck, Long I sland, for at least one week of the course (dormitory fees will be announced and collected at time of registration). Summer Session only. MAT charge, $\$ 50$.
626. Vertebrate Phylogeny. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: A course in comparative anatomy. Phylogeny and interrelationships of the important major groups of the phylum Chordata, emphasizing the origins of higher categories and their adaptive radiation into sub-groups. Laboratory on representatives of fishes, amphibians, reptiles, birds, and mammals, emphasizing differences in locomotion, feeding mechanisms, and sense organs found within the same subclasses, infra-classes, superorders, and orders, with practice in the identification of typical specimens likely to be found in the field.
630. Biometrics. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Course in genetics and calculus. Probabilistic models in biology, field,
and laboratory sampling; tests of hypotheses; uses of statistics for estimation. Topics selected will include growth processes of organisms and populations, discriminant functions, and genetic descriptions of evol ving populations. Laboratory includes computational procedures in evaluating biological data. $\dagger \dagger$
680. Field Biology Studies. 680.3, 9 hr.; 3 cr., 680.4, 12 hr.; 4 cr., $680.5,15$ hr.; 5 cr., 680.6, 18 hr.; 6 cr. Prereq.: Variable prerequisites and permission of the instructor(s). A variable content course encompassing field studies in the areas of botany, ecology, entomology, invertebrate and vertebrate zoology, and limnology. Usually offered Summer only, with the 3-6 credits depending on the subjects included and the time involved. The focus of the course is the comparative study of habitats and their components. Format and destinations are variable and costs reflect the mode of travel, destination, and type of accommodations. A term paper is required. MAT charge, $\$ 50$.
682. Environmental Biology and the Law. 3 lec., 1 proj. prep. hr.; 4 cr. Prereq.: Experience in environmental field studies and permission of the instructor. An analysis of federal and state statutes and regulations in relation to environmental biology. Cases of major import are studied and analyzed. Students are expected to develop an understanding of applicable law, both statutory and common law, as it affects such areas as land-use control, protection of wetlands, endangered species, water and air pollution. Students are required to do a project paper evaluating environmental impact statements in terms of the various statutes and regulations. $\dagger \dagger$
685. Special Topics. 685.2-685.4, 2-6 hr.; $2-4 \mathrm{cr}$. Special topics in various areas of cellular, devel opmental, environmental, or evolutionary biology to be taken by arrangement with the instructor and graduate adviser. No more than 3 credits of Special Topics will be credited toward the Master's degree. This course is designed primarily for students entering the M.A. program, particularly from other institutions, and must be taken during the first year of graduate study. $\dagger \dagger$

## Business and Liberal Arts <br> (BALA)

Director: Barbara Sandler
Advisory Committee: Erickson, Hanlon, Prall, Saft
Secretary: Evelyn Hurr
Office: Kissena Hall 315, 997-2860
Business and Liberal Arts is a rigorous, interdisciplinary minor for the liberal arts major. Conceived and planned in response to the results of a corporate survey undertaken by the Queens College Corporate Advisory Board in 1986, BALA is designed to help students build bridges between the liberal arts and business. Study of the liberal arts and performance in the corporate world both depend on the ability to communicate in person and on paper, to analyze and solve problems, and to share ideas with colleagues. BALA makes explicit those capacities long associated implicitly with a liberal arts education. Consistent with the tradition of the liberal arts, BALA marries the study of the arts and sciences with carefully selected exposure to basic business disciplines.

## The Minor

The BALA minor consists of eight required three-credit courses totalling 24 credits, which may be taken in conjunction with any major.

## Eligibility Requirements

Only a limited number of students can be admitted to the program each semester, since we must work within existing faculty resources while maintaining our commitment to small class size.
Entrance is competitive and selective. Students will be selected for the program based on grade-point average, an essay, and an interview with the Director. In conjunction with the Faculty Advisory Committee, the Director shall make the decision on whether a student is admitted.

## Retention Requirement

Retention in the BALA minor requires maintenance of a 3.0 overall GPA, and a 3.3 GPA in the required BALA courses.

## Curriculum

Of the eight required courses, four provide an interdisciplinary, conceptual
context for linking business and the liberal arts (Introductory Seminar, Law and Ethics of Business, Analytical ProbIem Solving and Decision Making, Critical Thinking in Business); four make explicit how fundamental skills within the liberal arts are applicable to business (Oral Communication in the Workplace, Computers with Business Applications, Financial and Managerial Accounting, Essay Writing for Special Fields).

## COURSES

100. Introductory Seminar in Business and Liberal Arts. 3 hr.; 3 cr. Prereq.: Permission of Director. Topics will vary from seminar to seminar according to the interests of the instructor. Assignments will include short papers and oral presentations related to the seminar topic. (This course is limited to students enrolled in the BALA minor.)

## 103. Critical Thinking in Business. 3

hr.; 3 cr. Prereq.: Limited to students enrolled in BALA minor. Introduces students to effective reasoning as used in business. Students will learn how to define issues, ask key questions, clarify assumptions, evaluate evidence, avoid stereotypes, assess risk and opportunity, and resolve conflicts. Examples are selected from domestic and international business contexts.
302. Law and Ethics of Business. 3 hr .; 3 cr . Prereq.: BALA 100 and junior or senior standing. An examination of legal issues concerning rights, liabilities, and obligations in corporate life, as well as the ethical obligations of businesses. Included will be analyses of selected law cases illustrative of the ethical as well as legal problems arising for both domestic and transnational corporations. (This course is limited to students enrolled in the BALA minor.)

## 303. Analytical Problem Solving and

 Decision Making in Business. 3 hr .; 3 cr. Prereq.: Computer Science 18, Accounting 100, and BALA 103. An introduction to problem solving in business utilizing selected case histories. Emphasis will be placed on the importance of using a broad base of general knowledge and a wide variety of approaches and techniques to decision making. (This course is limited to students enrolled in the BALA minor.)391. Business Internship. 120 hr . work experience plus 8 hr . of conference; 3 cr . Prereq.: Satisfactory completion of five BALA courses and permission of BALA Director. Participation required in workshops in resume preparation and job interview skills. Participation in the internship may be contingent upon a successful interview at the sponsoring organization. Interns are expected to perform managerial tasks with emphasis on writing, speaking, computing, and critical thinking. Students will be supervised by a faculty adviser. This course may be repeated once
for a maximum of 6 credits.
Other required courses for the minor besides BALA 100, 103, 302, and 303 include:
Accounting 100. Financial and Managerial Accounting
Communication Arts and Sciences 165. Oral Communication in the Workplace
Computer Science 18. Computers with Business Applications
English 201. Essay Writing for Special Fields: Writing for Business
BALA is not a business administration minor, but rather a liberal arts program dedicated to building a bridge between business and the university.

All guidelines regarding Queens College requirements and LASAR apply to the BALA minor, but no BALA course or section given specifically for BALA students, including Computer Science 18, fulfills any LASAR requirement.

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
tOffered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.

# Byzantine and M odern G reek Studies 

Director: Harry J. Psomiades
Program Coordinator: Effie Lekas
Advisory Committee: Bird, FrangakisSyrett, Lewine, Manicas, Picken, Schneider
Office: J efferson Hall 301, 997-4520
The program offers a structured body of courses, drawn from the Division of the Arts and the Division of the Social Sciences, leading to a major in Byzantine and Modern Greek Studies. It is designed to provide a detailed knowledge of the history, language and literature, institutions, customs, and culture of the Greek people from Byzantine times to the present. Program offerings are divided into the following categories: A) Byzantine Studies, B) M odern Greek Studies, C) Modern Greek Literature and Culture, D) Greek-American Studies.

Byzantine and Modern Greek Studies should be of special interest to those students who have either a cultural or professional interest in the Greek experience, and to those seeking to understand a culture and civilization other than their own. Because the program draws from several disciplines, it provides insights into the unity of knowledge and is an excellent choice as a second major. It provides the background for graduate work in Byzantine and/or Modern Greek Studies and may lead to careers in education, community organization and development, social work, business, journalism, and international affairs.

## The Major

Requirements for the major are:

1. A minimum of 36 credits in Byzantine and Modern Greek Studies, including GRST 100; one of the following courses: GRST 101 or 102; two courses each from three of the four categories listed under intermediate courses; and a seminar, for a total of 27 credits.* The introductory courses in each category are, on principle, a prerequisite for the intermediate courses, tutorials, and seminars in each category. Exemptions from this rule may be given by the Director with concurrence of the instruc-

[^7]tor. Tutorials, colloquia, and seminars not listed in the program but in which the student demonstrates a significant research effort on a Byzantine or Greek theme may, with the approval of the Director, fulfill the research requirement or be offered as an elective.
2. In addition, majors are required to take four semesters of M odern Greek or pass a proficiency examination in Modern Greek equivalent to the intermediate level. Students who plan to concentrate in Byzantine Studies may offer four semesters of Ancient Greek or its equivalent. Up to 3 credits of Ancient or M odern Greek through the intermediate level may be used toward the 36credit requirement for the major.

Transfer students must take a minimum of 18 credits in the program regardless of the number of credits earned at another institution in Byzantine and Modern Greek Studies. Students with two majors, including Byzantine and Modern Greek Studies, may not cross-list more than 12 credits toward the 36 -credit requirement. Majors are encouraged to confer with the Director of the program at all stages of their studies. A concentration form should be filed with the program during the junior year. Students are advised to consult the program's Student Handbook for a detailed description of courses offered each semester.

## The Minor

Requirements for the minor are:

1. A minimum of 18 credits in Byzantine and Modern Greek Studies, including GRST 100; one of the following courses: GRST 101 or 102; out of the four categories listed, two courses from one and one course from another, for a total of 15 credits.
2. In addition, students are required to take four semesters of M odern Greek or pass a proficiency examination in Modern Greek, equivalent to the intermediate level. Students who plan to concentrate in Byzantine Studies may offer four semesters of Ancient Greek or its equivalent. Up to 3 credits of Ancient or M odern Greek through the intermediate level may be used toward the 18-credit requirement for the minor.

Elementary and Early Childhood Education majors may use Byzantine and Modern Greek Studies to meet the department's requirement for a major (36 credits) in another field.

## Course Sequence

## Introductory

The courses below are introductions to the major categories of Byzantine and Modern Greek Studies. Students are advised to complete these courses by the end of their sophomore year.
GRST 100. Modern Greek Culture and Civilization
GRST 102. The Greek-American Community

## Intermediate

A. Byzantine Studies

Art 211. Early Christian and Byzantine Art
History 209. The Byzantine Empire, 324-1025
History 210. The Byzantine Empire, 1025-1453
B. Modern Greek Studies

Economics 221. The Economy of Greece
History 239. History of Southeastern Europe, 1354-1804
History 240. History of Southeastern Europe, 1804 to the Present
History 241. M odern Greek History, 1821-1923
History 242. M odern Greek History, 1923 to the Present
Political Science 241. The F ormation of the M odern Greek State
Political Science 260. The Middle East in World Politics
Political Science 269. Colloquium in International Politics (when subject is Greece and/or Cyprus)
C. Modern Greek Literature and Culture

Anthropology 209. Peoples of Europe (when subject is Greece and/or Cyprus)
GRST 200. Greek Cinema
Greek 305. M odern Greek Literature I
Greek 306. M odern Greek Literature II
Greek 150. M odern Greek Literature in Translation
D. Greek-American Studies

GRST 201. Colloquium on the GreekAmerican Community
ETST 310. Six Major Ethnic Groups of New York City
Urban Studies 202. Racial and Ethnic Minorities in Urban America

## Seminars

GRST 300. Seminar on the Greek-American Community
GRST 301. Seminar in Byzantine and Modern Greek Studies
Greek 321. Survey of M odern Greek Literature I
Greek 322. Survey of Modern Greek Literature II

Greek 323. Survey of M odern Greek LiteraturellI
History 394. Seminar in History (when the topic is on Byzantine, Balkan, or M odern Greek History)
Political Science 384. Seminar in International Politics (when the topic is on Greece and/or Cyprus, or when listed as the Middle East in World Politics)

## Additional Electives

Greek 204. Intermediate Modern Greek II
Greek 211. Modern Greek Conversation
Greek 315. Writing about Literature: Theory and Practice
Greek 330. Early M odern Greek Literature: F ourteenth to Seventeenth Century
Greek 335. M odern Greek Poets
Classics 120. Greek Civilization
GRST 202. Selected Topics in Byzantine and Modern Greek Studies
GRST 390. Tutorial (on Byzantine and M odern Greek subjects)

## COURSES

100. Modern Greek Culture and Civilization. 3 hr.; 3 cr . From the fall of Constantinople (1453) to the present, a survey of the political, intellectual, and social currents of Greek life.
101. Byzantine Culture and Civilization. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. A survey of the political, religious, intellectual, and social currents of Byzantine life.
102. The Greek-American Community. 3 hr .; 3 cr . An interdisciplinary study of the Greek experience in America, drawing upon works of history, sociology, and literature. The internal structures of Greek communities; the family, religion, culture, education, and the economic order; their participation in the decision-making process and their relation to the ideol ogy of the "melting pot" and the rise of "neoethnicity."
103. Greek Cinema. 4 hr.; 3 cr. Prereq.: GRST 100 or permission of the instructor. This course examines a major aspect of the development of the Greek cinema as an expression of the formation of Greek culture in the twentieth century. The films screened change annually. In addition to the Greek cinema, the course will discuss the varying foreign aesthetic schools and directors that have influenced filmmakers in Greece.
104. Colloquium on the Greek-American Community. 3 hr.; 3 cr . Prereq.: GRST 102 or permission of instructor. The topic studied will vary from semester to semester and will be announced in advance. May be repeated once for credit provided the topic is not the same. A student may not use GRST 201 twice to satisfy the requirement for two courses in
category D. See program office for details.
105. Selected Topics in Byzantine and Modern Greek Studies. 3 hr.; 3 cr. The subject to be studied will vary from semester to semester and will be announced in advance. May be repeated for credit provided the subject is not the same.
106. Seminar on the Greek-American Community. 3 hr.; 3 cr. Prereq.: GRST 102, one course from category D, sophomores and above only. Supervised research on the Greek-American community. The seminar is designed to assist students in the analysis and interpretation of selected survey areas pertaining to the GreekAmerican community, and will entail contacts with community organizations. See program office for details.
107. Seminar in Byzantine and Modern Greek Studies. 3 hr .; 3 cr . Prereq.: Permission of program Director. An intensive study in a selected field of Byzantine and Modern Greek Studies. The subject to be studied will vary and will be announced in advance. This course may be repeated for credit provided the subject is not the same.
108. Tutorials. 3 hr.; 3 cr. Prereq.: Upper junior or senior standing and permission of the program Director. Students undertake and complete an individual research problem in their field of special interest under the direction of an instructor in the program.

# C hemistry and B iochemistry 

Chair: Harry D. Gafney

Graduate Advisers: Robert Engel (Chemistry), Wilma A. Saffran (Biochemistry)
Department Concentration Adviser:
George Axelrad, 997-4102
Evening Session Coordinator: Raymond L. Disch, 997-4193

Summer Session Coordinator: Thomas C. Strekas, 997-3275

Dept. Office: Remsen 206, 997-4100
Distinguished Professor: Bittman; Professors: Axelrad, Baker, Berkowitz, Disch, Engel, Gafney, Goldman, Hersh, W., K oeppl, Locke, Schulman, Strekas, Tropp; Associate Professors: Rotenberg, Saffran; Assistant Professor: Mirkin;
Adjunct Associate Professor: Wong;
Adjunct Assistant Professor: Hersh, C.;
Research Associates: Seven Postdoctoral
Fellows; Thirty-five Graduate Students; Laboratory and Radiation Safety Officer: de Szalay; Chief CLT and Director of Laboratories: Smith; Chief CLT: Wurman; Senior CLTs: Badalamenti, Beukelaer, Masse; CLT: Ezeude; Glassblower: Safferling; Administrative Assistant: Brickman; Department Secretary: Deutsch

The department faculty maintain strong commitments to teaching and research. We emphasize problem solving, laboratory work, and computing in training undergraduates. Faculty-student research is strongly encouraged.
A major in chemistry or biochemistry prepares students for graduate work in these areas, for careers in the chemistry and biotechnology fields, and for teaching secondary school chemistry. The major is a traditional route to professional schools of medicine, dentistry, and other healthrelated professions. Courses in the department also meet the chemistry requirements that students majoring in other science fields must fulfill.

The department is accredited by the Committee on Professional Training of the American Chemical Society as qualified to offer professional training to chemists.

## The Major

A major in chemistry will include Chemistry 111, 112 or 113, and 114 (or equivalents), 241, 251, 252, 361, 362, 365, 366 , Math 111, 112, and 201 (or equivalents), and Physics 121 and 122 (or equivalents), and 12 additional credits in the natural sciences and/or mathematics. At least six of the 12 additional credits must be advanced chemistry courses (Chemistry 375 and those with Chemistry 361 as a pre- or corequisite) and must include some laboratory work. Any science courses other than chemistry to be included must be more advanced than the first year's work, and any mathematics courses to be included must be advanced courses that have Mathematics 201 as a prerequisite.

Students taking Chemistry 112 and courses beyond Chemistry 114, must have a grade of C - or higher in the courses specified as prerequisites. To graduate as a chemistry major, a student must earn at least a C average (2.0) for all courses that make up the concentration in chemistry.

Students who repeat a course in chemistry are reminded that credit can be received only once.

Evening students should consult with the Evening Session Coordinator.

## Biochemistry Track

The biochemistry track is designed to train chemistry majors with an interest in chemical approaches to living systems and health-related problems. The curriculum is as follows:

1. The chemistry major core including Chemistry 113 and 114 (or equivalent), 241, 251, 252, 361, and 365, M ath 111 and 112 (or equivalent), and 201, and Physics 121 and 122 (or equivalent).
2. Chemistry 375, 376, 377, 378, 379.
3. Biology 107, 108, and 286.

Students interested in obtaining information about the biochemistry track as well as other information related to a major in chemistry are urged to obtain a copy of the Chemistry Department Handbook and consult with the concentration adviser and the department faculty for more details about the various opportunities available.

## B.A.-M.A. Program

The four-year B.A.-M.A. program in biochemistry and chemistry is described in the Chemi stry Department Handbook, available in the department office.

Majors who want to be certified by the American Chemical Society as having successfully completed an approved
undergraduate program in chemistry should consult with a department concentration adviser on the choice of 12 credits beyond Chemistry 366. A similar conference is strongly advised for chemistry majors who plan to do graduate work in chemistry or biochemistry.

## The Minor

The chemistry minor consists of Introductory Chemistry (Chemistry 113 and 114, or equivalent, 111, 112, and 114 or 119), Organic Chemistry (Chemistry 251 and 252), and Analytical Chemistry I (Chemistry 241). Chemistry 241 may be replaced by other courses with approval of the department. (Note: A prerequisite for Chemistry 114 is Mathematics 100, or 101 , or 111 . Such a course is therefore a requirement for a minor in chemistry.)

## Science Education Minor

Chemistry majors who plan to teach general science and chemistry should consult the science education adviser in the Secondary Education Department (Powdermaker 193, 997-5150) on the selection of the 12 additional credits beyond Chemistry 366.

## Transfer Students

All transfer students who plan to take chemistry courses beyond the first course must provide proof of having completed with a grade of C - or better the prerequisite courses. Students are advised to schedule the evaluation prior to their registration. The department will accept an official grade report or a student copy of the transcript. Students must also provide an official bulletin from the college where the work in chemistry was done.

Majors in chemistry must complete at least half of their chemistry concentration requirements in the department.

## COURSES

Note: The department offers the following introductory courses: Chemistry 10, 16, 19, 111,113 , and 119. All of these beginning courses assume the student has had no previous college chemistry; however, each course serves a different purpose.

Either Chemistry 111, 113, or 119 can serve as a first course for majors in chemistry, biology, geol ogy, physics, or in the pre-medical, pre-veterinary, and pre-engineering programs

If you are not sure which introductory course is right for you, we offer an optional Chemistry Placement Examination. This test in simple mathematics and reasoning is designed to help you to decide.
10. Elementary Chemistry for the Health Sciences. 3 lec., 3 lab. hr.; 4 cr.

A one-semester course presenting an overview of the energetics of physiological systems. The course will begin with an introduction to necessary background material on chemical structure and on energetics, and continue with discussions of energy metabolism, energy transfer in the body, and sources of chemical energy in the body. The laboratory part of the course will provide an introduction to experimental chemical techniques, to experimental aspects of thermochemistry, and to analyses and manipulations of biochemical samples. N ot open to students who have taken Chemistry 19, 113, 119, or their equivalents. MAT charge, $\$ 18$. Spring
11. Chemistry for Today. 2 lec., 2 lab. hr.; 3 cr. Prereq.: Open to ACE and LEAP students only. A nonmathematical introduction to chemistry to provide some understanding of the chemical aspects of issues that confront today's citizen. The laboratory class will provide firsthand experience in various chemical techniques. MAT charge, \$18.
16. Chemistry in Modern Society. 2 lec., 1 rec. hr.; 3 cr. (N ot open to students who have taken Chemistry 19, 58, 59, 111, 112, 113,114 .) A survey of chemistry designed to acquaint nonscientists with aspects of the subject of interest and concern to the average citizen. The course provides an introduction to atoms and molecules and to chemical reactions that play a significant role in modern life. Included in this treatment are discussions of important types of molecules found in living systems. Topics such as the genetic code and recombinant DNA techniques ("genetic engineering"); the role of hormones in plants, animals, and insects; the nature of genetic diseases, viruses, the cancer problem, and chemotherapy are among those considered. The course deals with aspects of chemical technology and chemical aspects of our environmental problems. In this connection, energy resources, material resources, and the role of synthetic and analytical procedures are considered. Fall, Spring
17. Chemistry for the Consumer. 3 lab. hr.; 1 cr. Prereq. or coreq.: Chemistry 16. Provides a firsthand laboratory experience of chemistry-based products and processes. The emphasis of the course is to provide a basis of knowledge for the average consumer. Students prepare and/or analyze consumer products such as cold creams, cereals, headache tablets, and cleansers as well as investigate the chemical behavior and manufacture of substances such as plastics, acids, fertilizers, and insecticides. Processes such as photography, dyeing, painting, and printing form the basis of a number of laboratory sessions. Students also learn how chemicals can be used to generate electricity (cells and batteries) and how solar energy can be trapped using chemical principles. MAT charge, \$18. Fall, Spring
19. General Chemistry I. 2 lec., 1 rec., 3 lab. hr.; 4 cr. An introductory course for
students who do not intend to take courses beyond Chemistry 79. Chemistry 19 prepares students for entry into Chemistry 58 or 59. MAT charge, $\$ 18$. Fall, Spring
58. General Chemistry II. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Chemistry 19 or equivalent. A one-semester treatment of aspects of organic chemistry and biochemistry. MAT charge, \$18. $\dagger \dagger$

## 59. Survey of Organic Chemistry. 2

 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Chemistry 19 or equivalent with a grade of C - or better. A one-semester survey of organic chemistry, intended for majors in home economics, nutrition, biology-education, health-education, and other health-related fields, and also for nonscience majors.MAT charge, \$25. Fall, Spring
79. Biochemistry in Nutrition. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Chemistry 19 and 59 (or equivalents). A study of the structure, properties, and metabolism of the major groups of biological importance, with special emphasis on the role of those compounds required in diet: proteins, carbohydrates, lipids, nucleic acids, and vitamins. In addition to presenting the chemistry of major cellular constituents, the course will also cover enzymology, the metabolism of carbohydrates, proteins, lipids, nucleic acids, and important nutrients. Problems of metabolic regulation in relation to nutrient intake will also be discussed. Not open to chemistry majors. MAT charge, \$18. Fall, Spring
111. Preliminary Chemistry. 1 lec., 3 rec. hr.; 2 cr. Prereq.: Math 6 or equivalent. Emphasizes problem-solving strategies and techniques in the context of basic chemistry topics such as the mole concept, stoichiometry, solutions, gas laws, and an introduction to atomic structure. Chemistry 111 and 112 prepare the student for Chemistry 114. Fall, Spring

## 113, 114. Introductory College Chem-

 istry. 3 lec., 1 rec., 3 lab. hr.; 5 cr. each semester. Prereq.: For Chemistry 114, a grade of C- or better in Chemistry 113 or 112 and Mathematics 100, or 101, or 111. This is the standard introductory sequence for students interested in physical science, biology, pre-engineering, pre-medical, and pre-dental programs. It is designed to provide a thorough knowledge of facts and theory essential for subsequent advanced courses. A previous knowledge of chemistry is not required; however, adequate high school preparation in basic science and mathematics is essential. MAT charge, \$18. Fall, Spring
## 115, 116. Introductory College Chem-

 istry. Chemistry 115: 3 lec., 1 rec. hr.; 4 cr.; Chemistry 116: 3 lec., 1 rec., 6 lab. hr.; 6 cr. Prereq.: For Chemistry 116, a grade of C- or better in Chemistry 115 and Mathematics 100, or 101, or 111. The equivalent of Chemistry 113 and 114, but with all the laboratory work in the second semester. $\dagger \dagger$119. Introductory College Chemistry. 3 lec., 1 rec., 5 lab. hr.; 6 cr. Prereq.: One year of high school chemistry; prereq. or coreq.: Mathematics 100, or 101, or 111. Designed to prepare selected students for advanced work. MAT charge, $\$ 18 . \dagger \dagger$
120. Environmental Chemistry. 3 lec . hr.; 3 cr. Prereq.: Chemistry 114, 116, or 119 with a grade of C- or higher. Study of environmental quality from a chemical point of view, including the atmosphere, hydrosphere, heavy metals in the environment, problems of solid waste disposal, food additives, and energy production and conservation. Fall
121. Analytical Chemistry I. 3 lec., 4 lab. hr.; 4 cr. Prereq.: A grade of C- or higher in Chemistry 114, 116, or 119. The study of the theory and techniques of quantitative determination by gravimetric, volumetric, and instrumental methods. MAT charge, $\$ 18$. Fall, Spring
251, 252. Organic Chemistry I, II. 3 lec., 1 rec., 4 lab. hr.; 5 cr . each semester. Prereq.: For Chemistry 251, a grade of C- or higher in Chemistry 114, 116, or 119; for Chemistry 252, a grade of C - or higher in Chemistry 251. The structure, preparation, properties, and reactions of the principal classes of organic compounds. MAT charge, \$25. Fall, Spring
122. Advanced Inorganic Chemistry. 3 lec. hr.; 3 cr. Prereq.: Grade of C- or higher in Chemistry 252 and 361. A survey of the fundamental aspects of inorganic chemistry designed to acquaint the student with the electronic structure of atoms and molecules, bonding, structure, group theory, spectroscopy, and the kinetics and mechanisms of inorganic reactions. Fall

## 332. Advanced Inorganic Chemistry

Laboratory. 6 lab. hr.; 2 cr. Coreq.: Chemistry 331. A laboratory course designed to acquaint the student with various techniques for the synthesis and characterization of inorganic compounds. A wide variety of experiments is available so that the student can exercise some choice in accord with his or her interests. MAT charge, \$25. $\dagger \dagger$
342. Analytical Chemistry II: Instrumental Analysis. 2 lec., 6 lab. hr.; 4 cr . Prereq.: A grade of C- or higher in Chemistry 241; prereq. or coreq.: Chemistry 361. Quantitative determinations using instrumental methods. Laboratory experiments utilizing commercially available instruments are included. MAT charge, $\$ 25$. Spring
353. Qualitative Organic Analysis. 2 lec., 6 lab. hr.; 4 cr. Prereq.: A grade of Cor higher in Chemistry 252 and 365; prereq. or coreq.: Chemistry 362 . The systematic identification of organic compounds using semimicrotechniques and including an introduction to the interpretation of infrared, ultraviolet, mass, and nuclear magnetic resonance spectra. MAT charge, $\$ 25$. Spring
354. Advanced Organic Chemistry. 2 lec., 1 rec. hr.; 3 cr . Prereq.: A grade of Cor higher in Chemistry 252 and 365; prereq. or coreq.: Chemistry 362. Mechanisms of organic reactions, thermodynamics and chemical equilibrium, stereochemical problems, and polycyclic and heterocyclic compounds. Fall
355. Advanced Organic Chemistry Laboratory. 6 lab. hr.; 2 cr. Coreq.: Chemistry 354. Advanced preparative work and, for some students, a start in research. MAT charge, $\$ 25 . \dagger \dagger$
361, 362. Physical Chemistry I, II. 3 hr.; 3 cr . each semester. Prereq.: For Chemistry 361, Physics 122 or 146, Mathematics 201, Chemistry 114, 116, or 119 with a grade of C- or higher; for Chemistry 362, a grade of C- or higher in Chemistry 361. An introduction to such topics as thermodynamics, equilibrium, electrochemistry, kinetics, quantum theory, spectroscopy, and atomic theory. 361, F all; 362, Spring
363. Selected Topics in Advanced Physical Chemistry. 3 lec. hr.; 3 cr. Prereq.: A grade of C- or higher in Chemistry 362. Selected topics from quantum chemistry, kinetic theory, statistical thermodynamics, and their applications. $\dagger$
365, 366. Physical Chemistry Laboratory I, II. 1 rec., 4 lab. hr.; 2 cr. each semester. Prereq. or coreq.: F or Chemistry 365, Chemistry 241 and 361; prereq.: F or Chemistry 366, Chemistry 365; prereq. or coreq.: For 366, Chemistry 362. An introduction to experimental techniques. MAT charge, \$25. 365, Fall; 366, Spring
375. Introduction to Biochemistry. 4 lec. hr.; 4 cr. Prereq.: A grade of C- or higher in Chemistry 252 and in Biology 102 or 104, or permission of instructor. Structure, properties, biosynthesis, and metabolism of major groups of compounds of biological importance: proteins, amino acids, nucleic acids, carbohydrates, lipids, and vitamins. Fall, Spring
376. Introductory Biochemistry Laboratory. 1 rec., 4 lab. hr.; 2 cr. Prereq.: Chemistry 361 and a grade of C - or higher in Chemistry 252; coreq.: Chemistry 375. Experimental study of selected biochemical processes; enzyme kinetics; biological oxidations; use of radioactive tracers; chromatographic separation and purification of major types of natural substances. MAT charge, \$25. Fall, Spring
377. Advanced Biochemistry. 3 lec. hr.; 3 cr . Prereq.: A grade of C- or higher in Chemistry 361, 375, or permission of department. Biosynthesis especially of macromolecules and complex cellular constituents such as membranes. Specialized topics of current interest. Spring
378. Physical Biochemistry. 3 lec. hr.; 3 cr. Prereq. or coreq.: A grade of C- or higher in Chemistry 361; prereq. or coreq.: Chemistry 375. Structure and conformation of proteins, nucleic acids, and other biopolymers; physical techniques for study
of macromolecules; behavior and properties of biopolymers. $\dagger$
379. Biophysical Chemistry Labora-
tory. 1 rec., 4 lab. hr.; 2 cr. Prereq.: Grade of C- or higher in Chemistry 361 and 365; prereq. or coreq.: Chemistry 378. Application of physical chemical techniques to the study of biomolecular properties, including molecular conformations, kinetic and thermodynamic aspects of ligand binding, redox properties and separation techniques. MAT charge, $\$ 25 . \dagger$
380. Selected Topics in Biochemistry. 3 lec. hr.; 3 cr. Prereq.: Chemistry 377 or permission of instructor. In-depth treatment of topics such as recombinant DNA technology, biochemistry of cancer, membrane structure and function, control and regulation in metabolic processes, bioinorganic chemistry. $\dagger$
381. Seminar. 2 hr.; 2 cr. Prereq.: Permission of the department. Topics for each semester announced in advance. Offered primarily for seniors. Fall, Spring
391. Special Problems. 391.1, 3 hr.; 1 cr. each semester; 391.2, 6 hr.; 2 cr. each semester; 391.3, 9 hr .; 3 cr . each semester. Prereq.: Permission of department. Introduction to the methods and techniques of chemical/biochemical research for the advanced student in science. E ach student accepted works on a research problem under the supervision of a member of the faculty. Includes both laboratory and library work. May be taken more than once. MAT charge, $\$ 25$.

## Course in Reserve

112. Introductory College Chemistry.

# C lassical, M iddle E astern \& Asian anguages \& Cultures 

Chair: Ammiel Alcalay
Dept. Office: King 203, 997-5570; Fax 997-5072

Professors: Goldsmith, Schoenheim; Associate Professors: Alcalay, Lidov, Spectorsky; Assistant Professors: Cook, Kim, Shu, Sukhu; Lecturer: Acker; Department Secretary: Silverman; Professors Emeriti: Gries, Solomon, Wu
The department offers courses in five areas:
Arabic, Islamic, and Middle Eastern Studies
Asian Studies: Chinese (Classical and Modern Mandarin), J apanese, and Korean
Classics, Ancient Greek, and Latin
Hebrew: Ancient, Medieval, and Modern; Sephardic and Israeli Culture Yiddish*
In addition to language courses, the faculty offer a wide variety of literature and culture courses both in English and in foreign languages. Students who already know the languages are able to take advanced courses to enrich their understanding of the humanities in these traditions; sequences of such courses can become important components of interdisciplinary concentrations, minors, or double-majors that complement a student's primary field of study. "In-translation" courses give students an understanding of the ancient Western and Asian classics and of various modern Asian, Middle Eastern, and Mediterranean cultures. These courses can serve as valuable supplements to work in other departments such as Art, Comparative Literature, English, History, and Philosophy. They can also complement course work in fields where knowledge of Classical, Middle E astern, and Asian cultures and languages can be an important component; these include Anthropology, Economics, Linguistics, Political Science, Urban Studies, and Women's Studies. The

[^8]department also stresses the importance of foreign language skills and broad cultural knowledge for all undergraduates; we work with students to develop interdisciplinary concentrations, minors, or double-majors linked to a diverse range of interests, fields of study, and professional orientations.

Major programs are available in Ancient Greek, Latin, Hebrew, and Yiddish.* Chinese, J apanese, and K orean are part of the Asian Studies major; Hebrew and Yiddish are part of theJ ewish Studies major. Students can minor in any of the areas of the department.

## Writing Through Cultures

The Department of Classical, Middle Eastern, and Asian Languages and Cultures offers an alternative, three-course program called Writing Through Cultures, which is another way to satisfy four separate requirements: the College writing requirement (equivalent to English 120) and the Humanities I Tier 1, Humanities I Tier 2, and Humanities III LASAR requirements. This program encourages students to study one culture in depth - choosing from ancient and modern cultures from various parts of the world - while learning to perfect their writing abilities.
To enroll in the Writing Through Cultures program, students must apply in advance to a department area adviser or to the department writing program coordinator and agree on a sequence of three courses in one area of the student's interest. These courses are taught in English (see list below). Typical sequences might be:
Chinese: Oriental Studies 140, 220, 221;
Comparative Literature 220, 221; Chinese 240
J apanese: Oriental Studies 140, 220,
221; Comparative Literature 220,
221; J apanese 250
Classical Greece \& Rome: Classics 120, 130, 140, 150, 240, 250
Ancient Greak: Classics 120, 140, 250
The Middle East: Arabic 150, 160;
Hebrew 150, 155
The Hebrew Tradition: Hebrew 150, 155, 160
Modern J ewish Culture: Yiddish 150, 161; Hebrew 150, 155
We expect to add more courses in the near future, including some to make possible concentrations in K orean, the Islamic Tradition, and Modern Israeli Culture. A student's sequence may include one advanced literature course in the language of the culture studied,
but all writing must be done in English.
Cities and Civilizations, an interdis-
ciplinary sequence of courses looking at world cultures through the study of great cities, will be offered as a pilot program and will also be a component of Writing Through Cultures.

Students enrolled in the Writing Program will receive special assignments and writing instruction in each of the courses - short assignments in the first course and a major term paper in the third. Their participation in the program will be noted on their records, and upon completion of the third course, the Registrar will be notified that the LASAR and English skills requirements have been satisfied.

The program is open only to students who have completed or are exempt from English 110. The department may restrict admission to the program, and may limit the sequences offered on the basis of course availability. Students who do not complete the sequence will fulfill only the requirements which are satisfied by the courses they do complete, as listed in the College Bulletin.

## Courses in English

The department offers the following courses in English (many of which satisfy the Humanities I or III Liberal Arts and Sciences Area Requirements, and the Pre-Industrial/Non-Western Civilization requirement; see pages 46-48).

Arabic 150. M odern Arabic Literature in Translation
Arabic 160/H istory 117. The History and Civilization of Islam
Arabic 260. Revival and Reform Movements in Islam
Chinese 240. M odern Chinese Fiction in Translation
Classics 10. The Greek and Latin Elements in English
Classics 120. Greek Civilization
Classics 130. Roman Civilization
Classics 140. Classical Mythology
Classics 150. Greek and Latin Classics in Translation
Classics 240. Religion and Philosophy in Classical Greece and Rome
Classics 250. Ancient Epic and Tragedy
Hebrew 150. M odern Hebrew Literature in Translation
Hebrew 155. Sephardic Literature in Translation
Hebrew 160. Masterpieces of Hebrew Literature in Translation
Hebrew 190. Topics in Hebrew Culture and Literature in Translation
J apanese 250. M odern J apanese Fiction in Translation
J apanese 255. The Tale of Genji and Early J apanese Women's Writings K orean 120. Civilization of K orea

K orean 150. K orean Literature in Translation
Oriental Studies 140. East Asian Religion
Oriental Studies 220. East Asian Civilization I
Oriental Studies 221. East Asian Civilization II
Yiddish 150. An Introduction to Yiddish Literature
Yiddish 161. The Culture of East European J ewry

Courses in the art, history, and philosophy of China, J apan, Greece, and Rome are offered by the rel evant departments. Other related courses include English 380 and 381, Comparative Literature 220 and 221, and courses in J ewish Studies (see page 156).

## A rabic, Islamic, and M iddle E astern Studies

Coordinator and Adviser: Susan A. Spectorsky

Arabic language study stresses the reading and comprehension of Modern Standard Arabic. After completing Arabic 204, advanced students may wish to pursue writing and speaking skills as well. Students are introduced to graded modern reading selections in Arabic 102. In Arabic 203, students read short classical texts in addition to ungraded modern selections. From Arabic 204 on, students' command of syntax and morphology enables them to choose to begin to study either classical or modern literature. Courses in English introduce students to masterpieces of Arabic literature and to the historical and cultural development of the civilization of Islam.

## The Minor

The minor in Arabic consists of 12 credits in language courses beyond Arabic 102 and two courses ( 6 credits) taught in English relevant to the history and civilization of Islam. For details, please consult the Coordinator or the Chair.

## Course Placement

Placement in basic language courses is subject to permission of the instructor.

## COURSES IN ARABIC

Courses Taught in English
150. Modern Arabic Literature in

Translation. 3 hr .; 3 cr . An introduction to outstanding works of Arabic literature in English translation. Modern Arabic writers have broken with classical forms
and traditions, and current writing deals with contemporary concerns and ideals. We will study the intellectual, social, and political implications of selected short stories, novels, and poems.

## 160./History 117. History and Civi-

lization of Islam. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Explores the institutions and intellectual traditions of the civilization of Islam from the days of the Prophet Muhammad through the modern period. $\dagger$
260. Revival and Reform Movements in Islam. 3 hr.; 3 cr. Prereq.: English 110 and sophomore standing. An examination of movements of revival and reform that have evolved in various parts of the Islamic world from the eighteenth through the twentieth centuries. Some of these movements represent developments within Islam; others are responses to the pressures of political and social change brought about by colonization and industrialization. All reading and discussion are in English.

## Basic Language Courses

101. Elementary Arabic I. 4 hr.; 4 cr. Prereq.: English 95 or equivalent. A beginner's course in modern Arabic, designed to give elementary control over the spoken and the written word; practice in reading elementary texts and in oral expression. Fall
102. Elementary Arabic II. 4 hr.; 4 cr. Prereq.: Arabic 101 or equivalent. A continuation of Arabic 101. Spring
103. Intermediate Arabic I. 3 hr.; 3 cr . Prereq.: Arabic 102. A continuation of Arabic 102. F all
104. Intermediate Arabic II. 3 hr.; 3 cr. Prereq.: Arabic 203. A continuation of Arabic 203. Spring

## Advanced Language Courses

Please consult the Coordinator. Permission of the instructor is required before registration for advanced language study.

## C hinese, Japanese, <br> K orean, and <br> A sian Studies

Coordinators and Advisers for Chinese: Yunzhong Shu, Gopal Sukhu; Adviser for J apanese: Lewis Cook

## Major in Asian Studies

The department offers courses in Chinese, J apanese, and K orean from elementary to advanced levels, as well as literature and civilization courses given in translation. A major in Asian Studies

Note English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). †Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule
is also offered and has a Chinese, J apanese, or K orean language requirement. Asian Studies is a flexible program for students wishing to gain familiarity with the history and cultures as well as the social, religious, and political institutions of the countries of Asia in ways that can be applied to a wide range of fields including law, foreign affairs, international business, secondary education, comparative literature, art history, and a variety of other professions and academic disciplines. F or more details, see pages 85-86.

## Courses Taught in English

Chinese 240. Modern Chinese Fiction in Translation. 3 hr .; 3 cr . Prereq.: Sophomore standing. Readings in English translation of works of Chinese fiction from the perspective of literary history of the twentieth century. The course will introduce the major literary movements, trends, concerns, and debates through the close study of individual works.
J apanese 250. Modern J apanese Fiction in Translation. 3 hr .; 3 cr . Prereq.: Sophomore standing. Readings in English translation of modern J apanese fiction from the late nineteenth century to the present. Through close readings of selected texts by a wide range of authors, the course will examine such issues as problems of representation; the language, form, and position of the "novel"; modernization/westernization vs. the "tradition"; modernity and nationalism; gender, fámily, and society.

J apanese 255. The Tale of Genji and E arly J apanese Women's Writings. 3 hr.; 3 cr . Prereq.: Sophomore standing. The course will approach Shikibu's TheTale of Genji both as the seminal literary fiction of theJ apanese tradition and as a predecessor to the modern psychological novel. The readings, in English translations, will include important texts by other 11th-century J apanese women writers, and selections from medieval critical commentaries.

## Korean 120. Civilization of Korea. 3

 hr.; 3 cr . An introduction to K orean civilization. Topics explored include religion, philosophy, literature, art, architecture, and music, and social and political issues in a historical framework. No knowledge of K orean required. All readings and course work will be in English.
## Korean 150. Korean Literature in

 Translation. 3 hr .; 3 cr . This course will examine the development of a Korean "national" literature through selected readings ranging historically from the earliest Iyrics in Chinese to contemporary works in Korean. The course is both an introduction to the major works of K orean literature and an overview of contemporary concerns.Oriental Studies 140. East Asian Religion. 3 hr.; 3 cr. Prereq.: English 110 or
equivalent. An introduction to the study of the major religious traditions that originate and survive in South and East Asia: Hinduism, Buddhism, Confucianism, and Taoism. Certain aspects of Shamanism will be studied as well.
Oriental Studies 220. East Asian Civilization I. 3 hr .; 3 cr . An introduction to the civilization of China and J apan, from ancient times through the T'ang dynasty in China and from ancient times through the medieval period in J apan. No knowledge of Chinese or J apanese is necessary.

## Oriental Studies 221. E ast Asian

Civilization II. 3 hr.; 3 cr. A continuation of Oriental Studies 220. An introduction to the civilization of China and J apan, from the Sung dynasty through the twentieth century in China and from the Tokugawa period through the twentieth century in J apan. No knowledge of Chinese or J apanese is necessary.

## Chinese

The program of instruction in Chinese has three parts. The first two years are intended to introduce the student to the basic sentence patterns of Mandarin and to Chinese characters: the first year emphasizes the spoken language, the second year emphasizes the written language as it is used to transcribe the spoken language. The third year is an introduction to the classical language through the study of classical grammar and classical texts. The fourth year provides the student with a selection of reading courses that reinforce the student's experience with both the spoken and classical languages through the reading of dramas, essays, historical texts, and fiction. The reading selections from the second year on are intended to acquaint the student with the civilization of China through the study of secondary and primary materials.

## The Minor

The minor in Chinese consists of 17 credits in the language (Chinese 101, 102, 203, 204, and 250) and 3 credits in Oriental Studies 220.

## Course Placement

Students with no background in the Chinese language begin with Chinese 101. Students who have learned Chinese characters through their study of J apanese or K orean may enter Chinese 250 with the permission of the instructor. All others, whether native speakers or not, should consult the department for correct placement.

## COURSES IN CHINESE

## Basic Language Courses

101. Elementary Chinese I. 4 hr.; 4 cr. Prereq.: English 95 or equivalent. A beginner's course in Mandarin. Fall
102. Elementary Chinese II. 4 hr .; 4 cr . Prereq.: Chinese 101 or equivalent. A continuation of Chinese 101. Spring
103. Intermediate Chinese I. 3 hr.; 3 cr. Prereq.: Chinese 102 or equivalent. Primarily a reading course intended to increase the student's command of Chinese characters and give further practice in using the basic language patterns studied in the elementary course. Fall
104. Intermediate Chinese II. 3 hr.; 3 cr. Prereq.: Chinese 203 or equivalent. A continuation of Chinese 203. Spring
105. Intermediate Chinese Conver-
sation I. 2 hr.; 1 cr. Prereq.: Chinese 102 or permission of department. For students who wish to improve their fluency in speaking. $\dagger \dagger$
106. Intermediate Chinese Conver-
sation II. 2 hr.; 1 cr. Prereq.: Chinese 211 or permission of department. A continuation of Chinese 211. $\dagger \dagger$
107. Introduction to Classical Chinese I. 3 hr.; 3 cr. Prereq.: Chinese 204 or equivalent. Wen-yen grammar and the reading of texts in Classical Chinese. Fall
108. Introduction to Classical Chinese II. 3 hr.; 3 cr. Prereq.: Chinese 250 or equivalent. A continuation of Chinese 250. Springt $\dagger$

Advanced Language and Literature Courses
311. Advanced Chinese Conversation I. 2 hr.; 1 cr. Prereq.: Chinese 212 or permission of department. A continuation of Chinese 212. $\dagger \dagger$
312. Advanced Chinese Conversation
II. 2 hr.; 1 cr. Prereq.: Chinese 311 or permission of department. A continuation of Chinese 311. $\dagger \dagger$
315. Chinese Composition. 3 hr.; 2 cr. Prereq.: Chinese 251 or equivalent. Exercises in composition and syntax, designed to give an enhanced appreciation and command of the written language. $\dagger \dagger$
320. Chinese Drama. 3 hr.; 3 cr. Prereq.: Chinese 251 or equivalent. Readings in representative twentieth-century Chinese plays. $\dagger \dagger$
330. The Chinese Essay. 3 hr.; 3 cr. Prereq.: Chinese 251 or equivalent. Readings in contemporary prose works. Current journalistic writings may be included. $\dagger \dagger$
340. Readings from Chinese History. 3 hr.; 3 cr. Prereq.: Chinese 251 or equivalent. Readings in Chinese historical texts; the selections may vary from year to year. $\dagger \dagger$
350. Chinese Fiction. 3 hr.; 3 cr. Prereq.: Chinese 251 or equivalent. Readings in twentieth-century Chinese novels and short stories. $\dagger \dagger$
360. Traditional Chinese Literature. 3 hr.; 3 cr. Prereq.: Chinese 251 or equivalent. Readings from Chinese classical writers of prose and poetry. Selections vary each semester. The course may be taken for credit more than once if the topic is different. $\dagger \dagger$
370. Chinese Short Story. 3 hr.; 3 cr. Prereq.: Chinese 251 or equivalent. Readings of classical and modern Chinese short stories. $\dagger \dagger$
380. Seminar in Sinological Methods. 3 hr.; 3 cr. Prereq.: Chinese 320, 330, 340, or 350 or permission of department.

## Japanese

The basic program of instruction in modern J apanese seeks to prepare students in four fundamental language skills: listening comprehension, speaking, reading, and writing. Elementary J apanese (J apanese 101-102) introduces beginning students to the fundamentals of modern spoken and written J apanese, with particular emphasis on the acquisition of basic grammatical patterns. Students will use the hiragana and katakana syllabary and a limited number of Kanji. IntermediateJ apanese (J apanese 203-204) further devel ops skills in reading, writing, conversation, and grammar, and increasingly incorporates Kanji.

## The Minor

The minor in J apanese consists of 20 credits, including four semesters of J apanese (101, 102, 203, 204) and two courses ( 6 credits) taught in English relevant toJ apanese literature or culture (J apanese 250, Oriental Studies 220 or 221, or other relevant courses). One of these two courses in English can be replaced by advanced J apanese Ianguage courses. Students who wish to minor in J apanese should consult the adviser for J apanese.

## Course Placement

Students who have no previous knowledge of the J apanese language must begin with J apanese 101. Students who have had previous training in J apanese should consult the instructor for correct placement.

## COURSES IN JAPANESE

101. Elementary J apanese I. $4 \mathrm{hr} . ; 4 \mathrm{cr}$. Prereq.: English 95 or equivalent. An introduction to the fundamentals of spoken and
written J apanese, with emphasis on the acquisition of basic grammatical patterns. Students will use the hiragana syllabary.
102. Elementary J apanese II. 4 hr.; 4 cr. Prereq.: J apanese 101 or equivalent. A continuation of J apanese 101. Students will also use the katakana syllabary and a limited number of Kanji.
103. Intermediate J apanese I. 3 hr.; 3 cr. Prereq.: J apanese 102 or equivalent. A continuation of J apanese 102. Further develops skills in reading, writing, conversation, and grammar, and increasingly incorporates Kanji.
104. Intermediate J apanese II. 3 hr.; 3 cr. Prereq.: J apanese 203 or equivalent. A continuation of J apanese 203. Spring

## 305. Advanced Modern J apanese I. 3

 hr.; 3 cr. Prereq.: J apanese 204 or permission of instructor. A course designed to devel op further the reading, writing, speaking, and listening skills that students have obtained in Elementary and Intermediate J apanese. More emphasis will be placed on reading and understanding modern written texts.306. Advanced Modern J apanese II. 3 hr.; 3 cr. Prereq.: J apanese 305 or permission of instructor. A continuation of J apanese 305. Readings of modern expository J apanese texts.

## Korean

## COURSES IN KOREAN

Korean 101. Elementary Korean I. 4 hr.; 4 cr. Prereq.: English 95. A beginner's course in K orean, with equal attention to speaking, reading, and writing. The K orean script han'gul will be used from the outset. For students with no previous knowledge of K orean.

Korean 102. Elementary Korean II. 4 hr.; 4 cr. Prereq.: K orean 101 or equivaIent. A continuation of K orean 101.
Korean 203. Intermediate Korean I. 3 hr.; 3 cr . Prereq.: K orean 102 or equivalent or permission of instructor. An intermediate course in Korean. Reviews the fundamentals of K orean and further develops skills in speaking, reading, and writing.

Korean 204. Intermediate Korean II. 3 hr.; 3 cr. Prereq.: K orean 203 or equivaIent. A continuation of K orean 203.
Korean 360. Readings in Korean. 3 hr.; 3 cr. Prereq.: Knowledge of K orean. Study of outstanding works in K orean literature, from earliest times to the present day. Selections represent a variety of older genres, such as hyangga, kayo, kasa, sijo, kodae, sosol, and p'ansori (these will be read in modern Korean), as well as contemporary poetry and fiction. All course work will be conducted in Korean.

## C lassics, A ncient G reek, and Latin

Coordinator and Adviser: J oel B. Lidov
The Classics section offers Classics courses in English and beginning and advanced courses in Latin and in Ancient Greek. In the Classics courses students learn about the literature and civilization of the ancient world as it is presented in the original writings of ancient poets, historians, orators, and philosophers. All reading is done in translation. The Greek and Latin courses provide students with a reading knowledge of the ancient languages. The first year is largely devoted to forms, grammar, and short practice passages. Continuous reading is introduced in the second year.

## Majors in Ancient Greek and Latin

The major in Ancient Greek consists of a minimum of 12 credits of Greek beyond Greek 252; at least 6 credits of Latin beyond Latin 102 or its equivalent; and Classics 120, 130, and 140 (27 credits).

The major in Latin consists of a minimum of 15 credits of Latin beyond Latin 203; Greek 251 and 252 or their equivalent (8 credits); and Classics 120, 130, and 140 ( 9 credits). Students who intend to teach Latin at the high school level or to go on to graduate work in classics should also take Latin 315 and 316 (2 credits).

To be graduated with a major in Ancient Greek or Latin, students must attain a C average in the courses composing their major.

## The Minor in Classical Studies

A minor in Classical Studies requires 18 credits in Ancient Greek, Latin, or Classics; at least 9 credits must be in courses numbered 200 or above. In addition to courses offered by the department, courses in other departments on Ancient Greek or Roman history, art, literature, or philosophy may be included with the permission of the department adviser
(e. g., Art 110, 206, 307; Comparative Literature 101 in place of Classics 150); History 113, 205, 206, 207, 208; Philosophy 140, 250, 264).

## Course Placement

Students who have had previous training in Latin or Ancient Greek should consult the department. Note that Greek 251 has no prerequisites and is the beginner's course for all students who
have not had any formal instruction in Ancient Greek.

## COURSES IN CLASSICS

## Courses Taught in English

10. The Greek and Latin Elements in English. 3 hr .; 3 cr . Study of the most important Greek and Latin roots in English, both literary and scientific; history of the Greek and Latin elements in English; principles of word formation. $\mathrm{t} \dagger$
11. Greek Civilization. 3 hr .; 3 cr . Designed for students who wish to secure an overview of the life and civilization of the ancient Greeks. Knowledge of Greek not necessary. $\dagger$
12. Roman Civilization. 3 hr .; 3 cr. Designed for students who wish to secure an overview of the life of ancient Rome and its civilization. Knowledge of Latin not necessary. $\dagger \dagger$
13. Classical Mythology. 3 hr .; 3 cr Analysis and interpretation of Greek and Roman mythology: the various theories of its origins, a comparison with similar mythic elements in other ethnic groups, and the influence of the myths on the religious and patriotic concepts of classical times and on classical and modern languages and literatures. Texts, lectures, and class discussions supplemented by collateral readings leading to a term paper. Knowledge of ancient languages not necessary. Fall, Spring
14. Greek and Latin Classics in Translation. 3 hr.; 3 cr. Prereq.: English 110 An introduction to the masterpieces that have made the literature of Greece and Rome an enduring part of the modern heritage. The course will include Homer, Herodotus, Greek Tragedy, Greek and Roman Lyric, Greek and Roman Comedy, Roman Epic, Ovid. The literature will be studied for its enduring values, in relation to its times, and as the background for literature in the modern languages. Fall, Spring
15. Religion and Philosophy in Classical Greece and Rome. 3 hr .; 3 cr . An examination of the official state cults, of unofficial forms of worship such as the mystery religions, of the influx and spread of such Oriental deities as Mithra and Isis, and the rise of Christianity. Those Greek philosophical ideas that spread to Rome and frequently supplemented or served in place of religion for some segments of the population are also examined. $\dagger \dagger$
16. Ancient Epic and Tragedy. 3 hr .; 3 cr. Study in English translation of Homer, Aeschylus, Sophocles, Euripides, and their influence. $\dagger \dagger$
17. Topics in Classical Studies. 300.1-$300.3,1-3 \mathrm{hr}$.; 1-3 cr. Specific topics will be announced in advance. A study of a topic in Classical culture or literature for students who have taken introductory courses in Classics or ancient Greek or Roman histo-
ry, art, or philosophy. Materials will be read in translation. Course may be repeated for credit when the topic changes. Course may also be given as a tutorial.

## COURSES IN ANCIENT GREEK

251. Elementary Ancient Greek I. 4 hr.; 4 cr. A beginner's course in Ancient Greek, based on the language of Plato and other Classical Athenian authors.
252. Elementary Ancient Greek II. 4 hr.; 4 cr. Prereq.: Greek 251 or one year of high school Greek. A continuation of Greek 251. Spring
253. Euripides. 3 hr.; 3 cr. Prereq.: Greek 252 or two years of high school Greek. $\dagger \dagger$
254. Plato. 3 hr.; 3 cr. Prereq.: Greek 252 or two years of high school Greek. Readings in the shorter works of Plato. $\mathrm{T} \dagger$
255. Homer. 3 hr.; 3 cr. Prereq.: Greek 252 or two years of high school Greek. $\dagger \dagger$
256. Readings in Ancient Greek Literature. 360.1-360.3, 1-3 hr.; 1-3 cr. Prereq.: Greek 351 or 352 or equivalent. A study of the writings of one major Ancient Greek author (such as Aeschylus, Sophocles, Herodotus, Thucydides, Lysias) in the original Greek. Topic to be announced in advance. Course may be repeated for credit when topic changes. Course may also be given as tutorial; consult Coordinator.

## COURSES IN LATIN

101. Elementary Latin. 3 hr .; 3 cr. Fall
102. Intermediate Latin. 3 hr .; 3 cr . Pre-
req.: Latin 101 or one year of high school Latin. A continuation of Latin 101. Spring
103. Roman Prose. 3 hr .; 3 cr. Prereq.: Latin 102 or two years of high school Latin. Selections from Latin prose, with special attention to syntax, idiom, and cultural context, to improve skills in reading and understanding.
104. Roman Poetry. 3 hr .; 3 cr . Prereq.: Latin 203 or three years of high school Latin. Selections from Catullus and other Roman poets, with special attention to idiom, vocabulary, and style of Roman poetic tradition.
105. Latin Prose Composition I. 1 hr.; 1 cr . Prereq.: Latin 204 or permission of department. A practical course in the writing of Latin prose; review of forms and syntax. $\dagger \dagger$

## 360. Readings in Latin Literature.

360.1-360.3, 1-3 hr.; 1-3 cr. Prereq.: Latin 204 or equivalent. A study of the writings of one major Roman author (such as Cicero, Virgil, Lucretius, Horace, Ovid, Tacitus) or works in one major genre (such as elegy, comedy, satire) in the original Latin. Topic to be announced in advance. Course may be repeated for credit when topic changes. Course may also be given as tutorial; consult Coordinator.

## H ebrew L anguage and Cul ture

Coordinator and Adviser: J erome Acker
The department offers courses in the Hebrew language, Biblical Aramaic, Hebrew, Sephardic, Yiddish, and Israeli literature and culture. Language instruction prepares students to understand and appreciate the literature and civilization of the J ewish people by developing skills in listening comprehension, speaking, reading, writing, and translation. The department offers a diverse range of courses for advanced students with a command of Hebrew; these include courses in Biblical, Talmudic, Medieval, and Modern Hebrew literature, and Israeli culture. In many of these courses, Hebrew is used as the classroom language. Students can use these advanced courses as the basis for a concentration, minor, or double-major to complement their primary field of study. The department also offers a wide range of courses in English on Hebrew literature of various periods as well as Israeli, Sephardic, and Yiddish literature and culture.

## The Major in Hebrew

The major in Hebrew requires 30 credits beyond Hebrew 101-102. Students must consult the adviser for placement in the language program and to determine the distribution of credits for the major. Hebrew 203 and 204 may be applied to the Hebrew major only if students have been placed into these courses by the department. All students are required to take a minimum of 18 credits in courses in Hebrew numbered above 300. The remaining credits may include additional courses in Hebrew, courses in Arabic or Yiddish, or courses in Hebrew, J ewish, Israeli, or Mideastern literature or culture given in English. At least 12 credits must be taken at Queens College. Students must attain at least a C average in the courses composing their major.

## The Minor in Hebrew

The minor in Hebrew consists of 18 credits in Hebrew beyond 102. For details, please consult the Coordinator or the Chair. At least three of these courses must be taken at Queens.

## Study Abroad

Study in Israel can give the student a deeper and more extensive knowledge of the Hebrew language and its literature
and culture than is normally possible in an academic setting. The department encourages study abroad, and grants varying credit toward the major and toward the degree at Queens College, depending on the nature of the course of study. A matriculated student should consult the Coordinator before taking courses abroad.

## Course Placement

Students who have had less than one year of high school Hebrew normally begin with course 101; those with less than two years normally begin with course 102; those who completed the requirements for the New York State Regents Examination in Hebrew (3 years) with a grade of at least 85 should enter course 305 or 307.

All others, including native speakers and students who attended Hebrew day schools or Yeshivot, should consult the department for correct placement.

## COURSES IN HEBREW

## Courses Taught in English

150. Modern Hebrew Literature in Translation. 3 hr .; 3 cr . Readings in modern Hebrew literature in translation. The authors to be read vary from semester to semester, announced in advance. May be repeated for credit provided the content is not the same. $\dagger$
151. Sephardic Literature in Translation. 3 hr .; 3 cr . The class will explore cultural, political, and social implications of works by Sephardic writers both in Israel and the Diaspora. Readings in English translation of the literature of Sephardic and Middle Eastern J ews from the late nineteenth century to the present.

## 160. Masterpieces of Hebrew Litera-

 ture in Translation. 3 hr .; 3 cr . Readings in English translation of outstanding works in Hebrew literature from the Bible to the modern period, illustrating a variety of genres and themes. $\dagger$190. Topics in Hebrew Culture and Literature in Translation. 3 hr .; 3 cr . Specific topics will be announced in advance. May be taken for credit more than once if the topic is different. $\dagger \dagger$

## Basic Language Courses

101. E lementary Hebrew I. 4 hr.; 4 cr. A beginner's course in modern Hebrew. Fall, Spring
102. Elementary Hebrew II. 4 hr.; 4 cr. Prereq.: Hebrew 101 or equivalent. Fall, Spring
103. Intermediate Hebrew I. 3 hr.; 3 cr. Prereq.: Hebrew 102 or equivalent. A continuation of Hebrew 102. Fall, Spring
104. Intermediate Hebrew II. 3 hr.; 3 cr. Prereq.: Hebrew 203 or equivalent. A con-
tinuation of Hebrew 203. Fall, Spring Advanced Language Courses
105. Advanced Modern Hebrew. 3 hr.; 3 cr. Prereq.: Hebrew 204. A study of modern Hebrew texts to improve students' command of the language and to develop an appreciation of modern literature. For students who have completed two years of college-level study (or equivalent) in a general Hebrew course or who have attained a reading knowledge of Biblical or Rabbinic Hebrew without practice in modern literature. $\dagger$
106. Classical Hebrew. 3 hr.; 3 cr. Pre req.: Hebrew 204. An introduction to Hebrew of Biblical and Rabbinic texts. For students who have completed two years of college-level study (or equivalent) in a general Hebrew course or who have attained proficiency in modern Hebrew without practice in earlier texts. $\dagger \dagger$
107. Hebrew Conversation. 3 hr.; 3 cr. Prereq.: Hebrew 204 and permission of instructor. $\dagger$
108. Hebrew Grammar and Composition. 3 hr.; 3 cr. Prereq.: Hebrew 204 or equivalent. A thorough review of Hebrew grammar and usage with systematic practice in composition. $\dagger$
109. Skills and Art of Translation. 3 hr.; 3 cr. Prereq.: Hebrew 204 (or equivalent) and English 120. Discussion of the techniques and problems of translation with extensive practice in translating various texts. This course will enable the He brew student to understand the unique structure and idiomatic usage of Hebrew in comparison to English. May be taken by fluent speakers of either language. $\dagger \dagger$
110. History of the Hebrew Language.

3 hr.; 3 cr. Prereq.: One course in Biblical literature. A detailed study of the phonology and morphology of the Hebrew language from the point of view of its historical development and its relation to other Semitic languages, especially Akkadian, Arabic, and Aramaic. $\dagger \dagger$
362. Hebrew Root Studies. 3 hr.; 3 cr. Prereq.: One course in Biblical literature. $\dagger \dagger$

Elective Courses in Hebrew Literature
321. Biblical Literature I: Genesis. 3 hr.; 3 cr. Prereq.: Hebrew 307.††
322. Biblical Literature II: Exodus. 3 hr.; 3 cr. Prereq.: Hebrew 307. $\dagger \dagger$
323. Biblical Literature III: Leviticus/ Numbers. 3 hr.; 3 cr. Prereq.: Hebrew 307. $\dagger \dagger$
324. Biblical Literature IV: Deuteronomy. 3 hr.; 3 cr. Prereq.: Hebrew 307. $\dagger \dagger$
325. Biblical Literature V: J oshua and J udges. 3 hr.; 3 cr. Prereq.: Hebrew 307.††
326. Biblical Literature VI: Samuel I and II. 3 hr.; 3 cr. Prereq.: Hebrew $307 . \dagger \dagger$
327. Biblical Literature VII: Kings I
and II. 3 hr.; 3 cr. Prereq.: Hebrew 307. $\dagger \dagger$
328. Biblical Literature VIII: Major

Prophets. 3 hr.; 3 cr. Prereq.: Hebrew 307.††
329. Biblical Literature IX: Minor Prophets. 3 hr.; 3 cr. Prereq.: Hebrew 307.††
330. Biblical Literature X: Megillot. 3 hr.; 3 cr. Prereq.: Hebrew 307. $\dagger \dagger$
331. Biblical Literature XI: Psalms. 3 hr.; 3 cr. Prereq.: Hebrew 307. $\dagger \dagger$
332. Biblical Literature XII: Wisdom Literature. 3 hr.; 3 cr. Prereq.: Hebrew 307.††
335. Biblical Aramaic: Daniel and

Ezra. 3 hr.; 3 cr. Prereq.: One course in Biblical literature. Introduction to the Aramaic texts found in the Hebrew Bible. $\dagger \dagger$
340. Talmudic Literature. 3 hr.; 3 cr. Prereq.: Hebrew 307 or equivalent. A study of the content, method, and linguistic characteristics of a tractate of the Talmud. Attention is given to the historical development and characteristics of the Mishna and the Gemara. $\dagger \dagger$
341. Midrash and Aggada. 3 hr.; 3 cr. Prereq.: Hebrew 307 or equivalent. An introduction to the content and methods of Midrash and Aggada through a survey of selected Midrashim. $\dagger \dagger$
345. Medieval Literature I. 3 hr.; 3 cr. Prereq.: Hebrew 307. Readings in the secular and liturgical poetry of the Middle Ages, particularly of the "Golden Age" in Spain. $\dagger \dagger$
346. Medieval Literature II. 3 hr.; 3 cr. Prereq.: Hebrew 307. Readings in philosophy, ethics, history, and Biblical exegesis Special attention to the works of J udah Ha-Levi, Maimonides, and Nahmanides. $\dagger \dagger$
351. Modern Hebrew Drama. 3 hr.; 3 cr. Prereq.: Hebrew 305. $\dagger \dagger$
352. Modern Hebrew Poetry I. 3 hr.; 3 cr. Prereq.: Hebrew $305 . \dagger \dagger$
353. Modern Hebrew Poetry II. 3 hr.; 3 cr. Prereq.: Hebrew 305. $\dagger \dagger$
354. The Modern Hebrew Essay. 3 hr.; 3 cr. Prereq.: Hebrew $305 . \dagger \dagger$
356. Contemporary Israeli Literature I. 3 hr.; 3 cr. Prereq.: Hebrew 305. $\dagger \dagger$
357. Contemporary Israeli Literature II. 3 hr.; 3 cr. Prereq.: Hebrew $305 . \dagger \dagger$
358. The Modern Hebrew Press. 3 hr.; 3 cr. Prereq.: Permission of instructor. Readings, translation, and discussion of selections from contemporary Hebrew newspapers, periodicals, and journals of opinion: news, stories, articles, reviews, and criticism. May be repeated once for credit. $\dagger \dagger$
390. Studies in Hebrew Language, Literature, and Culture. 390.1-390.3, 1-3 hr.; 1-3 cr. Prereq.: Varies with topic. An advanced course in Hebrew. Topics will vary and will be announced in advance. May be taken more than once if the topic is different. $\dagger \dagger$

## Yiddish

Coordinator and Adviser: Emanuel S. Goldsmith

The department offers courses in Yiddish language, literature, and culture, including courses in English translation. The courses in Yiddish language aim to devel op students' ability to read, write, comprehend, and speak Yiddish. These courses also introduce students to the history of the Yiddish language and its literature and to major themes of the $J$ ewish experience. The literature and culture courses, some of which are offered in English, seek to deepen students' knowledge of those significant aspects of J ewish civilization which, during the past thousand years, found expression in the Yiddish language. Advanced courses are intended for students with interest in Yiddish teaching, scholarship, and journalism, as well as for those interested in other J ewish studies, including Hebrew language and literature, J ewish history, J ewish thought, and the sociology of the J ewish community. Students are encouraged to partake of the rich Yiddish cultural life of New York City and to participate in the program of the Yiddish Culture Club at Queens College.

## The Major in Yiddish*

Students majoring in Yiddish must complete 36 credits beyond Yiddish 204, of which 18 must be in courses numbered above 300. They should complete Yiddish 203 before taking courses in Yiddish literature conducted in the Yiddish language. Majors are strongly urged to take additional courses in Hebrew language and literature as well as courses in theJ ewish experience offered by other departments.

## The Minor in Yiddish**

The minor in Yiddish consists of 18 credits in Yiddish beyond Yiddish 102. The student may choose language courses or literature and culture courses, including those offered in English.

## Study Abroad

The department encourages and offers credit for Yiddish studies pursued at accredited institutions of learning in Europe and Israel.

[^9]
## Course Placement

Students who already have a background in Yiddish should consult the Coordinator for correct placement.

## COURSES IN YIDDISH

Courses Taught in English
150. Introduction to Yiddish Literature. 3 hr.; 3 cr. A survey of Yiddish literature from its beginnings in the fifteenth century to the contemporary short story, novel, essay, and poetry. Yiddish literature will be presented both within the context of world literature and as an aspect of the J ewish experience. Fall, Spring
156. J ewish Thought and Modern Yiddish Literature. 3 hr .; 3 cr . The influence on modern Yiddish literature of the major $J$ ewish ideol ogies in Eastern Europe and in the West. The course will explore the expressions in Yiddish literature of various intellectual currents from the Haskalah to the present. $\dagger \dagger$
161. The Culture of E ast E uropean J ewry. 3 hr.; 3 cr. An introduction to East European J ewish civilization from the sixteenth century to the Holocaust. Topics discussed include: origins of East European J ewry, the traditional life-style, Yiddish language and literature, H assidism, Haskalah, origins of modern Hebrew literature, the Mussar Movement, J ewish socialism, and Zionism. $\dagger$
172. Hassidism and J ewish Mysticism 3 hr .; 3 cr . Hassidism and its influence, including the sources of J ewish mysticism in the Bible and the Talmud; Hassidism as folk mysticism; Hassidic motifs in modern Yiddish and Hebrew literature. $\dagger \dagger$
176. The Literature of the Holocaust. 3 hr.; 3 cr . The experiences of European $J$ ewry during the Second World War and the years leading up to it as reflected in Yiddish literature. The course will explore such topics as genocide, ghetto life, concentration camps, J ewish resistance and escape, the response of the Western world and the Soviet Union. $\dagger \dagger$

## 190. Topics in Yiddish Culture and

 Literature in Translation. 190.1-190.3, 1-3 hr.; 1-3 cr. Specific topics will be announced in advance. Course may be taken for credit more than once if the topic is different. $\dagger \dagger$
## Basic Language Courses

101. E lementary Yiddish I. 4 hr.; 4 cr. For students with no previous knowledge of Yiddish; the elements of Yiddish grammar, aural comprehension, speaking, reading, and writing. The course also serves as an introduction to the culture of the Yid-dish-speaking world. F all
102. Elementary Yiddish II. 4 hr.; 4 cr. Prereq.: Yiddish 101 or equivalent. A continuation of the work in Yiddish grammar, comprehension, speaking, reading, writing, and the study of Yiddish culture. Spring
103. Intermediate Yiddish I. 3 hr.; 3 cr Prereq.: Yiddish 102 or equivalent. Reading and interpretation of literature, writing, speaking, aural comprehension. Outside reading in Yiddish and in English will introduce the student to some of the major figures in Yiddish literature. Fall
104. Intermediate Yiddish II. 3 hr.; 3 cr. Prereq.: Yiddish 203 or equivalent. Readings in modern Yiddish literature. Outside reading in Yiddish and in English will further introduce the student to the major figures in Yiddish literature. Yiddish 203 and 204 serve not only to train students in language, but also to acquaint them with some of the major Yiddish writers. Spring
105. Intermediate Conversational Yiddish. 3 hr.; 3 cr. Prereq.: Yiddish 102 or permission of instructor. $\dagger \dagger$

## Advanced Language and <br> Literature Course

390. Studies in Yiddish Language, Literature, and Culture. 390.1-390.3, 1-3 hr.; 1-3 cr. Prereq.: Yiddish 203. Specific topics will be announced in advance. The course will be given in Yiddish. May be taken more than once if the topic is different. $\dagger \dagger$

Courses in Reserve
140. History of the Yiddish Language.
154. Yiddish Drama.
162. J ews in the Soviet Union, 1917 to the Present.
167. The Development of Yiddish Culture in the United States.
174. The E ast Side in American Litera ture in Yiddish and in English.

## 305. Advanced Yiddish.

330. Yiddish Literature from Its Beginnings to Mendele.
331. Mendele and His Contemporaries
332. Peretz, Sholom Aleichem, and Their Contemporaries.
333. Soviet Yiddish Literature.
334. American Yiddish Literature, 1880-1915.
335. American Yiddish Literature, 1915 to the Present.
336. The Yiddish Novel in the Twentieth Century.
337. Yiddish Poetry in the Twentieth Century.

## C ommunication A rts \& Sciences

Chair: Stuart E. Liebman
Deputy Chair and Chair, Undergraduate Studies Committee: Harvey Halpern
Coordinator, Graduate Programs in Speech/Language Pathology: Robert Rosenbaum
Coordinator, Graduate Program in Media Studies: J onathan Buchsbaum
Dept. Office: G Building 100, 520-7353
Professors: Cairns, Gelfand, Halpern, Haney, Liebman, Rosenfield, Stark; Associate Professors: Buchsbaum, Grossman, Hill, Kraat; Assistant Professors: Gerber, López-Pumarejo, Mazor, Rosenbaum, Schneider; Instructors: Sandler, Toueg; Lecturer: Rembert; College Laboratory Technicians: Cicali, Sun; Department Secretary: Sapienza; Office Assistant: Pilate

## $Q$ ueens C ollege Speech - Language - Hearing C enter

Director: Stark; Associate Director: Rosenbaum; Coordinator of Audiology: Mazor; Speech and Hearing Staff: Gerber, Kraat, Schneider, Toueg; Center Secretary: Kroll
Courses in communication arts and sciences direct the student toward a better understanding of self and society through the study of communication processes, content, and media. They assist in preparing the student for professions that require both a theoretical and technical knowledge of communication, such as education, the law, government service, the ministry, advertising and public relations, social services, industrial communications, and the arts A major in the department encourages the student to view communication as a unity while allowing a concentration in subjects and areas of special personal interest.

## Areas of Study

The Department of Communication Arts and Sciences offers work in two major areas of study. Students may also create special courses of study (see page 105).

Communication: Sciences and Disorders
This is the study, habilitation, and rehabilitation of children and adults with disorders of speech, hearing, and Ianguage. Includes pre-professional coursework for students who wish to undertake graduate programs leading to careers as speech-language pathologists and audiol ogists. Students have the opportunity to observe clinical practice in the Queens College Speech - Language - Hearing Center. The program al so introduces basic speech and hearing science and its research methods in preparation for graduate study in such areas as acoustic phonetics, psychological and physical acoustics, and psycholinguistics.

## Communication: Arts and Media

Designed to provide a comprehensive understanding of the substance and form of message variables in a variety of communications systems, including speech, film, radio, and television. Students are introduced to rhetorical, research-oriented, and aesthetic approaches. Theory and research courses are supplemented by basic-level courses in film and television production. Students may also elect a limited number of credits in internship programs at major corporate and public institutions in the greater New York area.

## Major Standing

To enter a major program, the student must file an Application for Major Standing, available in the department office. Applications must be filed during the first weeks of each semester, or before the completion of department preregistration in any semester.

To maintain major standing after filing, the student must pursue the elected major program, with approval of his or her major adviser, during department preregistration each semester. The major program must receive formal approval for graduation during the student's final semester in residence.

Freshmen who intend to be CAS majors are advised to elect department core courses (see below) during the freshman year and to file for major standing no earlier than the latter half of the first semester in residence.

## The Majors

A major in communication arts and sciences consists of not fewer than 39 nor more than 46 credits. Every major must take indicated credits from the selected program. A minimum grade of C is
required in order for a course to be counted toward the CAS majors.

## Communication: Sciences and Disorders

Level One: CAS 101, 106, and 107. (These courses are prerequisites for all courses in level two and level three except CAS 283.)

Leve Two: CAS 207, 208, 210, 283.
Level Three: CAS 309, 316 (formerly 116), 320, 321, 330.

One of the following: CAS 108, 331, 339; Linguistics 205 or 206; Sociology 211; Psychology 221 or 349.

Either Psychology 224 or 229, or both SEYS 221 and 222.

## Certification

Preparation for professional work in Communication Disorders requires completion of a master's degree. Satisfying the requirements for the American Speech and Hearing Association's Certificate of Clinical Competence in Speech-Language Pathology or Audiology provides the strongest preparation for professional work in this area and the widest flexibility for future employment. Certification by the American Speech, Language, and Hearing Association requires a minimum of one year of graduate study, a specified number of clock hours of supervised clinical practice, a year of employment experience, and passing of a national examination. Students should consult advisers in order to plan programs of study that will lead toward eventual certification by the national professional association.

## Communication: Arts and Media

Required: CAS 102 and 147.
Level One: One course from CAS 101,
103, 104, 105, 106, 110.
Level Two

1. Historical Foundations. One course from: CAS 143, 144, 246, 250.
2. Critical Foundations. One course: CAS 244 or 258.
3. Foundations of Performance and Production. One course from: CAS 160, 242, 245, 248, 249, 251, 252.

Level Three

1. F our courses from among the following (three courses must be 300 level): CAS 243, 257, 259, 300, 303, 340, 341, *342, *343, *344, 345, 346, 347, 348, $349,350,351,352,353,354,357,370$, 371, 381, 382, 384, and 392.3 (3 credits only). (*May take only two of these for major credit.)
2. Electives selected from all departmental offerings to total 9 credits including three credits of CAS 392 Internship.

## Special Studies

Each area of major study offers a Special Studies Track designed to give a student the flexibility to develop a meaningful program within the discipline that is not available as a standard course of study. The following requirements must be met by any student who wants to pursue a Special Studies Track:

1. The applicant must have at least upper sophomore standing (junior when the track is begun).
2. No student will be admitted before the completion of at least one of the program cores with an index of 3.2; a student may, however, apply for admission during the semester in which he or she is completing a program core.
3. Each applicant must submit to a faculty committee - consisting of at least two members holding professorial rank - a plan of study comprising a sequence of 15-18 credits of upper level courses, together with a statement justifying the plan.
4. The written plan of study and its justification, bearing the written approval of the faculty committee, must be submitted to, and approved by, the Undergraduate Studies Committee, before the student begins the $15-18$-credit sequence
5. The 15 -18-credit program must include a 3-credit senior tutorial administered by the faculty committee. No more than one tutorial may be included in the approved program.

## Pre-Journalism

Queens College does not offer a major in journalism but does offer a minor (see page 158). Students interested in postgraduate training or careers in journalism and publishing are urged to major in English, history, political science, communication arts and sciences, or one of the other liberal arts disciplines, and to acquire as broadly based an education outside their major as they can. They can acquire some valuable experience while working for the campus press as an extracurricular activity, and in journalism and publishing internships sponsored by the Departments of English and Communication Arts and Sciences.

The following courses may be of interest to pre-journalism students:
English 220. Introduction to Editing
English 225. Newspaper and Article Writing
English 303. Essay Workshop
Sociology 218. Mass Communication and Popular Culture
CAS 102. Introduction to Media
CAS 242. Television Production I

CAS 243. Television Production II
CAS 244. Media Analysis and Criticism
CAS 246. Freedom of Speech
CAS 345. Media Information Systems
CAS 347. Comparative Media Systems CAS 357. Media, Law, and Ethics

An interdisciplinary advisory committee for pre-journalism students has been set up with representatives from the English, CAS, and Sociology Departments. Students may consult any of these departments for referral to counseling on professional schools and careers.

## Joint Major: Communication and Political Science

This program is designed for students whose interests are in law, public affairs, international communication, and political reporting.

New students are not being accepted into this joint major as of Fall 1996. Please consult with advisers from the Political Science Department concerning future plans for this program.

Joint Major: Communication and Linguistics
This program is being revised. Please consult with advisers from the Linguistics Department concerning future plans for this program.

Joint Major: Drama, Theatre, and Dance and Mass Communications The two departments are revising this program. Please consult with advisers in each department for the current status of this program.

## The Minor in Arts and Media

The minor in Arts and Media consists of 21 credits forming a coherent course of study. The minor requires careful planning. A student wishing to take this minor must file a minor concentration form before completing 6 credits of the CAS courses comprising the program. The courses will be distributed as follows:

CAS 102 and 147, plus one course from Level One of the Arts and Media Major and one course from each of the three areas of Level Two, plus one additional course. At least three of the courses must be at the 200 level or above.

## COURSES

101. Introduction to Psycholinguistics.

3 hr .; 3 cr . Linguistic and psychological processes underlying communication. Fall, Spring
102. Introduction to Media. 3 hr .; 3 cr .

Relations among media, environment, and the self, with attention to effects of various media on views of contemporary issues. Fall, Spring

## 103. Introduction to Interpersonal

 Communication. 3 hr.; 3 cr . Basic concepts and processes of human communication with special emphasis on the role of individual factors in group interaction. Theoretical and experiential consideration of such topics as communication models, verbal and nonverbal codes, perception, and self-concept. Fall, Spring104. The Role of Rhetoric in American Society. 3 hr .; 3 cr . Analysis of the role of rhetoric in creating and resolving public problems through various media. MAT charge, \$2. Fall, Spring
105. Communication as Symbolic

Action. 3 hr .; 3 cr . An introductory analysis of symbols and symbol systems and their impact on communication, conflict, and culture. Fall, Spring
106. Introduction to Communication

Disorders. 3 hr .; 3 cr . The nature of communication disorders in children and adults, including the effects of sensory and physical impairments in speech, language, and hearing functions. Fall, Spring

Other courses recommended for freshmen and sophomores, without prerequisite, are CAS 110, 143, 144, 160, and 246.
59. Forensics. 3 hr.; 1 cr. Prereq.: Admission to course by permission of instructor. A participation course. Students are coached individually and introduced to a wide variety of forensic activities: public speaking, oral interpretation of literature, and intercol legiate debate. May be repeated for up to 3 credits. Fall, Spring

## 107. Phonetics of the English Lan-

guage. 3 hr .; 3 cr . Study of American contemporary speech through phonetic analysis; principles of linguistic change applied to English; practice in broad and narrow phonetic transcription. Fall, Spring
108. Introduction to Sociolinguistics. 3 hr.; 3 cr . The interaction of language usage and the social organization of behavior in a pluralistic society. $\dagger$
110. Introduction to Political Communication. 3 hr .; 3 cr . A survey of the major approaches to American, comparative, and international political communication. Covers such topics as the language of politics, communication in political decision making, the rhetoric of politics, mass communication, and political behavior. Fall, Spring
143. History of the Cinema I: 1880 to 1930. 4 hr .; 3 cr . Survey of the motion picture from its inception to 1930. Develop-

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). †Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule
ment of the cinema as both a distinctive medium of communication and an art form. Significant films are viewed and discussed. MAT charge, \$7. Fall
144. History of the Cinema II: 1930 to the Present. 4 hr.; 3 cr . Development of the cinema since 1930. MAT charge, $\$ 7$. Spring
147. Cinematic and Video Forms: An Interdisciplinary Approach. 4 hr.; 3 cr. An exploration of the aesthetic, social,
behavioral, and technical dimensions of film and video technologies. MAT charge, \$7. Fall, Spring
151. Public Speaking. (formerly CAS 251) $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Application of principles of speech preparation to major types of public address; study of selected speeches to illustrate major types; presentation of speeches; policy-forming, professional, social, ceremonial. $\dagger$
160. Introduction to Interpretation. 3 hr .; 3 cr . Relation of the appreciation, analysis, and evaluation of literature to its oral interpretation. Fall, Spring
165. Oral Communication in the Workplace. 3 hr .; 3 cr . Study of the role of communication as a variable defining, organizing, mediating, and affecting the outcomes of interactions within organizational environments. Introduction to and mastery of basic oral formats and nonverbal communication techniques likely to be useful to a participant in corporate organizations. Some sections of this course will be limited to students enrolled in the Business and Liberal Arts minor.
173. Creative Drama for Children. 3 hr.; 3 cr . Theories and procedures of children's improvisational drama. Designed for elementary education majors. Fall, Spring

## 207. Anatomy and Physiology of

Speech. 3 hr.; 3 cr. Prereq.: CAS 101, 106, 107. The neuromuscular systems involving breathing, phonation, resonation, and articulation. Fall, Spring
208. Introduction to Hearing Science. 3 hr.; 3 cr. Prereq.: CAS 101, 106, 107. The anatomy and physiology of the ear; the psycho-acoustics of hearing. Fall, Spring
210. Language Acquisition. 3 hr .; 3 cr . Prereq.: CAS 101, 106, 107. The development of language behavior in children with special attention to linguistic and psychosocial correlates. Fall, Spring
240. Multi Image Media. 3 hr .; 3 cr . Prereq.: CAS 147. Intensive study of the theory, aesthetics, and production of multimedia environments. Offered Summer Session only.
242. Television Production I. 2 lec., 2 lab. hr.; 3 cr. Prereq.: Sophomore standing. Creative processes and techniques of studio television production, including the operation of studio and control-room equipment. Fall, Spring
243. Television Production II. 2 lec., 2 lab. hr.; 3 cr. Prereq.: CAS 242 or permission of department. A continuation of CAS 242 , including production of television in the field. Differences in techniques and styles between studio and field video production are emphasized.
244. Media Analysis and Criticism. 3 hr.; 3 cr. Prereq.: CAS 102 or 104, or 105 or 110. Methodology of evaluating media through an examination of form and content. Fall, Spring
245. The Script and the Medium. 3 hr. plus conf.; 3 cr. Prereq.: CAS 102 and 147, or permission of department. Study of shorter forms and format of radio, tel evision, and film writing. Fall, Spring
246. Freedom of Speech. (formerly CAS 109) 3 hr.; 3 cr. Prereq.: Sophomore standing. Regulation and control of communication through legal restriction, censorship, and self-regulation. Fall, Spring
248. Argumentation. (formerly CAS 153) 3 hr.; 3 cr. Prereq.: Sophomore standing. Analysis of public propositions, accumulation and testing of evidence, formulation and critical evaluation of reasoning, structuring of argument, processes of attack and defense, and effective communication of argument, with an emphasis upon legal and political communication. Fall, Spring
249. Media Performance. 2 lec., 2 lab. hr.; 3 cr. Prereq.: CAS 151, 160, Drama 100 or Drama 121. The development of the performer in radio, television, and film. Fall, Spring
250. History of Broadcasting. 3 hr .; 3 cr . Prereq.: CAS 102. The history of radio and television broadcasting from the 1920s to the present. Using an interdisciplinary approach, it focuses on broadcasting institutions, issues, research trends, and program format analysis.
252. Small Group Communication. 3 hr.; 3 cr. Prereq.: CAS 103. Study and illustration of small group communication. Fall, Spring

## 253. Media and Human Communica-

tion. 3 hr.; 3 cr. Prereq.: CAS 102 and 103. A study of the effects of media technology and media innovation on personal communication. Fall, Spring
254. Communication in Intergroup Conflict and Conflict Resolution. 3 hr .; 3 cr . Prereq.: CAS 103 or 110. Study of the theory of conflict and the theories of conflict resolution, with emphasis on communication as the significant variable in conflicts among groups. Fall, Spring
255. Computer-Human Communica-
tion. 3 hr.; 3 cr. Prereq.: CAS 102. The computer as a medium of communication. Types of computer-human relationships and their social uses and consequences are examined.
256. Presidential Communication. 3 hr.; 3 cr. Prereq.: Sophomore standing.

Critical analysis of the communication systems employed by contemporary presidents from Kennedy to the present. $\dagger$
257. Nonverbal Communication. 3 hr .; 3 cr. Prereq.: CAS 103, or permission of department. Non-linguistic behavior and message systems with emphasis on communication by means of spatial relationships (proxemics) and body movement (kinesics) and with attention to communication by means of touch, vocal cues, personal adornment, and objects. $\dagger$
258. Rhetorical Criticism. 3 hr.; 3 cr. Prereq.: CAS 102 or 104 or 105 or 110. Study of critical methods based on leading traditional and contemporary theories of rhetoric. Fall, Spring
259. Cultural Factors in Communication. 3 hr .; 3 cr . Prereq.: CAS 103; sophomore standing. An examination of cultural factors influencing messages and interpersonal behavior, such as roles, stereotypes, prejudices, verbal and nonverbal languages, use and organization of time and space, social structures. Spring
263. Readers' Theatre. 3 hr.; 3 cr. Prereq.: CAS 160 or Drama 121. The theory and techniques in the communication of literature to an audience from manuscript by a group of readers. $\dagger \dagger$
265. Advanced Interpretation: Performance in Communication. 3 hr .; 3 cr . Prereq.: CAS 160 or permission of department. Exploration of the social and aesthetic dimensions of performance based on the study and presentation of writing of literary merit.
283. Quantitative Methods in Communication. 3 hr.; 3 cr. Prereq.: Sophomore standing. Quantification of behavior, probability, descriptive statistics, basic measurement, hypothesis testing, confidence intervals, simple analysis of variance, and simple correlation. Fall, Spring
300. Television Field Production. 2 lec., 2 lab. hr.; 3 cr. Prereq.: CAS 242 and 243, or permission of department. Specific principles and techniques of on-location video production including concept and design, elements of television script writing, camera techniques, lighting, sound, and editing.
301. Media Practicum I. 3 hr.; 1 cr. Prereq.: The student must have production skills appropriate to the selected project. Students applying for the course must have a faculty sponsor. The student must complete a media production project in film, video, or sound under faculty supervision and sponsorship. CAS 301 and 302 may be repeated for up to 3 credits in any combination.
302. Media Practicum II. 3 hr.; 1 cr. Prereq.: Upper junior-senior standing. Appropriate media skills required. Admission by permission of the instructor only. The student will apply media production skills in assisting the teaching of CAS media production courses. CAS 301 and 302 may be
repeated for up to 3 credits in any combination.
303. Telecommunications: Sound. 2
lec., 2 lab. hr.; 3 cr. Prereq.: CAS 147 or 242. Creative processes and techniques of sound in radio, television, and film. Fall, Spring
306. Meaning in Speech and Language.

3 hr.; 3 cr. Prereq.: CAS 101 or permission of department. The relation between expression in speech and language and the content for which it stands. $\dagger \dagger$
309. Introduction to Speech Science. 3 hr.; 3 cr. Prereq.: CAS 207 and 208, or permission of department. The acoustical components of speech and their physiological correlates; information-bearing elements in the speech signal and their perceptual processing. Fall, Spring
315. Theoretical and Experimental Psycholinguistics. 3 hr .; 3 cr . Prereq.: CAS 101 or permission of department. Major theoretical advances and empirical discoveries in selected areas of psycholinguistic inquiry. $\dagger \dagger$
316. Communication in the Elementary School. (formerly CAS 116) 3 hr.; 3 cr. Prereq.: CAS 210. Cognitive and communicative processes in children, with a view to application in classroom methods, techniques, and materials. Fall, Spring
320. Disorders of Speech and Language I. 4 hr.; 3 cr. Prereq.: CAS 207 and 210, or permission of department. Introduction to the etiology, diagnosis, and therapy for speech disorders relating to voice, stuttering, articulation, and delayed speech secondary to emotional problems. Fall, Spring
321. Disorders of Speech and Lan-
guage II. 4 hr.; 3 cr. Prereq.: CAS 207 and 210, or permission of department. Introduction to the etiology, diagnosis, and therapy for speech disorders relating to cleft palate, cerebral palsy, aphasia, mental retardation, and delayed speech secondary to brain damage. Fall, Spring
330. Introduction to Audiology I. 3 hr .; 3 cr. Prereq.: CAS 207 and 208, or permission of department. An introduction to the measurement and evaluation of hearing loss, stressing pure tone audiometry, basic speech audiometry, basic impedance tests, and clinical aspects of masking. An introduction to hearing aids and aural rehabilitation. Fall, Spring
331. Introduction to Audiology II. 3 hr.; 3 cr . Prereq.: CAS 330. Diagnostic aspects of audiology, stressing site of lesion testing, basic evaluation of vestibular function, advanced speech audiometry, basic central auditory testing, and non-organic hearing loss. Spring
339. Seminar in Communication Disorders. 3 hr.; 3 cr. Prereq.: CAS 320 or 321, CAS 283, 330, or permission of department. Discussion and evaluation of current issues in speech and language pathology,
audiology, and speech and hearing science Topics to be announced. May be repeated for credit once. Usually offered in Summer.
340. The Comic Form. 3 hr.; 3 cr. Prereq.: CAS 143 or 144 or 147, or permission of instructor. This course is a study of the comic film from the "Golden Age" of the silent film comedies of Chaplin, Keaton, and Laurel and Hardy to Woody Allen. Topics examined include the nature of comic genres in cinema and television, the nature of film comedy, television comedy, the satire of the Marx Brothers, the
"Crazy" comedies of Howard Hawks, and the comic approach of J ean Renoir.
341. Theory of Film. 3 hr.; 3 cr. Prereq.: CAS 147, and CAS 143 or 144; or permission of department. Comparative study of concepts relating to the art of the film, including a consideration of writings of critics and directors. Fall, Spring
342, 343, 344. Studies in Film. 3 hr.; 3 cr. Prereq.: CAS 147, and CAS 143 or 144.
342. Styles of Cinema. An exploration of the three basic styles of cinema - Realism, Expressionism, and Surrealism - using selected films as models for study. MAT charge, \$7. Fall, Spring
343. Documentary in Film and Broadcasting. Study of documentary philosophies and strategies through an examination of important documentarists, movements, and films. MAT charge, $\$ 7$. Fall
344. Italian Cinema from Neo-Realism to the Present. Study of Italian cinema. MAT charge, $\$ 7$. Spring
345. Media Information Systems. 3 hr .; 3 cr. Prereq.: CAS 102 and 104 or 110 or 246. Analysis of information, news, and public affairs presentations transmitted by print and electronic media. Fall, Spring
346. Television Direction. 4 hr.; 3 cr. Prereq.: CAS 242 and 243, or permission of department. Theory and practice of television direction. $\dagger$
347. Comparative Media Systems. 3 hr.; 3 cr. Prereq.: CAS 102 and 104 or 110 or 246. Cross-national comparisons of media systems in different countries, with reference to both print and electronic media. Fall, Spring
348. Advanced Film Production. 4 hr .; 3 cr. Prereq.: CAS 143 or 144 and 147. Production of cinema forms: documentary, art, industrial, and educational. (Refundable MAT deposit required, \$1.) $\dagger$
349. Research in Media Production. 3 hr.; 3 cr. Prereq.: CAS 102 and completion of LASAR Scientific Methodology and Quantitative Reasoning requirement. An examination of the general nature of media, with special emphasis on the identification, operational definition, and measurement of production variables. $\dagger$
350. Persuasion. 3 hr .; 3 cr . Prereq.: CAS 103 or 110 or 248 . The influencing of belief and behavior through speech; emphasis on
motivational aspects and their evaluations theories of attitude, belief, and the value related to communication; the audience as receiver of communication. Fall, Spring
351. Communication and the Legal System. 3 hr.; 3 cr . Prereq.: J unior standing and CAS 110 and 246 or 248. Examination of communication and the legal system, with attention to legal counseling and interviewing, negotiating, advocacy, and use of media.
352, 353, 354. Historical Studies of Public Discourse. 3 hr.; 3 cr. Prereq.: $J$ unior standing and CAS 102 or 110 . Studies of the role of public discourse in political, social, and intellectual life.
352. Discourse of the Classical Period. $\dagger \dagger$
353. American and British Discourse to 1900. $\dagger \dagger$
354. Twentieth-Century Public Discourse. $\dagger$
357. Media, Law, and Ethics. 3 hr .; 3 cr . Prereq.: CAS 109. This course is an advanced study of issues and problems arising from legal regulation and ethical considerations of media activities. Such areas as defamation, informational privacy, reporters' rights, shield laws, copyright laws, and the covering of terrorist activities will be explored.
370. Radical Critiques of Mass Communication. 3 hr.; 3 cr . Prereq.: CAS 102 and 244. Critical examination of radical analyses of mass media, products, and institutions.
371. The Aesthetics of Communica-
tion. 3 hr.; 3 cr . Prereq.: CAS 147 and 244 or 258. Aesthetic aspects of events in communication - visual, aural, written, and gestural - are explored. Fall, Spring
381. Studies in Communication Arts and Sciences. 3 hr.; 3 cr. Prereq.: Permission of department. Intensive study in an area of the department; each semester a special subject will be selected; papers involving research will be assigned. May be repeated once for credit providing there is a change in the topic. Fall, Spring
382. Communication Theory. 3 hr .; 3 cr . Prereq.: CAS 102 and 244 or 258. Major theories of human communication: their formulation, structure, function, and evaluation. $\dagger$
384. Communication as Experience. 3 hr.; 3 cr . Prereq.: J unior standing and CAS 103. Examination of the act of communication from an existential point of view, with special attention to the concept of the person and its role in the study and experience of communication. $\dagger \dagger$
391. Special Problems. 1 conf. and 9 hr .; 3 cr. Prereq.: Approved CAS major of upper junior or senior standing with a minimum 3.0 grade-point average and written permission of instructor before registration, plus written permission of Chair. Students with less than a 3.0 grade-point average
must petition the departmental Undergraduate Studies Committee for the privilege of taking the course. Individual research under the direction of a member or members of the department; weekly reports to the research adviser and presentation of such paper or papers as the adviser may require. Credit toward advanced track determined by topic. Fall, Spring
392. Internship. 392.3: 135 hr.; 3 cr 392.6: 270 hr.; 6 cr. Prereq.: Upper junior or senior standing with a minimum 3.0 grade-point average; permission of the department, and evidence of sufficient preparation through relevant prior course work. Students with less than a 3.0 gradepoint average must petition the departmental Undergraduate Studies Committee for the privilege of taking the course. Supervision by a faculty adviser of the student's choice. Ordinarily, an internship will involve unpaid off-campus work (and/or participant observation) in a field which the student's coursework has analyzed or otherwise prepared him or her for (e.g., clinical work in speech therapy, broadcast-station operations, etc.).

Requirements: An initial prospectus (including a description of the student's duties by a representative of the sponsoring organization); periodic progress reports; a final summary report; and whatever else the adviser may ask for. The 392 courses may be taken in any combination up to a maximum of 9 credits.

# C omparative Literature 

Chair: David J. Kleinbard

Dept. Office: Kiely 310, 997-5690
Professor: Kleinbard; Associate Professors: Ahmed, Carroll, Ferris; Assistant Professor: Martin; Department Secretary: Shapiro

The comparative literature program includes courses taught by faculty from all the language and literature departments and from anthropology. It offers students the opportunity to study Western and non-Western literary texts in their historical, social, and cultural contexts. Courses frequently include works of philosophy, history, psychology, anthropology, and the cinema. They aim to help students learn to read critically, with greater pleasure and understanding. Majors can prepare for graduate study and work in such fields as law, education, publishing, writing, and translation. Because major requirements overlap with those of English and the foreign languages, comparative literature is an excellent choice as one of two majors or as a minor.

Although comparative literature courses involve study of texts from many countries, all are read and taught in English.

## The Major

The major in comparative literature consists of 12 courses totaling 36 credits, including four approved elective courses in the literature of a foreign language in the original; three approved elective courses in the literature of another language (students may offer English or American literature, or three additional courses in comparative literature beyond Comparative Literature 101, instead of the second foreign language); and five approved courses in comparative literature, including two chosen from 331 through 350 and two seminars (381 through 384).

Majors contemplating graduate work in comparative literature must have substantial reading knowledge of one foreign language and at least a beginning knowledge of a second. One of these should be French or German.

Comparative literature majors should consider related elective courses in such areas as English, anthropology, philosophy, and history.

## The Minor

The minor in comparative literature consists of five elective courses in comparative literature, totaling 15 credits. These must include at least one chosen from Comparative Literature 331 through 350, and one seminar (381 through 384). The introductory courses, Comparative Literature 101 and 102, will not count toward the minor. There is no language requirement for a comparative literature minor.

## Course Offerings

Comparative literature courses fall into three groups: General Literature, Genre and Criticism, and Advanced Seminars.

General Literature: Comparative Literature 101 through 204 are introductory courses that present some of the major works forming a common reference for Western literary traditions. Priority in registration will be given to freshmen.

Comparative Literature 211 through 231 represent a broad effort to stimulate the crossing of cultural frontiers. Courses are given in English, and all readings are done in English translation, although students who can read foreign literatures in the original are encouraged to do so. These courses provide basic preparatory work for comparative literature majors; broadening for literature and language majors and other majors in the arts; and cross-disciplinary and cross-cultural exploration for students in the social and natural sciences.

Genre and Criticism: Comparative Literature 331 to 341 are intended for more advanced work in comparative literature for all students.

Advanced Seminars: Comparative Literature 381 to 384 . Topics will vary from semester to semester. Open to qualified students in other areas as well as to comparative literature majors and minors.

## COURSES

101. Great Books I. 3 hr.; 3 cr. Prereq.: English 110. An introductory course that presents some of the major works forming a common source and reference for Western literature and culture. Readings will include works from among the following: the Epic of Gilgamesh, the Bible, Homer, Virgil, the Greek tragedies, the Bhagavad Gita, Plato, St. Augustine, Everyman, and Dante. Priority in registration given to freshmen. Fall, Spring
102. Great Books II. 3 hr.; 3 cr. Prereq.:

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). tOffered either Fall or Spring; see Class Schedule. $\dagger \dagger$ May be offered; see Class Schedule

English 110. Masterpieces of Western literature from the Renaissance to modern times. Readings include works from among the following: Rabelais, Shakespeare Molière, Candide, Gulliver's Travels, Goethe's Faust, Grimms' Fairy Tales, and more recent works. Fall, Spring
203. The E uropean Novel. 3 hr.; 3 cr. Prereq.: Sophomore standing. Some major European novels of the nineteenth and twentieth centuries; attention to the problems of the novel as a literary form during this period. Fall, Spring
204. Modern Drama. 3 hr.; 3 cr. Prereq.: Sophomore standing. Selected plays from the late nineteenth century to the present. The thematic focus of this course and the texts studied vary each semester. Students may take this course twice for credit, if the works studied are different.
205. Modern Poetry. 3 hr.; 3 cr. Prereq.: Sophomore standing and English 120 or 140. Intensive readings in nineteenth- and twentieth-century lyric poetry of Europe and the Americas, with attention to one or more kinds of poetry (e.g. romantic, symbolist, surrealist) and interpretive approaches. The authors and texts studied vary each semester. Students may take the course twice for credit, if the works studied are different.

## General Literature

211. Medieval Literature, 1100 to 1500

3 hr.; 3 cr. Prereq.: Sophomore standing. Major European texts in a variety of forms and genres, studied in their historical, social, intellectual, and religious contexts. The thematic focus and texts studied vary each semester. Students may take this course twice for credit, if the works studied are different.

## 212. The Literature of the Renais-

 sance. 3 hr .; 3 cr . Prereq.: Sophomore standing. Major European texts in a variety of forms and genres, studied in their historical, social, intellectual, and religious contexts. The thematic focus of this course and the texts studied vary each semester. Students may take this course twice for credit, if the works studied are different.213. The Enlightenment. 3 hr.; 3 cr. Prereq.: Sophomore standing. A comparative study of outstanding figures in the literature and philosophy of the seventeenth and eighteenth centuries, including such writers as Voltaire, Diderot, Rousseau, Vico, Hume, Gibbon, and Lessing. $\dagger \dagger$
214. R omanticism. 3 hr.; 3 cr. Prereq.: Sophomore standing. A study of the cultural revolution that took place throughout Europe during the early nineteenth century, setting a dominant pattern in the literature and culture for the nineteenth and much of the twentieth century. $\dagger \dagger$
215. Topics in Modern Literature. 3 hr.; 3 cr. Prereq.: Sophomore standing. This course will examine selected topics in modern literature and their relationship to
nineteenth- and twentieth-century models of thought, society, and culture. We will consider, for instance, the influence of the naturalist Buffon on Balzac, of experimental medicine on Zola, of the philosopher Bergson on Proust, of technology on H. G. Wells, of physics on Thomas Pynchon, and of Freud on Kafka and Schnitzler.

## 217. Great Authors in Literature. 3 hr .

 3 cr . Prereq.: Sophomore standing. Will focus on a number of important figures in Western literature ranging from Dante to Beckett. Authors to be read will vary from semester to semester, and emphasis will be on reading fewer authors in depth. $\dagger \dagger$218. Russia and the West. 3 hr .; 3 cr . Prereq.: Sophomore standing. Major nine-teenth- and twentieth-century works illustrating the crosscurrents between Russian and Western literature. The thematic focus and texts studied vary each semester. Students may repeat this course twice for credit, if the works studied are different.
219. E ast Asian Literature I. 3 hr.; 3 cr. Prereq.: Sophomore standing. Introduction to representative works of traditional Chinese and J apanese literature, from ancient times through the Yuan dynasty in China and from ancient times through the medieval period in J apan. No knowledge of Chinese or J apanese is necessary.
220. East Asian Literature II. 3 hr.; 3 cr. Prereq.: Sophomore standing. Introduction to representative works of Chinese and $J$ apanese literature from the Sung dynasty through the twentieth century in China and from the Tokugawa period through the twentieth century in J apan. No knowledge of Chinese or J apanese is necessary.

## 225. Literature and Anthropology. 3

hr.; 3 cr . Prereq.: Sophomore standing. Literary representations in relation to anthropological theories, methods, and subject matter. The thematic focus and texts studied vary each semester. Students may repeat this course more than once, if the topic and works studied are different.
228. Themes in Literature. 3 hr .; 3 cr . Prereq.: Sophomore standing. A topical course, depending on interests of the instructor. It may examine such problems as literary expression; the relation of literature to other arts, history, and philosophy; or the expression of a cultural theme in different national literatures. $\dagger \dagger$
229. Women in Modern World Literature. 3 hr.; 3 cr. Prereq.: Sophomore standing. The representation of women in literary texts by female and male writers, with attention to the relationship between women's social and cultural status and their image in literature. The thematic focus of this course (e.g. Women and War; Women in Non-Western Literature) and the works studied vary each semester. Students may repeat this course more than once, if the topic and works studied are different.
230. African Literatures. 3 hr.; 3 cr. Prereq.: Sophomore standing or permission of
instructor. Study of canonical and noncanonical texts, from a variety of African cultures, in their social, political, and historical contexts, with particular attention to genres, themes, and styles.

## 231. African Literatures in a World

 Context. 3 hr.; 3 cr. Prereq.: Sophomore standing or permission of instructor. Comparative study of texts in a variety of forms and genres from African, Asian, European, and American cultures, with an emphasis on how historical, political, and social factors affect literary representations.240. Representation, Photography, and Literature 3 hr .; 3 cr . Prereq.: Sophomore standing. Comparison of photography and other visual arts to fiction, poetry, essay, and other forms of writing in order to raise questions about how stories are told by the visual arts and by literature, and how believability is established by these different arts. The course considers what readers and viewers expect from these different art forms and how, at times, visual and verbal arts are linked together in support of one another and, at others, kept separate or even in opposition.
241. Literature and the Movies. 3 or 4 hr.; 3 cr. Prereq.: Sophomore standing. A study of the ways in which literature and the movies have strongly influenced each other. The course will investigate problems arising from the relations and conflicts between these two different media. MAT charge, \$7. $\dagger$

Genre and Criticism
331. Literary Criticism. 3 hr.; 3 cr. Prereq.: At least one elective course in English or another literature. The history and problems of literary criticism from Plato to the present, with special emphasis on continental criticism. Not open to students who received credit for English $382 . \dagger \dagger$
333. Tragedy. 3 hr.; 3 cr. Prereq.: At least one elective course in English or another literature. Major tragic texts from various cultures and ages, with some attention to theories of tragedy. Students may take this course twice for credit, if the works studied are different.
334. Mythology and Heroic Literature. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: At least one elective course in English or another literature. Major heroic epics, with some attention to questions of genre. The texts in this course may vary each semester. Students may take the course twice for credit, if the works studied are different.
335. Problems in Drama. 3 hr.; 3 cr. Prereq.: At least one elective course in English or another literature. An intensive study of the works of one or more important dramatic authors. The author(s) and texts vary each semester. Students may take this course twice for credit, if the author(s) and works studied are different.
336. F orms of Fiction. 3 hr.; 3 cr. Prereq.: At least one elective course in English
or another literature. The novel, novella, short story, and other forms of prose fiction, with special emphasis on questions and problems of genre. The texts studied vary each semester. Students may take this course twice for credit, if the works studied are different.
337. Archetypes. 3 hr.; 3 cr. Prereq.: At least one elective course in English or another literature. Various recurrent themes, myths, and forms in literature, such as Don J uan, Orpheus, F aust; the quest, romance, pastoral. The texts studied in this course vary each semester. Students may take this course more than once for credit, if the topic is different.

## 338. Masterpieces of the Western

Tradition. 3 hr.; 3 cr . Prereq.: At least one elective course in English or another literature. Aims to provide a general overview of Western literature to students who have already studied some of it, and who would like to have an upper-level general course in literature. Works will range from Gilgamesh to the present. $\dagger \dagger$
340. Literature and History. 3 hr .; 3 cr . Prereq.: One elective course in Comparative Literature or another Literature Department. The study of literature as history and history as literature. Students will learn how to read literary texts in relation to other forms of discourse within a given historical context, how to contextualize a text through historical research, and how to analyze the rhetoric of history.
341. Life Writing. 3 hr.; 3 cr. Prereq.: One elective course in Comparative Literature or another Literature Department. A consideration of various forms of life writing including autobiography, memoirs, diaries, journals, and testimonials - and the people who write them.

Additional courses are currently under consideration.

## Advanced Seminars

381, 382, 383, 384. Advanced Seminars. 3 hr.; 3 cr. Prereq.: Three elective courses in literature, reading knowledge of one foreign language, junior or senior standing, or permission of department. Exploration of important themes in literature, literary history, and criticism. Subject matter varies from semester to semester according to the interests and needs of students and teaching staff. Nonmajors also admitted. Fall, Spring

## C omputer Science

Chair: Theodore D. Brown
Assistant Chair: Kenneth Lord
UndergraduateAdvisers: Carol Friedman, Kenneth Lord, J ennifer Whitehead, Zhigang Xiang
Evening Student Adviser: Howard C. Wasserman

Graduate Advisers: Seyed-Ali Ghozati, T. Yung K ong, Christopher Vickery, Howard C. Wasserman, Keitaro Yukawa

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Professors: Brown, Di Paola, Kong, Kwok, Vickery, Waxman; Associate Pro fessors: Friedman, Ghozati, Goldberg, Gross, Sy, Wasserman, Whitehead, Xiang; Assistant Professors: Lord, Obrenic, Yukawa; Department Secretaries: Hernandez, J acobs; Systems and Network Administrators: Chen, J oshi

Computers are used with increasing frequency as important tools for activity and research in engineering, the natural and social sciences, and the arts. Computers are involved in every aspect of life in our society; even people who have no direct need to use a computer have to deal with data produced or processed by computers or to make decisions based on such data.

In the undergraduate division, the department offers courses and facilities for a major in computer science leading to the B.A. or B.S. degree. A major has the necessary preparation for graduate work in the field and for employment in programming, systems analysis, and other computer-related professions. The department has enjoyed continuous and unsolicited requests from industry and government agencies for its majors. In the graduate division, the department offers the M.A. degree and, in collaboration with other senior CUNY colleges, the Ph.D. in computer science. (F or further details, see the department handbook.)

The minor is intended for students whose careers require competence in computer programming without the indepth knowledge required of the major.

For those who do not want to major or minor in computer science, Computer Science 12 provides students with an understanding of how problems are formulated for solution by a personal computer using popular software packages. Computer Science 95 teaches introducto-
ry programming in Pascal for students who have never used a computer, and serves as a first course for students considering a major in computer science.

## Transfer Students

The normal first course in the major is Computer Science 95 (Prereq.: Mathematics 6). Computer Science 100 is an advanced 2-credit alternative to Computer Science 95 intended for transfer students who have completed an introduction to computer science course, but who have not studied the Pascal programming language. Transfer students should consult with a departmental adviser before registering.

## The Majors

The department offers concentrations leading to either the Bachelor of Arts or Bachelor of Science degree. The B. S. augments the B. A. with more computer science theory, mathematics, and an experimental laboratory. Students must complete at least half of the courses for the major and half of the required computer science courses at Queens College.

## Bachelor of Arts Degree

A. CoreRequirements

Computer Science 95 (unless exempt), 101, 103, 200, 201, 220, 300, 303, 320, and 341.
B. Elective Requirements Two additional three-credit computer science courses numbered 200-699, except $398,601,602,615$, and 640 . Selfstudy language courses may not be used to satisfy this requirement. No more than three credits of Computer Science 390 through 399 may be used as part of the major without the approval of the Honors and Awards Committee. One course from the following list may be taken in place of one computer science course for this requirement:

Mathematics 223, 224, 230, 245, 247, 248, 317, 333, 337, 609, 613, 619, 621, 623, 624, 625, 626, 633, 634, 635, or 636. Physics 225 or 312.
C. Math Requirements

Mathematics 111 and 112 or equivalent. Mathematics 120.
Mathematics 241 or 611 or 621.
Mathematics 130 or 135 or 137.
D. Physics Requirement

Physics 104 (Prereq.: Physics 103, 118,
122, or 146).

## Bachelor of Science Degree

A. Core Requirements

Computer Science 95 (unless exempt),

101, 103, 200, 201, 220, 300, 303, 320, and 341.
B. Elective Requirements

One of CS 322, 323, 324.
One additional three-credit computer science course numbered 200-699 except 398, 601, 602, and 640.
A course from the following list may be used for this requirement:
Mathematics 223, 224, 230, 245, 247,
248, 317, 337, 609, 613, 619, 621, 623, 624, 625, 626, 633, 634, 635, or 636. Physics 225 or 312.
C. Math Requirements

Mathematics 111 and 112 or equivalent. Mathematics 120.
Mathematics 241 or 611 or 621.
Mathematics 130 or 135 or 137
Mathematics 201 or 626.
D. Physics Requirement

Physics 104.
E. One of the following sequences:

Physics 145, 146, and 225.*
Chemistry 113 and 114.
Biology 107 and 108.
Geology 101 and 102.
Psychology 101 (or 102), 107, and 213.

## The Minor

The minor in computer science consists of the following courses:
A. Core Requirements

Computer Science 95 (unless exempt), 101, 103, 200, 201, 220, 300, 303, and 341.
B. Elective Requirements One additional three-credit course from the major A. or B. section.
C. Math Requirements

Math 120 and either 100, 101, or 111.

## Prerequisite Requirements

All courses in the major or minor (as listed above) must be completed with a grade of C - or better. A course may not serve as a prerequisite until it has been passed with a grade of C - or better. You will recei ve credit for the course only once.

N ote: The department requires one grade of C - or better for each course, not an average grade of C-. Thus, receiving a $D$ in a course and repeating it with a C - is satisfactory, even though the average of the two grades is less than C -

The C- minimum rule does not apply to prerequisites required for mathematics or physics courses.

[^10]
## B.A.-M.A. Program

The department offers an accelerated B.A.-M.A. program. Interested students should contact the department for complete details.

## D epartmental H onors

Departmental honors are awarded to majors of outstanding academic performance who also complete at least 3 credits in Computer Science 391, 393, or 399; have a Computer Science major GPA of 3.67; and overall GPA of 3.2.

## COURSES

Note that the middle digit of course numbers indicates the type of course rather than its level, as follows:

| Middle Digit | CourseType |
| :---: | :--- |
| 0 or 1 | Software |
| 2 or 3 | Foundations |
| 4 or 5 | Hardware |
| 6 or 7 | Methodology |
| 8 or 9 | Miscellaneous |

12. Understanding and Using Personal

Computers. 2 lec., 2 lab. hr.; 3 cr. Prereq.: Two and one-half years of high school mathematics, including intermediate algebra, or Mathematics 6. Hands-on introduc tion to computers, computation, and the basics of computer hardware and software. Students will have experience during the instructed microcomputer lab with a number of software environments including an operating system, a word processor, a spreadsheet and a database package. The course will focus on problem solving and programming with the context of these packages. In addition, students will acquire the skills needed to learn other software packages on their own. Not open for credit to students who have taken Computer Science 18.

## 18. Computers with Business Applica-

 tions. 3 hr.; 3 cr. Prereq.: Admission to the Business and Liberal Arts minor. Fundamentals of computer hardware and software with emphasis on applications most used in business: spread-sheets, database management, word processing, communications. An important part of the course is an examination of the problems created for business and its customers by computer usage, including crime and invasion of privacy.95. Introduction to Programming. 2 lec., 2 lab. hr.; 3 cr. Prereq.: Mathematics 6. Introduction to programming and problem solving in a high-level language. No prior experience with computers is presumed. Topics include variables and types, statements for decision making and iteration, procedures and functions, and single-dimension arrays. Not open to students who have received credit for Computer Science 100.
96. Pascal Programming. 2 hr.; 2 cr.

Prereq.: Mathematics 6 and permission of the department. This course is intended for
students who need to learn Pascal to begin the major (such as transfer students with a strong background in programming). It gives a rapid introduction to and practice in Pascal programming equivalent to that in Computer Science 95. Students who are unsure if they should take Computer Science 95 or 100 should consult an undergraduate adviser. Not open to students who have received credit for Computer Science 95.
101. Introduction to Computer Science. 2 lec., 2 rec. hr.; 4 cr. Prereq.: Computer Science 95 or 100 and Mathematics 10. An in-depth introduction to problemsolving techniques using the advanced features of a high-level language. Topics will include program testing techniques and the use of multi-dimensional and composite structures to implement stacks, queues, and simple linked lists. Software projects include design, coding, debugging, and documenting of programs. Introduction to theoretical computer science. Intended for majors or minors in computer science.
103. Data Structures. 3 hr.; 3 cr. Prereq.: Computer Science 101. Design and implementation of data structures including linked lists, tables, binary and n-ary trees and graphs, using both static and dynamic storage allocations. Searching and sorting techniques. Introductory analysis of algorithms.
200. Programming in $\mathbf{C}$ and $\mathrm{C}++$. 2 lec. hr.; 2 cr. Prereq.: Computer Science 103. Instruction in and general programming using the $C$ and $C++$ languages. Object-oriented design; development tools.
201. Computers and Programming. 3 hr.; 3 cr. Prereq.: Computer Science 95 or 100. Introductory computer architecture; machine representation of data; arithmetic and logical operations; machine language; structured assembly language programming including batch and interactive debugging; two-phase assembly; external subprograms and linkage; macros. Several projects illustrate machine structure and programming techniques.
220. Discrete Structures. (formerly Computer Science 221) 3 lec. hr.; 3 cr. Prereq.: Computer Science 95 and Mathematics 120. Recursion, recurrence relations, and generating functions; graphs and applications; abstract algebraic structures; applied number theory. Applications in computer science.
280. Self-Study Programming. 3 hr.; 1 cr. Prereq.: CS 103. Self-study and mastery of a programming language or package through reading and practice. Students should consult the department at the beginning of the semester for reading materials and assignments. May be repeated for a maximum of five credits provided the topic is different.

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). tOffered either Fall or Spring; see Class Schedule t†May be offered; see Class Schedule.
300. Programming Languages. 3 lec., 2 lab. hr.; 4 cr. Prereq.: Computer Science 200 and 201. Principles of programming language design and implementation of the procedural, functional, and logic programming paradigms including syntax (BNF , expression grammars, and operator associativity); binding of variables; type coercion and equivalence (including weakly- typed languages); scope and extent of variables (activation records, static and dynamic links); parameter passing and environments; formal semantics. Programming projects done in the lab will use programming languages which serve to exemplify in practice the the oretical material presented in lecture.
303. Operating Systems Principles. 3 hr.; 3 cr. Prereq.: Computer Science 200 and 201. Principles of the design and implementation of operating systems. Concurrent processes, CPU scheduling, interrupt handling, deadlocks, memory management, virtual memory, secondary storage management, file systems. Programming projects to illustrate portions of an operating system.
304. Operating-System Internals. 3 hr.; 3 cr. Prereq.: Computer Science 303. A study of the internal structures of a particular operating system such as Unix, iRMX or another chosen by the department. (The operating system to be studied is announced at registration time.) After intro ducing a systems implementation language appropriate to the operating system being studied (for example, C in the case of Unix or $P L / M$ in the case of iRMX), projects are assigned which involve system calls, use of the I/O and file systems, memory management, and process communication and scheduling. Projects may also involve developing new or replacement modules for the operating system such as the command interpreter or a device driver. A student may receive credit for this course only once.
307. Compilers. 3 hr.; 3 cr. Prereq.: Computer Science 300. F ormal definitions of programming languages: introduction to compiler construction including lexical, syntactic, and semantic analysis, code generation, and optimization. Students will implement portions of a compiler for some structured language.
309. Software Engineering. 4 hr . plus 1 hr. conf.; 3 cr. Prereq.: Computer Science 300. Principles of software engineering including the software life cycle, reliability, maintenance, requirements and specifications, design, implementation, and testing; features of languages designed for software engineering. Implementation of a large programming project using currently available software engineering tools.
311. Database Systems. 3 hr.; 3 cr. Prereq.: Computer Science 103 and 220. Principles of database systems including the physical level, database architecture, the relational, network, and hierarchic approaches, database design, normal forms query processing, concurrency, recovery, security, and integrity. Programming pro-
jects using some major database packages.
315. Artificial Intelligence. 3 hr .; 3 cr . Prereq.: Computer Science 300. Principles of artificial intelligence. Topics include logic and deduction; resolution theorem proving; space search and game playing; language parsing; image understanding; machine learning and expert systems. Programming projects in LISP, PROLOG, or related languages.
318. Computer Graphics. 3 hr.; 3 cr. Prereq.: Computer Science 200, 220, and Mathematics 130 or 135 . Introduction to the hardware and software components of graphics systems, fundamental algorithms for the generation of two-dimensional display (lines, fill areas, curves, characters), transformation and viewing algorithms, methods of organizing picture components into segments, interactive input, Graphical Kernel System (GKS) routine calls, color models, introduction to three-dimensional techniques. Programming projects to demonstrate the implementation of graphic algorithms.
320. Foundations of Computer Science. 3 hr.; 3 cr. Prereq.: Computer Science 103 and 220. Finite state machines and regular languages; context-free languages and stack machines; type-0 languages and Turing machines; computability (Herbrand-Gödel computability, recursively enumerable sets, halting problem, and diagonalization), feasible and infeasible problems (complexity classes, reductions), RAMs and PRAMs.
322. Computability. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Computer Science 320. Turing machines, Herbrand-Gödel definitions of recursive functions, partial recursive functions, the Universal Turing Machine, the ChurchTuring Thesis, unsolvable algorithmic problems, connections with the theory of computer programming.
323. Analysis of Algorithms. 3 hr .; 3 cr . Prereq.: Computer Science 103 and 220 and Mathematics 241. Time-space-computational complexity. Recursion, divide and conquer, balancing and dynamic programming. The complexity of sorting, searching, numerical, set, and graph problems. NPcomplete problems.
324. Formal Languages and Automata. 3 hr.; 3 cr. Prereq.: Computer Science 320. Finite state concepts: acceptors, regular expressions, closure properties, sequential machines, and finite state transducers. Formal grammars: Chomsky hierarchy grammars, pushdown acceptors and linear bounded automata. Closure properties and algorithms on grammars.
341. Computer Organization. 3 hr .; 3 cr . Prereq.: Computer Science 201 and 220. Combinational and sequential logic design including programmable logic devices. Memory organization. Arithmetic unit design. Conventional and microprogrammed control unit design. I/O organization.
343. Computer Architecture. 3 hr.; 3 cr Prereq.: Computer Science 300 and 341;
prereq. or coreq.: Computer Science 303. Examination of specific microcomputers, minicomputers, and large-scale computers. Special purpose architectures, multipro cessing organizations.
348. Data Communications. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Computer Science 341. Computer communications and networks; carriers, media, interfaces (RS 232, RS 422, CCITT); circuit types, data codes, synchronous and asynchronous transmission; protocols (OSI, TCP/IP); modems, multiplexors, and other network hardware; error correction and encryption; voice and data switching: local area networks, ISDN, packet switching; issues in the architecture, design, and management of networks.
361. Numerical Methods. 3 hr.; 3 cr. Pre req.: Computer Science 101 and Math ematics 201. Numerical methods and efficient computation, approximation, and interpolation. Computer solution of systems of algebraic and ordinary differential equations.
381. Special Topics in Computer Science. 381.1-381.4, 1-4 hr.; 1-4 cr. Prereq. Permission of department. Fall, Spring

No more than three credits of Computer Science 391-399, excluding 398, may be used as an elective for the Computer Science major or minor.
391. Honors Problems in Computer Science. 391.1-391.3, 1-3 hr.; 1-3 cr. Prereq.: Permission of department. Open to students majoring in computer science who, in the opinion of the department, are capable of carrying out the work of the course. E ach student works on a research problem under the supervision of a member of the staff. Fall, Spring
393. Honors Thesis. 3 hr.; 3 cr. Prereq.: J unior or senior standing and approval of the Department's Honors and Awards Committee. The student will engage in sig nificant research under the supervision of a faculty mentor and a thesis committee consisting of two other faculty members. The thesis proposal and committee must be approved by the Departmental Honors and Awards Committee. Upon completion of the research paper, an oral presentation of the results, open to the public, will be given. With the approval of the mentor thesis committee, and the Department's Honors and Awards Committee, the course may be repeated once for credit when the level of the student's work warrants a ful year of effort.
395. Research Projects. 395.1-395.3, 1-3 hr.; 1-3 cr. Prereq.: Permission of department. Open to majors and nonmajors who, in the opinion of the department, are capable of carrying out an independent project of mutual interest under the supervision of a member of the staff.
398. Internship. 398.1, 45 hr.; 1 cr.; 398.2, 90 hr., 2 cr.; 398.3, 135 hr.; 3 cr. Prereq.: Completion of 15 credits in computer sci-
ence and departmental approval. Computer science students are given an opportunity to work and learn for credit. Students should consult the College Office of Cooperative Education and Internships for listings of available internships and procedures for applying. A proposal must be approved by the department before registration. The student's grade will be based on both the employer's and faculty sponsor's evaluations of the student's performance, based on midterm and final reports. A limit of 6 credits of internships may be taken. Computer Science 398 may not be applied to the computer science major or minor.

## 399. Honors Readings in Computer

Science. 3 hr .; 3 cr. Prereq.: J unior or senior standing and permission of instructor. Students will study and report on survey and research papers dealing with various current topics in computer science selected by the instructor. Topics for each offering of the course will be announced at registration time.

## Graduate Courses for Undergraduates

(Consult the Graduate Bulletin for complete course listing.)
Undergraduate computer science students may apply to take 600-level graduate courses if they meet the following criteria: completion of at least 61 credits toward the bachelor's degree; computer science major GPA of at least 3.2; and permission of the instructor, undergraduate adviser, and department Chair.

Undergraduates may apply to take 700level graduate courses if they meet the following criteria: completion of at least 78 credits toward the bachelor's degree; computer science major GPA of at least 3.5; and permission of the instructor, undergraduate adviser, department Chair, and the Office of Graduate Studies.

## Courses in Reserve

102. Practicum in Pascal Programming. 215. C.
103. Computer Hardware Lab.

## C ooperative E ducation and Internships

See Special Sequences and Courses, page 197.

## D rama, Theatre, and D ance

Chair: Raymond D. Gasper

Dept. Office: Rathaus 213, 997-3090
Professors: Allen, Carlson, H., Einhorn, Feiner, Gasper, Matthews; Associate Professors: Malone, Tanner; Assistant Professor: Critchell; Adjunct Assistant Professors: Einenkel, Pereira, Rose; Adjunct Lecturers: Boodaghian, J ackson, Saarikangas, Stansfield, Vuolo, Wanner, Webb; Senior College Laboratory Technician: Hudson; Administrative Assistant: Stansfield; Professors Emeriti: Dierlam, Keene

The Drama, Theatre, and Dance curriculum offers a study of the subject appropriate to a liberal arts degree. A balanced combination of theory and practice aims at giving an understanding of the arts of drama, theatre, and dance that can serve as a foundation for graduate study. Effort is made to provide scope for the development of individual talent and skills as a preliminary for those students who intend to concentrate on future conservatory training for a stage career. Students are encouraged to major in Drama, Theatre, and Dance and minor in closely related areas such as Art and English.

## The Majors

## Drama and Theatre

A major in Drama and Theatre consists of no fewer than 36 credits, which must include:

1. 101
credits
2. 201, 202
3. One of the following: 203, 204, 3083
4. 1113
5. 115
6. One of the following: 318 or 3193
7. One of the following: 100 or 1213
8. One of the following: 230 or 231 ..... 3
9. Elective credits$\begin{array}{r}9 \\ - \\ \hline\end{array}$

## Theatre-Dance

A major in Theatre-Dance consists of no fewer than 36 credits, which must include:

[^11]credits
minimum of 4 credits: 266 ,
267, 268, 362, 3654
3. 269, 270, 3769
4. One of the following: 102 or 2513
5. One of the following: 111 or 1153
6. 100

3
7. Electives in Theatre-Dance $\quad-\frac{6}{36}$

## The Minors

Drama and Theatre
A minor in Drama and Theatre consists of no fewer than 18 credits, which must include:

## credits

1. Two of the following: 101,

201, 202, 203, 204, 308, 3096
2. One of the following: 111 or 1153
3. One of the following: 318 or 3193
4. One of the following: 100 or 1213
5. One of the following: 231, 241,

342, 343, 344, 346, 349

## Theatre-Dance

A minor in Theatre-Dance shall consist of no fewer than 18 credits, which must include:

|  | credits |
| :--- | :---: |
| 1. 251 | 3 |
| 2. 269 | 3 |
| 3. 270 | 3 |
| 4. 376 | 3 |
| 5. Three courses selected from |  |
| $160,163,261,264,362,365$ | $--\frac{6}{18}$ |

## Joint Major

## Drama and Theatre and <br> Mass Communications

The Departments of Drama, Theatre, and Dance and Communication Arts and Sciences are revising this program. Please consult with advisers in each department for the current status of this program.

## COURSES IN DRAMA AND THEATRE

## Introductory Courses

1. Introduction to Drama and Theatre.

3 hr .; 3 cr . Introduction to the study of drama and theatre, including playwriting, directing, acting, design, and technical theatre. No experience in dramatic production is required. Lecture discussions, performances, demonstrations, films, tapes, and guest appearances by playwrights, directors, actors, and designers may be included. There may be some opportunity for student performance. Fall, Spring

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). corequisite for all courses (see pp. 40, 125). t†May be offered; see Class Schedule.

## 102. Introduction to the History of

Theatre. 3 hr .; 3 cr . A general survey of the devel opment of theatre for nonmajors. Only offered in Summer Session.

Play and Performance, History, and Criticism Courses
101. Play and Performance: Introduction. 3 hr.; 3 cr. A study of plays and playwrights with particular attention to the relationship between text and performance. Fall, Spring
201. History of Theatre from Antiquity to the Renaissance. 3 hr .; 3 cr . A study of plays with special reference to the history of theatre architecture, scene design, and acting. Fall

## 202. History of Theatre from the

Renaissance. 3 hr .; 3 cr . A study of plays with special reference to the history of theatre architecture, scene design, and acting. Spring
203. Play and Performance: Modern Theatre. 3 hr .; 3 cr . A study of plays, theatres, and production practices of the latter part of the nineteenth century and the early part of the twentieth century through World War II, with particular emphasis on production theory and the development of representative styles of drama and theatre.
204. Play and Performance: Contemporary Theatre. 3 hr .; 3 cr . Study of plays, theatres, and production practices since World War II; particular emphasis on performance, theory, and the development of representative styles of contemporary drama and theatre.
205. History of Musical Theatre. 3 hr.; 3 cr. Fall
206. Play and Performance: Black Drama in America. 3 hr.; 3 cr . A survey of drama dealing with the black experience in America. Fall
308. Studies in Play and Performance. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: J unior or senior standing and permission of department. Topic varies from semester to semester. Advanced study of one or more playwrights, theatre companies, theatrical theories, or methods. May be repeated for credit if different topic is studied.
309. Studies in Theatre History. 3 hr.; 3 cr. Advanced study of a particular period of theatre history. Topic will vary from semester to semester. May be repeated for credit if a different topic is studied. Spring

## Design and Technical Courses

## 111. Introduction to Design for the

Theatre. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Analysis of design ele ments as they apply to stage scenery and costumes. Projects developed in various media for selected plays. Fall, Spring
115. Introduction to Technical Theatre. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Survey of types of theatres, their physical plants, and production techniques, with a concentration on drafting, scenery construction, and methods of

## handling. Fall, Spring

211. Scenic Design I. 3 hr.; 3 cr. Prereq. Drama 111 or Art 260 or permission of department. Students will design stage scenery for plays, operas, and musical theatre. Fall
212. Scenic Design II. 3 hr.; 3 cr. Prereq.: Drama 211 or permission of department. Students will design stage scenery for multiscene productions including operas, musicals, and at least one play by Shakespeare. Spring
213. Costume Design I. 3 hr.; 3 cr. Pre req.: Drama 111 or Home Economics 157 or Art 260, or permission of department. Projects in costume design for plays, operas, musical theatre, and dance performances. The course deals with earlier periods of theatrical history. Fall
214. Costume Design II. 3 hr.; 3 cr. Prereq.: Drama 111 or Home E conomics 158 or Art 260, or permission of department. Projects in costume design for plays, operas, musical theatre, and dance performances. Continues from the periods covered by Drama 213 to contemporary theatre. May be taken independently of 213.
215. Theatre Lighting I. 3 hr.; 3 cr. Prereq.: Drama 115 or permission of department. Aesthetics and practice of lighting design with reference to historical development, col or theory, basic electricity, control equipment, and optics for stage lighting. Fall
216. Theatre Lighting II. 3 hr.; 3 cr. Prereq.: Drama 215 or permission of department. Advanced study of color, optics, and production for the stage. Emphasis on lighting design, script analysis, plotting, cueing. Spring
217. Projects of Theatre Design. 3 hr.; 3 cr. Prereq.: Drama 111 and permission of department. Advanced individual projects in design of stage scenery, lighting, or costumes that may involve the execution of a Queens College production. May be repeated for credit if a different project is undertaken. Fall, Spring
218. Projects in Technical Theatre. 3 hr.; 3 cr . Prereq.: Drama 115 and permission of department. Projects in technical theatre. May be repeated for credit if a different project is undertaken. Fall, Spring

## Acting Courses

100. Introduction to Acting. 3 hr .; 3 cr . A course intended for nonmajors or beginners in theatre with no previous training or experience, and for majors who intend to take a single course in acting to fulfill the major requirement. Introduces all aspects of acting, including philosophy and different methods; physical, sensory, and emotional work; improvisations; theatre games; monologues; character analysis; scene study; script interpretation; performing and working relationship with director. Students intending to take more than one course in acting must take Drama 121
instead of, or in addition to, this course.
101. Acting I. 3 hr.; 3 cr. An introduction to basic physical and emotional work, improvisations, technique, and theatre games. The first courses for the professional actor. (See also Drama 100.)
102. Acting II. 3 hr.; 3 cr. Prereq.: Drama 121 and permission of department. Scene analysis and performance, audition techniques, and the preparation and presentation of monologues.
103. Acting III. 3 hr.; 3 cr. Prereq.: Drama 222, audition, or permission of department. Character study, script interpretation, role preparation, and scene work.
104. Acting IV. 3 hr.; 3 cr. Prereq.: Drama 323, audition, or permission of department. Advanced character study, script analysis, role preparation, and advanced scene work.
105. Voice and Articulation for the

Actor. 3 hr.; 3 cr. Prereq.: Drama 121 or permission of department.
227. Physical Training for the Actor I. 3 hr.; 2 cr. Prereq.: Drama 121 or permission of department. Physical techniques for performance. Fall
328. Physical Training for the Actor II. 3 hr.; 3 cr. Prereq.: Drama 121, 227, or permission of department. Continuation and expansion of physical techniques studied in Drama 227, as well as improvisation, movement, and mime.
329. Acting Projects. 3 hr .; 3 cr . Prereq.: Audition. Acting in performances directed by faculty or by students under faculty supervision. May be repeated for credit if different work is involved. Fall, Spring

Play Direction and Stage Management
230. Stage Management. 3 hr.; 3 cr. Pre req.: Permission of department. The practical application of stage managing techniques in production. May be repeated for credit if different work is involved. Fall, Spring
231. Introduction to Directing. 3 hr.; 3 cr. A beginning course in the craft of stage direction including play and character analysis, staging techniques, production styles, and rehearsal methods. Classroom staging exercises and direction of a scene as a final project are required. Fall, Spring
332. Intermediate Directing. 3 hr .; 3 cr . Prereq.: Drama 231 and permission of department. Continuation of study of directing. Student will direct one act of a play or a one-act play. May be repeated for credit if different work is involved. Fall
333. Advanced Directing. 3 hr .; 3 cr . Prereq.: Drama 332 and permission of department. Advanced projects in directing a full-length play, which might involve directing a major production in the Queens College Theatre. May be repeated for credit if different work is involved. Spring

## Workshops

241. Experimental Theatre Workshop. 3 hr .; 3 cr. A study of group-created drama. Students will create a group production through improvisations, theatre games, vocal and physical exercises. The group participates in writing a play, shares responsibilities as directors, actors, and designers, rehearses the production, and performs it before an audience. May be repeated for credit if a different project is undertaken. Fall, Spring
242. Black Drama Workshop. 3 hr.; 3 cr The production of a play or plays dealing with the black experience. Spring
243. Shakespeare Workshop I. 3 hr.; 3 cr. Prereq.: Permission of department. A study of Shakespeare's comedies and tragicomedies integrating scholarship, criticism, and theatre art. F all
244. Shakespeare Workshop II. 3 hr.; 3 cr. Prereq.: Permission of department. A study of Shakespeare's histories and tragedies integrating scholarship, criticism, and theatre art. Spring
245. Playwriting Workshop. 3 hr.; 3 cr. Prereq.: Permission of department. Spring
246. Musical Theatre Workshop. 3 hr .; 3 cr . Prereq.: Audition and permission of department. Practice of performance techniques, including auditioning, for the performer in musical theatre. May be repeated for credit if different work is involved. Fall, Spring
247. Workshop in Repertory Theatre Management, Production, and Performance. 349.1-349.6, 1-6 hr.; 1-6 cr. Prereq.: Audition, interview, and permission of department. Students will be involved in organizing and operating a theatre under faculty supervision. They will, as a team, take responsibility for all aspects of theatre operations including producing, directing, acting, designing, publicity, management of budget, box office, house management, and all other matters pertaining to the operation of a theatre.

Special Theatre Projects and Seminars
390. Special Problems in Drama and Theatre. 390.1-390.3, 1-3 hr.; 1-3 cr. Prereq.: Permission of department. Individual research under the direction of a member or members of the department and resulting in a written report. May be repeated for credit.

## 397. Seminar in Drama and Theatre.

 3 hr.; 3 cr. Prereq.: Permission of department. Topic to vary from semester to semester.
## COURSES IN THEATRE-DANCE

## Introductory Course

150. Introduction to Dance. 3 hr .; 3 cr . An introduction to dance as a performing art, combining lectures on historical development with studio work in the fundamen-
tals of dance technique. Fall, Spring
History, Criticism, Therapy, and Education Courses
151. History of Dance. 3 hr .; 3 cr . Lec-ture-discussion on the historical and philosophical development of dance as an art form. Fall
152. Contemporary Dance: Criticism and Aesthetics. 3 hr .; 3 cr . Lecture-discussion examining major influences and devel opments in dance in the twentieth century. Spring
153. Introduction to Dance Therapy. 3 hr.; 3 cr . A wide-ranging introduction to the theory and practice of dance therapy. The course focuses on the skills and techniques of dance and expressive movement and their therapeutic application. Members of the class serve as a laboratory for exploring individual and group issues. This course is only offered in Summer Session.

## 257. Principles of Teaching Dance. 3

 hr.; 3 cr . The theory and practice of aims and materials used in the teaching of dance. Fall
## Studio Courses

160. Modern Dance I. 3 hr.; 2 cr. Beginning studio course in modern dance techniques with emphasis on developing fundamental movement skills. Fall, Spring
161. Modern Dance II. 3 hr.; 2 cr. Prereq.: Theatre-Dance 160. Intermediate studio course in modern dance techniques with emphasis on greater movement range, control, and complexity. Fall, Spring
162. Modern Dance III. 3 hr.; 3 cr. Prereq.: Theatre-Dance 261 or permission of department. Advanced studio course in modern dance techniques with emphasis on performance style and quality. May be repeated for credit if different work is involved. No more than 12 credits in The-atre-Dance 362 and 365 can be applied toward the baccalaureate degree.
163. Ballet I. 3 hr.; 2 cr. Beginning studio course in classical ballet technique with emphasis on correct placement and alignment. Fall, Spring
164. Ballet II. 3 hr.; 2 cr. Prereq.: TheatreDance 163 or permission of department. Intermediate studio course in classical ballet techniques with emphasis on proper phrasing, clarity, and musicality. Fall, Spring
165. Ballet III. 3 hr.; 2 cr. Prereq.: The-atre-Dance 264 or permission of department. Advanced studio training in classical ballet technique with emphasis on refinement and performance qualities. May be repeated for credit if different work is involved. No more than 12 credits in The-atre-Dance 362 and 365 can be applied toward the baccalaureate degree. Spring
166. Specialized Styles in Dance: J azz. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. A studio course focusing on the style of jazz dance form
167. Specialized Styles in Dance: Tap. 3 hr .; 3 cr . A studio course focusing on the style of tap dance form.
168. Specialized Styles in Dance: Ethnic, Social, or Folk. 3 hr.; 3 cr. A studio course focusing on the style of ethnic, social, or folk dance forms.
169. Analysis of Dance Movement. 3 hr.; 3 cr . A studio course designed to teach the use of the body for dance and the underlying principles of human movement.

## Choreography Courses

270. Dance Improvisation and Composition. 3 hr.; 3 cr . A studio course exploring skills, techniques, and methods for choreographing dance. F all
271. Music for Movement. 3 hr.; 3 cr. An investigation of the relationships of music and other forms of sound to dance movement.
272. Dance Notation. 3 hr .; 3 cr . A study of the basic skills and techniques for analyzing and recording movement in Labanotation.

## Dance Production and Workshops

380. Dance Production. 3 hr.; 3 cr. Pre req.: Audition. A laboratory for creating and preparing for a dance performance, culminating in the public presentation of a dance concert. May be repeated for credit when topic changes. Spring
381. Theatre-Dance Workshop. 3 hr .; 3 cr. Prereq.: Permission of department. The study of dance as a significant component of theatre. One or more projects will be presented. May be repeated for credit when topic changes. Fall, Spring

## Special Projects and Seminars

395. Special Problems in TheatreDance. 395.1-395.3, 1-3 hr.; 1-3 cr. Prereq.: Permission of department. Independent study projects under faculty supervision. May be repeated for credit if different work is involved.
396. Seminar in Theatre-Dance. 3 hr.; 3 cr. Prereq.: Permission of department. Topics vary from semester to semester. May be repeated for credit if different work is involved.

## E conomics

Acting Chair: M. Anne Hill

Assistant Chair: Babette Solon
Dept. Office: Powdermaker 300, 997-5440
Professors: Edelstein, Edwards, Gram, Hill, Kaufmann, Levenson, Riskin, Roistacher, Tabb, Thurston; Adjunct Professor: Kohn; Associate Professors: Dohan, Field-Hendrey, Gabel, Nix, Weiman; Adjunct Associate Professors: Malin, Rezvani. Solon; Assistant Professor: Feliciano; Lecturer: Chiremba; Department Secretaries: Crohn, Rossini

The department aims to give students a thorough comprehension of the economic aspects of human behavior in its social context. By providing knowledge of the basic structure, processes, and problems of the economy and systematic training in the use of analytical procedures in their study, economics, along with other social sciences, constitutes an essential element in the broad understanding of society, its organization, functioning, and trends.

Courses in economics prepare the student for graduate work in economics, statistics, and business administration; for professional schools such as law, journalism, and social work. Training in economics also helps to prepare those who want to teach economics or social studies on a secondary level or who wish to do economic research.

Students who plan to pursue graduate work in economics, statistics, and business administration should also take courses in the Mathematics Department. Most graduate schools require as a minimum Mathematics 111 and 112. In addition, it is recommended that economics majors also take Computer Science 101 (Introduction to Computer Science).

## The Major

Students who want to major in economics must take Mathematics 21 or the equivalent and must select at least 30 credits in economics courses exclusive of courses numbered $151,253,254,258$, and 370 . Economics 101, 102, 205, 206, and 249 and 382 are required of all majors. Transfer students must take at least 15 hours of economics at Queens College. All students must have at least a C average for economics courses taken at Queens College, and, in addition, a C average in the required courses in economics. Mathematics 21 or its equiva-
lent must be passed with a letter grade. Students who are planning to major in economics should take Mathematics 21 or its equivalent as early in their economics major as possible because Mathematics 21 or its equivalent is a prerequisite for two required courses, E conomics 205 and 249. Equivalents for Mathematics 21 include Mathematics 100, 101, 111, 117, an AP calculus score which is greater than or equal to 3 for Calculus AB, or an AP calculus score which is greater than or equal to 2 for Calculus BC.

E conomics majors who have not completed Economics 205 and 206 by the start of their junior year must take Economics 205 and 206 during their junior year. If neither Economics 205 nor 206 has been taken at the start of the junior year, at least one must be taken during the student's first semester as a junior. If one of the two courses has been completed before the start of the junior year, the second course must be taken during the first semester of the junior year.

All majors must see a department adviser before enrolling in courses beyond Economics 101 and 102. Majors are required to file a concentration form during their junior year or before.

## Joint Major in Economics and Accounting

Students majoring in accounting may also receive a major in economics by completing 30 credits in the latter. All of the economics courses required for the accounting degree may be included for the concentration in economics. Economics 205, 206, and 382 must be part of the 30 credits in economics.

## The Minor

The requirements for the minor in economics are:

1. Mathematics 21 or the equivalent and 18 credits in economics consisting of Economics 101, 102; two of the following courses: Economics 205, 206, and 249; and two electives. At least 12 of these credits must be taken at Queens College.
2. C average for all economics courses applied to the minor and a C average in Economics 101, 102, and the two courses chosen from Economics 205, 206, and 249.
3. Students should consult with a faculty adviser and complete a concentration form as soon as they have decided to minor in economics.

## COURSES

1. E conomics and Society. 3 hr .; 3 cr . A course designed for the nonmajor who
wishes an introduction to economic reasoning and policy making. The major concepts of modern economics will be discussed along with applications of the theory to important contemporary problems such as inflation, recession, productivity, income distribution, and the U. S. role in the world economy. Credit will not be applied toward the major in economics or toward filling CPA requirements. Accounting majors should take E conomics 101. Fall, Spring
2. Introductory E conomics I. 3 hr.; 3 cr. Prereq.: Having passed the 11th-year Algebra Regents examination; or passing the appropriate placement examination administered by the Mathematics Department; or passing a course at the level of Mathematics 6. Surveys major economic principles, institutions, and problems. Covers the nature and methods of economics; economic processes in market and other systems, and the role of the government; the nature of the business firm and the problem of industrial organization and monopoly; the position of Iabor and agriculture in the American economy; determination of the levels of income, prices, and employment; money and banking; the problems of poverty and income distribution; and the role of stabilization policy. Fall, Spring
3. Introductory E conomics II. $3 \mathrm{hr} . ; 3$ cr. Prereq. or coreq.: Economics 101. Cov ers the process of resource allocation and in-come distribution within a free enterprise economy, with international trade, and under collectivism; the nature and problems of the balance of international payments and the role of international monetary policy and foreign investment; the problems of economic growth in advanced and underdeveloped economies and under collectivism. Fall, Spring

## 203. Development of E conomic

Thought. 3 hr.; 3 cr. Prereq.: E conomics 102 or permission of instructor; English 120. Traces the evolution of economic doctrines both in their institutional context and with reference to central issues that are of present-day significance.
205. Price Theory. 3 lec., 1 lab. hr.; 3 cr. Prereq.: E conomics 102 and Mathematics 21 or the equivalent. Familiarizes the student with the technical tools of economic analysis. Covers price, input and output decisions of the business firm; the forces behind supply of and demand for the product of the firm and industry; and the factors determining the distribution of income. This course cannot be taken for credit if Economics 225 has been taken (see also E conomics 225). Fall, Spring
206. Macro-E conomic Analysis. 3 hr.; 3 cr. Prereq.: Economics 102. National income measurement; macro-economic theories of income, employment, prices, and interest rates; public policies for growth

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). tOffered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
and stabilization. This course cannot be taken for credit if E conomics 226 has been taken (see also E conomics 226). Fall, Spring
207. Comparative E conomic Systems. 3 hr.; 3 cr. Prereq.: Economics 102; English 120. Includes comparisons with the USSR. $\dagger \dagger$
208. The Process of Economic Devel-
opment. 3 hr.; 3 cr. Prereq.: E conomics 102; English 120. The causes of differences in the levels of economic performance among countries; major theories of economic development; policies for economic development. $\dagger \dagger$
210. Transformation of E conomic Systems. 3 hr.; 3 cr. Prereq.: Economics 102; English 120. This course is concerned with the breakup and reconstitution of economic systems from antiquity to the present. The emphasis will be on primitive, feudal, and contemporary underdeveloped economies. $\dagger \dagger$
211. Economics of Asia. 3 hr.; 3 cr. Prereq.: Economics 102 or permission of department; English $120 . \dagger \dagger$
212. Economic Problems of Latin

America. 3 hr.; 3 cr. Prereq.: Economics 102 or permission of department; English 120.
213. Economics of the Labor Force. 3 hr.; 3 cr. Prereq.: Economics 102; English 120. Theoretical and public policy issues relating to wage determination, labor markets, the labor force, wages, prices, productivity, employment, human resources, and income maintenance.
214. Economics of Organized Labor. 3 hr.; 3 cr. Prereq.: Economics 102; English 120. Includes collective bargaining in the public and private sectors and labor problems of minorities. $\dagger \dagger$
215. Money and Banking. 3 hr.; 3 cr. Prereq.: Economics 102. Description and analysis of monetary and banking principles and institutions.
217. Public Finance. 3 hr .; 3 cr . Prereq.: Economics 205 or 225; English 120. Such topics as government expenditures, distribution of the tax burden, equity in taxation, tax competition, and the national debt
218. The Economics of State and Local Finance. 3 hr.; 3 cr. Prereq.: Economics 102; English 120. Such topics as the demand for government services, intergovernmental fiscal relations, the distribution of various public services within and between governmental jurisdictions, governmental budgeting processes, and sources of revenue.
219. Economics of Class, Race, and Sex. 3 hr.; 3 cr. Prereq.: Economics 101; English 120. This course is concerned with theoretical and historical explanations of stratification by class, race, sex, and ethnicity. Specifically, it is concerned with explaining differential rates of progress among ethnic groups; the economic position of the black population versus the
white one; black/white males vis-à-vis black/ white females; and finally, males and females.
220. Consumer Economics and Personal Finance. 3 hr .; 3 cr . Prereq.: Economics 102; English 120. This course covers personal financial planning, consumer decision making, present value theory, money management, and credit. Specific topics include: income taxes, investing and portfolio management, risk management (insurance), pensions, long-term family and estate planning, and the problems of information and transaction costs. Students learn to use a spreadsheet on the IBM PC to solve various case problems. $\dagger \dagger$
221. The E conomy of Greece. 3 hr .; 3 cr . Prereq.: Economics 102; English 120. This course will focus on the postwar structure and performance of the Greek economy. An examination of overall growth as well as growth of the agricultural, industrial, and service sectors will be pursued, taking into account the private-versus-public sector dichotomy. Special consideration will be given to external economic relations of Greece, its membership in the EEC, and balance of payments problems. The structural effects of external relations upon domestic development will be traced, dealing, for example, with migration and income distribution. $\dagger \dagger$
222. E uropean Economic History since 1750. 3 hr.; 3 cr. Prereq.: Economics 101 and 102; English 120. Emphasizes the processes and repercussions of industrialization.
223. The Development of the American Economy to 1914. 3 hr .; 3 cr . Prereq.: Economics 101 and 102; English 120.
224. American Economic History since 1914. 3 hr.; 3 cr. Prereq.: Economics 101 and 102; English 120.

## 225. Price Theory (Mathematics

Emphasis). (formerly E conomics 205M) 3
lec., 1 lab. hr.; 3 cr. Prereq.: Economics 102 and Mathematics 22 or 103 or 112. Identical to E conomics 205, except taught with a greater use of mathematical tools. Recommended for students planning to do gradu ate work in economics and business. This course cannot be taken for credit if Economics 205 has been taken. $\dagger \dagger$
226. Macro-E conomic Analysis (Mathematics E mphasis). (formerly E conomics 206M) 3 hr.; 3 cr . Prereq.: E conomics 102 and Mathematics 22 or 103 or 112. Identical to E conomics 206 except taught with a greater use of mathematical tools. Recommended for students planning to do graduate work in economics and business. This course cannot be taken for credit if Economics 206 has been taken. $\dagger \dagger$
227. International Finance. 3 hr .; 3 cr .

Prereq.: Economics 102 and 206 or 226; English 120. An analysis of the economics of balance of payments, the foreign exchange market, international liquidity and adjustment problems, exchange rate
systems and their influence on interna and external balance, international financial institutions, international capital movements, financial problems of economic integration.
228. The Economics of the Environment. 3 hr.; 3 cr. Prereq.: E conomics 102 or permission of instructor; English 120. The economic causes of environmental problems and the problems encountered in estimating the economic cost of environmental damages. Application of economic theory to establish the conditions for the best use of the environment, and to evaluate economic costs and benefits of current regulatory policy. $\dagger \dagger$
230. Women's Issues in Economics. 3 hr.; 3 cr. Prereq.: Economics 102; English 120. Includes discussion of participation of women in the labor force; distribution of women among occupations; work outside the marketplace and in the home; wage diferentials between men and women; and government policies that affect the economic position of women. $\dagger \dagger$
240. Industrial Organization. 3 hr .; 3 cr . Prereq.: Economics 102 and Mathematics 21 or equivalent; English 120. The economic functions of business firms; the theory and practice of internal organization of firms; market structure and performance of competitors, oligopol ists, etc., and their effects on economic welfare; business as a social and political institution; the large firm in a mixed economy.
241. Corporation Finance. 3 lec., 1 lab. hr.; 3 cr. Prereq.: Economics 102. An analysis of the major funds flows of the firm. Development of the principles for determining specific assets a firm should acquire, as well as the least-cost methods of financing those assets. Topics considered include the management of cash, inventories, recei vables, and fixed assets; alternative sources of available funds, including short-, intermediate-, and long-term sources of financing; the cost of capital; optimum capital structure; and corporate dividend policy. Fall, Spring
242. Regulation of American Business. 3 hr.; 3 cr. Prereq.: Economics 102; English 120. The origin, evaluation, and present pattern of government regulation of business; the organization of industry; antitrust and the promotion of competition and prevention of monopoly and public regulation; public policies in natural resource and environmental conservation. $\dagger \dagger$
243. Economics of Distribution and Marketing. 3 hr.; 3 cr. Prereq.: Economics 102; English 120. Functions, structure, and cost of the system of distribution of goods and services. Emphasizes the dynamic character of marketing and the major problems encountered at every stage of the distribution process. Merchandising and sales promotional activities, price policies, selection of channels of distribution.
246. Urban Economics. 3 hr.; 3 cr. Prereq.: Economics 102; English 120. The
microeconomics of U. S. urban development patterns from the industrial revolution to the present. Decentralization of economic activity and population; the resulting urban problems and possible solutions to these problems.
247. Business Economics. 3 hr.; 3 cr. Prereq.: Economics 102; English 120. The application of economic principles to the problems of business decision making. Topics considered include decisions under risk and uncertainty; economic forecasting; estimation of demand and cost functions; price strategy under monopoly, oligopoly, and competition; diversification and conglomeration; and productivity analysis in worker and executive compensation. $\dagger \dagger$
249. Statistics as Applied to E conomics. 3 lec., 1 lab. hr.; 3 cr. Prereq.: Economics 101 and Mathematics 21 or equivalent. The topics covered are descriptive statistics, elementary probability theory, sampling statistical inference, estimation, and simple correlation and regression. (Not open to students with credit for Mathematics 241, which will be accepted in lieu of Economics 249.) Fall, Spring
326. International Economics. 3 hr .; 3 cr. Prereq.: Economics 205. An introduction to the theory of international trade and to empirical tests of trade theory.
341. Intermediate Finance. 3 hr.; 3 cr. Prereq.: Economics 241 and 249 or permission of the instructor; English 120. Covers the five most important problems of modern finance at a level beyond Economics
241. These are: the relationship between risk and returns, as expressed in the Capital Asset Pricing Model and Arbitrage Pricing Theory; the valuation of debt and equity instruments; the cost of capital and optimal capital structure; capital budgeting; and dividend policy.
350. Investment Analysis. 3 hr .; 3 cr Prereq.: Economics 241 or permission of instructor; English 120. An analysis of the types of securities available in the market covering both individual and institutional portfolio analyses and management. Considers the formulation of appropriate portfolio investment objectives, techniques for achieving them, and institutional, legal, and other constraints on portfolio strategies. Impacts of macro- and micro-economic activity on portfolio performance, and measures of performance are discussed.
351. Financial Markets. 3 hr.; 3 cr. Prereq.: E conomics 241 or permission of the instructor. Survey of the United States and international money and capital markets. Emphasis is on modern institutions and practices. The course also considers the analytics and consequences of recent trading techniques.
382. Introduction to E conometrics. 3 hr.; 3 cr . Prereq.: Economics 249 or equiva lent. This course will begin with a review of statistics and hypothesis testing, then introduce simple and multiple regression techniques; the estimation of regression
using ordinary least squares; inference; and the use of spreadsheets and statistical software to estimate economic models.
383. Seminar in Selected Studies in Economics. 3 hr.; 3 cr. Prereq.: Economics 101 and 102 and permission of department English 120. Subject varies with the instructor and the year. May be repeated for credit provided the topic is not the same. $\dagger \dagger$
390. Research Methods in Economics. 3 hr.; 3 cr. Prereq.: Economics 101, 102, 205, 206, 249. Class size is limited to 20. Required of honors students. The purpose of this course is to teach students some research methods in economics, including data sources, presentation and interpretation of data, organization writing, editorial revision, and oral presentation of brief research memos, a major research paper, use of literature searches, government documents, and computers to access data banks, and introduction to computer-based modeling.
391. Special Problems. 391.1-391.3, 1-3 hr.; 1-3 cr. Prereq.: Permission of department; English 120. Recommended for students of high standing who want to do special individual research in economics under the guidance of an instructor. (A student may receive credit only once for courses in the 391.1-391.3 series. $) \dagger \dagger$
392. Honors Seminar. 3 hr.; 3 cr. Prereq.: Economics 101, 102, 205, 206, 249; coreq.: E conomics 390. Class size is limited to 20. This course meets twice weekly to study selected topics in economics. The special topics will be selected by the staff, and, for example, could include rational expectations, econometric models, search theory, radical economics, benefit-cost analysis, decision-theory, location-models, etc. Students will be organized into study groups to meet with faculty to review specific topics in micro, macro, and other areas for their comprehensive exams.

## Courses in Reserve

204. Socialist Economic Thought.
205. Economic Structure and Behavior in Africa.
206. The Economics of Health and Income Maintenance Programs.
207. Economic Dynamics.
208. Marketing Research.
209. Business Cycles and Stabilization Policy.
210. Statistics as Applied to Economics II.
211. Seminar in Advanced Macroeconomic Theory.
212. Seminar in Advanced Microeconomic Theory.
213. Mathematical Economics.
214. Introduction to Operations Research.

Geography Courses in Reserve
151. Introduction to Geography.
253. E conomic Geography.
254. Introduction to Regional Science.
258. Political Geography.
370. Special Problems in Regional Science.

## E ast A sian Studies

The courses previously offered by the East Asian Studies program are now offered through the Asian Studies program.

## SCHOOLOF EDUCATION

(see also pages 120, 122, 123)
Acting Dean: Sydney Schwartz
Director of College Preparatory Programs: Marvin Leiner

Executive Assistant: Elizabeth Hennessey

Queens College offers undergraduate programs that prepare students for teaching at the early childhood, elementary, middle, and high school levels. Students are trained for teaching in many special subjects. Graduate students may study toward master's degrees in education in a number of teaching fields as well as the special subjects of special education and remedial reading. Graduate study, which includes advanced work beyond the master's degree, is available in counselor education, school administration and supervision, and school psychology.

The programs in the School of Education are approved by the State Education Department. All education courses, sequences, and programs comply with New Y ork State Department of Education regulations about certification. Students may obtain information from department offices concerning these requirements. Once the requirements specified by the departments are completed, students can apply for New Y ork State certification through the QC School of Education. A Certification of Qualification is issued by the New York State Department of E ducation for those completing undergraduate programs. To be certified, students must reach criterion scores on the examinations designated by the New York State Education Department.

The departments offer advice about programs; the Office of Educational Placement provides information about the examinations required by the New York State Department of Education and about New York State certification and New York City licensing. While advice and information are provided by faculty and staff of the School of Education, students are responsible for knowing and meeting specific licensure requirements of New York City, New York State, and other states.

All students must pass a medical examination prior to enrollment in courses that require fieldwork and contact with children and youth. Satisfactory standards in scholarship, health, motivation,
and character are expected. Departments may refuse matriculation or order withdrawal from courses if students do not meet these standards. Special requirements for entrance into and progress through educational sequences are specified below in the description of each department.

Matriculation for the Master of Science in Education degree is open to recipients of the baccalaureate degree from approved colleges who have completed an approved undergraduate education sequence. Special provisions may be made for those students whose undergraduate preparation lacks the necessary education background. F or further information, see the Advanced Certificate Program in the Elementary and Early Childhood Education and Services Department and Secondary E ducation and Youth Services Department sections below.

## Transfer Students

Transfer students are urged to seek advice from faculty advisers immediately upon admission to Queens College for evaluation of credit.

## Jointly Registered Programs

The School of Education has a joint degree program with Queensborough Community College and LaGuardia Community College for Elementary and Secondary Teacher Education. Students may enroll in these programs during their freshman year at either Community College. Students successfully completing the prescribed degree requirements specified by the Community College for the joint degree program are guaranteed admission to the Queens College teacher education program for which they have enrolled. Students are advised to enroll in the joint degree program during their first semester as a freshman. For further information, consult with the designated joint degree program adviser at Queensborough Community College or LaGuardia Community College.

## New York State Certification

U pon satisfactory completion of a Queens College education program and all requirements for the B.A. degree, the School of Education will forward a student's academic record and all necessary documents to the State Education Department as the first step in the certification process.

Graduating seniors are advised to contact their departments or the Educational Placement Office for information
about the examinations required by the New Y ork State Department of Education and additional requirements for permanent certification.

## Placement Service

The Office of Educational Placement helps certified teachers and candidates for certification find professional positions. Prospective employers both in and outside the metropolitan area make requests to the College office for candidates. Students are urged to register prior to graduation in Powdermaker 104. A nominal registration fee is charged. Teachers may update their files at any time. Dates and particulars of New York City license examinations as well as notices of job opportunities are posted outside Powdermaker 104. For information, contact Christine Howard, 997-5545.

## Field Placement Office

This office is the center of coordination for student teaching and the clinical component required in many education courses. It provides direction and service to the students and faculty in the School of Education.

## Evening Studies

The College offers a selection of required courses in the education sequence at night. Candidates will need to complete the sequence in the day session.

Students interested in Elementary and Early Childhood must see the Coordinator for Undergraduate Programs for advice (Powdermaker 180, 997-5302). Students interested in Secondary Education should seek advice from the Secondary Education and Youth Services Department (Powdermaker 193, 9975150).

## Education Honor Society

Kappa Delta Pi is the national honor society in education. It was founded March 8, 1911, at the University of IIIInois, and the K appa Gamma Chapter was installed at Queens College on December 16, 1963. It encourages excellence in scholarship, high personal standards, improvement in teacher preparation, distinction in achievement, and contributions to education. Invitations are extended to students in education on the basis of their cumulative and education indices, promise in the field of teaching, and faculty recommendation.

## Programs for Prospective School Psychology Majors

 The School Psychology Program is amaster's program of 60 credits leading to a New York State Certificate.

Students planning for graduate work in school psychology should see the Coordinator of the School Psychology Program (Professor Marian Fish, 997-5231) while they are enrolled in Secondary Education 201 or Elementary Education 202. To be eligible for admission to the School Psychology graduate program, the student may select one of two undergraduate plans. See the Graduate Bulletin (pages 66-69) for further details.

## Undergraduate Students in Graduate Education Courses

Undergraduates who wish to take graduate courses must see a graduate adviser in the appropriate education department and obtain permission from the Office of Graduate Studies, Powdermaker 100K. Credit may be used at the undergraduate or graduate level with the permission of the graduate adviser. For further information, see the Graduate Bulletin.

## New York City Regulations: <br> Special Education

New York City requires all candidates for licensing to have 6 credits in approved courses in special education. The following graduate courses (see the Graduate Bulletin) are approved for this purpose: ECP 740, Bases of Special Education; ECP 750, Electives in Special Education; EECE 713, The Psychology and Education of Exceptional Children and Youth; EECE 733, Workshop in Special Education: Curricular Adaptations for Mainstreamed Students; and EECE 732, Workshop in Special Education: Instructional Strategies for Mainstreaming. These may be taken for undergraduate or graduate credit in the senior year of undergraduate work with permission.

## E lementary \& E arly C hildhood E ducation \& Services

Chair: Glenna M. Sloan
Coordinator for Undergraduate Programs and Advisement: Myra Zarnowski
Dept. Office: Powdermaker 171, 997-5300
Professors: Abramson, Brovey, Schwartz, J., Schwartz, S., Sloan; Associate Professors: Baghban, Ezair, Gibson, Salz, Sobel, Swell, Turkel, Zarnowski; Assistant Professors: Bronars, Dill, Harris, J ohnson, Okongwu, Olivares; Instructor: Bisland; Department Secretaries: Gauvin, Zion

Successful completion of the approved undergraduate program leads to recommendation by the School of Education for a New York State Certificate of Qualification for teaching in Pre-Kindergarten through Grade 6. Because requirements for certification in New York State, New York City, and in other states vary among themselves and from time to time, students must adhere closely to the recommended programs and remain in constant communication with the advisers of the department to be kept abreast of any changes. Ultimately, it is the student's responsibility to meet requirements established for certification.

Students who are interested in becoming teachers in early childhood or elementary schools should seek advice about program planning as early as their freshman year. The department will provide detailed information about the curriculum, the clinical portion of the courses, and entrance and progress standards. Students will file a signed, approved program prior to admission in the education sequence.

In order to begin study in the department, students must have completed the following with a minimum overall cumulative average of 2.5:

1. Queens College English requirements, with an average grade of $B$ in English 110 and 120;
2. Queens College and CUNY mathematics entrance requirements including successful completion of Math 6, if required;
3. At least two of the three required semesters of foreign language study;
4. At least five of the seven categories of LASAR or 20 of the 31-credit total.
Departmental progress standards include:
5. Completion of, or exemption from, Math 6.
6. Maintenance of a 2.5 grade-point average;
7. Completion, with a minimum grade of $C$, of an advanced writing course, such as English 200, if the average grade in English 110 and 120 is less than B;
8. Evidence of effective written communication. Early in the professional preparation sequence, students will be asked to produce, on demand, a short writing sample to determine proficiency in written composition. If additional work is needed, students will be required to register for an additional college writing course or work on writing skills through an individual plan determined with an adviser;
9. Satisfactory oral communication. If a student is found to have difficulty in this area, as determined by faculty, the student will be required to take one of the following courses: Public Speaking (CAS 251), Introduction to Interpretation (CAS 160), Argumentation (CAS 153), Introduction to Acting (Drama 100), or Experimental Theatre Workshop (Drama 241), or will have to work out a satisfactory alternative with the adviser;
10. Satisfactory approaches to teaching. The clinical portion of the program is designed to ensure student progress. In individual cases of unsatisfactory performance, a faculty committee in Elementary and Early Childhood Education reviews the case and recommends either remedial action or that the student pursue other study;
11. Effective work with children from diverse backgrounds;
12. Demonstrated competence with respect to knowledge of drug and alcohol abuse, child abuse and mistreatment, as well as sex education with AIDS. The department will advise students on methods for meeting this requirement.

Queens College has a J ointly Registered Program (J RP) for Elementary/ Early Childhood majors with Queensborough and LaGuardia Community College. Students who are accepted into the major at either of these two community colleges and fulfill the requirements, are automatically accepted into the Elementary and Early Childhood major upon transfer to Queens College.

J RP students should meet with the Elementary Undergraduate Adviser during their first semester at Queens.

Students may not take education sequence courses by the P/ NC option. All I ncomplete work must be completed before applying for certification.

## The Undergraduate Education Certification Sequence

This program of study leads to New Y ork State Certification in Elementary and Early Childhood Education (Pre-K through Grade 6). It is a coherent program characterized by the integration of classroom instruction and clinical experience. The program has two phases: Pre-Professional Year courses and the Professional Year, a two-semester sequence with focus in one semester on Pre-K through Grade 2 and in the other on Grades 3 through 6.

Students who intend to co-major in Elementary and Early Childhood Education must complete an application obtained in the Office of Undergraduate Advisement, Powdermaker Hall 180 and attend a program orientation session.

Students accepted into the program typically begin in the first half of the junior year, taking required pre-Professional Year education courses (Phase I) as they complete co-major, LASAR, and other College requirements.

The two phases of the program which comprise the courses required for all majors are as follows:

| Phase I | Pre-Professional <br> Year Courses <br> Educational |  |
| :--- | :--- | :--- |
| EECE 201 | Educr. <br> Foundations | 2 cr. |
| Math 19 220 | Learning Technol ogies <br> in the Classroom | Mathematics for |
| Music 261 | Elementary Teachers <br> Music for Children | 3 cr. |
| M. |  |  |

## Phase II: The Professional Year

Students must complete their co-major, all College requirements for graduation (LASAR, English, Mathematics, F oreign Language, etc.), and Phase I of the Elementary and Early Childhood Program before they may begin the Professional Year. A second application, obtained in the Undergraduate Advisement Office, Powdermaker Hall 180 (997-5302), must be submitted and approved before admission to the Professional Year.

In this senior-year sequence, pedagogy courses are integrated with supervised field experience throughout both semesters.

Pre-K through Grade 2 Semester EECE 350 Curriculum: Grades Pre-K-2
EECE 340 Reading: Language Arts and Literature, Grades Pre-K-2 3 cr .
EECE 310 Educational Psychology 2 cr .
EECE 360 Clinical Experience and
Student Teaching:
Grades Pre-K-2 5 cr .
16 cr .
Grades 3 through 6 Semester
EECE 351 Curriculum: Grades 3-6 6 cr .
EECE 341 Reading: Language Arts and Literature, Grades 3-6 3 cr.
EECE 311 Educational Psychology: Learning
Clinical Experience and Student Teaching:
Grades 3-6 $\quad \frac{5 \mathrm{cr} \text {. }}{\text {. }}$

## Advanced Certificate

Prospective graduate students who did not major in elementary or early childhood education during undergraduate study may prepare for admission to the 33-credit master's degree program by additional study in an advanced certificate program.

Information is available from the Coordinator of Graduate Programs, Powdermaker 181 (997-5332). To be considered for admission, the candidate must have a bachelor's degree with a cumulative index of at least B. All candidates will be interviewed. Satisfactory completion of this program prepares a student for study in the Graduate Elementary and Early Childhood Education and Services Programs and for Graduate Programs in Reading, Special Education, and Teaching of English as a Second Language. The Graduate Bulletin gives more detailed information.

## LASAR Requirements

Any one of the following 3-credit courses may be used to satisfy half of the LASAR for the social sciences: EECE 104, Introduction to Urban E ducation; EECE 105, M oral Education: Theory and Practice; EECE 106, The Politics of American Education. These courses are open to any undergraduate student.

## COURSES

104./Urban Studies 117. Introduction to Urban Education. 3 hr.; 3 cr. This course is designed primarily for non-E ducation majors. The focus is on the structure and history of education in the United

States, especially the urban areas. It will explore questions involved in such areas as desegregation, financing, socioeconomic class, multicultural populations, and teaching as a profession.

## 105. Moral Education: Theory and

Practice. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Examination of ways children and adolescents are initiated into moral values; the roots of moral constraint and cooperative behavior.
106. The Politics of American Education. 3 hr.; 3 cr. Prereq.: Freshman or sophomore standing. The history and devel opment of governance at federal, state, and local levels with regard to education: an analysis of historical and contemporary educational issues and events with emphasis on the various power bases and coalitions that were and are involved. Theoretical, actual, and futurist models of education decision-making will be explored.
201. Foundations of Education. 3 hr.; 3 cr. Prereq.: Admission to the EECE program. A critical investigation of the educational enterprise through philosophical, historical, and sociological models; analysis of educational decisions. Will include field trips to schools and classroom observations. This course is required of all EECE majors.

## 220. Learning Technologies in the

Classroom. 2 hr.; 2 cr. Prereq.: Admission to the EECE program. A study of the technical aids available for teaching. These include computers, video and audio recorders, audio and video disc players, video, movie, and still cameras, and various types of projectors. Commercial media materials and programs available for use in schools with these tools will be examined. This course is required of all EECE majors.
310. Educational Psychology: Human

Development. 2 hr.; 2 cr. Prereq.: Admission to the Professional Y ear Program. This course explores child development from infancy through adolescence. Developmental theory and research are examined in the areas of perception, cognition, language, personality, social relations, moral behavior, and developmental disorders. Special emphasis is placed on the educational implications of devel opmental findings. This course is required of all EECE majors.
311. Educational Psychology: Learning. $2 \mathrm{hr} . ; 2 \mathrm{cr}$. Prereq.: Admission to the Professional Year Program. Examination of major learning theories and general principles underlying effective instruction. This course is required of all EECE majors.
340. Reading: Language Arts and Literature, Grades Pre-K-2. 3 hr.; 3 cr. Pre req.: Admission to the Professional Year

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). tOffered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.

Program. A research-based study of methods and materials for the development of literacy: emphasis on emergent literacy; devel opment of oral and written language; selection and use of children's literature across the curriculum; strategies involved in reading and writing to learn; appropriate assessment of the language arts. Activities prepare students to choose materials and methods appropriate to the language background, reading levels, and learning needs of individual children
341. Reading: Language Arts and Literature, Grades 3-6. 3 hr .; 3 cr . Prereq. Admission to the Professional Year Program. A research-based study of develop mental reading and writing strategies; reading and writing to learn; selection and use of children's literature across the curriculum; appropriate assessment of the language arts. Activities prepare students to choose materials and methods appropriate to the language background, reading levels, and learning needs of individual children.
350. Curriculum : Grades Pre-K-2. 6 hr.; 6 cr. Prereq.: Admission to the Professional Year Program. An integrated approach to the teaching of mathematics, science, social studies, and art for grades Pre-K-2. A study of appropriate methods and materials for each curriculum area.
351. Curriculum: Grades 3-6. 6 hr.; 6 cr. Prereq.: Admission to the Professional Y ear Program. This course takes an inte grated approach to the teaching of mathematics, social studies, and science for the upper elementary grades. Included is a study of appropriate methods and materials for each curriculum area.
360. Clinical Experience and Student Teaching: Grades Pre-K-2. 15 hr.; 5 cr. Prereq.: Admission to the Profession Year Program. A minimum of 15 hours weekly in Pre-K-2 classrooms and in laboratory settings at the College. Pre-primary clinical experience and student teaching accom pany the curriculum course EECE 350 for this level.
361. Clinical Experience and Student Teaching: Grades 3-6. $15 \mathrm{hr} . ; 5 \mathrm{cr}$. Pre req.: Admission to the Professional Year Program. A minimum of 15 hours weekly in Grades 3-6 classrooms and in laboratory settings at the College. College-supervised classroom experience and weekly seminar with supervisor.
362. Student Teaching. 24 hours per week; 8 cr . Prereq.: Permission of the department. Supervised observation and student teaching on the pre-kindergarten and kindergarten levels and in grades 1-6 of the elementary school for a total of at least 365 clock hours. This student teaching course is available only to students enrolled in the major prior to September 1995.
363. Student Teaching for Students with Prior Experience. 10 hr .; 3 cr . Prereq.: Permission of department. Supervised
observation and student teaching in ele mentary schools. With the approval of the undergraduate adviser, this course may be taken by students with prior experience as a paraprofessional.
390. Studies in Education. 390.1-390.3, 1-3 hr.; 1-3 cr. Prereq.: J unior standing and permission of department. Topics to be announced for each semester. May be repeated for credit provided the topic is changed.

## Bilingual/Multicultural Education

Students interested in special studies in Bilingual/Multicultural Education should meet with Professor Rafael Olivares (Powdermaker 177, 997-5318).

## Secondary E ducation and Youth Services

Chair: Philip M. Anderson<br>Dept. Office: Powdermaker 193, 997 5150

Professors: Anderson, Castiglione, Zevin; Associate Professors: Armour-Thomas, Artzt; Assistant Professors: Bomar Dong, Miller, M oncada-Davidson; Department Secretary: Nava

Middle School, Junior High, and Senior High School Teachers Prospective middle school, junior high, and senior high school teachers major in a liberal arts and sciences subject area and take at least 20 professional education credits, the total number depending on the requirements of each professional area. During the semester in which students take the first course - Secondary Education 201, Contemporary Education - they must see their subject matter adviser and register as a Secondary Education minor. The adviser will help the student plan subsequent courses. Art education majors are required to complete 23 education credits.

State teacher certification mandates that students demonstrate teaching competence concerning drug and al cohol abuse, child abuse and mistreatment, sex education, and AIDS. The department will advise students on various ways they can meet this requirement, as well as the latest changes involving state certification. Students must sean adviser to obtain current information.

## Science Teachers

Through careful planning, students may satisfy both science and mathematics certification requirements if they contin ue in the graduate program leading to the Master's degree.

## Advanced Certificate

The Advanced Certificate Program consisting of 42 credits is available to students who have a B.A. degree with a major in a field acceptable for State certification, but without an undergraduate minor in education. To be admitted, students must have a cumulative average in their major of at least 3.0. In addition, they must meet the general admissions and matriculation requirements of the College. Students seeking admission to this program should apply to the Secondary Education and Y outh Services Department. M ore detailed information is given in the GraduateBulletin.

## Suggested Program of Study

Please note: Some students may prefer to begin the sequence earlier. Courses in the Secondary Education and Y outh Services Department carry the prefix SEYS.

| Lower J unior | SEYS 201 |
| :---: | :---: |
| Upper J unior | SEYS 221 |
|  | SEYS 333 (for Art majors) |
| Lower Senior | SEYS 222 |
|  | SEYS 360, 361, 362, 363, |
|  | 364, 365, 366, 367, 368, 369 (whichever applies) |
| Upper Senior | SEYS 370, 371, 372, 373, |
|  | $374,375,376,377,378,379$ <br> (whichever applies) |

LASAR
Secondary Education (SEYS) 216/American Studies 216 may be used to satisfy the LASAR for the social sciences.

## COURSES

201. Contemporary Education: Principles and Practices. 5 hr.; 4 cr. Prereq.: Sophomore standing. To develop an understanding of education in a democratic society. Students are helped to formulate criteria by which they can evaluate various principles and practices of contemporary education and are given opportunities to examine the possibilities of a career in education or an allied field. Guided visits to public and private educational institutions are part of the course activities.
216./American Studies 216. Education and the American Myth of Success. 3 hr.; 3 cr. Prereq.: Upper sophomore standing and English 120. This course will examine American definitions of success as they reveal themselves through American cultural history. From an interdisciplinary per-
spective, the class will also consider educational policies and practices as they have emerged within the cultural context and have hel ped shape the American myth of success. Readings will be drawn from economic, sociological, and educational theory, as well as from literature, popular culture, advertising, and the public statements of business and industrial leaders.
221, 222. Human Development and Learning. 3 hr .; 3 cr . each sem. Prereq.: For SEYS 221, SEYS 201; for SEYS 222, SEYS 221. Emphasizes early childhood through adol escence. Designed to help students understand factors underlying physical and mental development and the learning process. Field work assignments involve case studies of individual children, regular work with groups of children in schools, centers, and appropriate agencies. Education students should not take Psychology 224.
202. Studies in Education. 290.1-290.6, 1-6 hr.; 1-6 cr. Prereq.: Permission of department. Topics to be announced for each semester. May be repeated for credit provided the topic is changed.

## 333. Student Teaching of Art in

Elementary School. 1 seminar hr., 4 lab. hr . (leave free the afternoon of the day on which class meets for field work); 3 cr. Prereq.: Permission of department. Prereq. or coreq.: SEYS $221 . \dagger$

## 350. Selected Topics in Secondary

 School Social Studies. 3 hr. (participation and observation one morning or afternoon per week) and 4 class hr.; 4 cr .Prereq.: SEYS 201; prereq. or coreq.: SEYS 221 or registration in a special program in secondary education. Studies of modern materials and learning activities. Students may repeat course for credit if there is no duplication of topics. $\dagger \dagger$
351. Methods and Materials of Teaching Foreign Languages in Elementary Schools. 3 hr.; 3 cr. Prereq.: A concentration form approved by the appropriate language department at the College. It integrates research-based principles of second language acquisition within the elementary school curriculum and program devel opment. Students who already have certificates to teach in Secondary or Elementary Schools who wish to take this course should consult with the department.

## 360. Seminar in Preparation for the

 Role of Teacher of a Specific Academic Subject in the Secondary Schools. 3 hr. (participation and observation one morning or afternoon per week) and 4 class hr.; 4 cr. Prereq. or coreq.: SEYS 222.360. Seminar in the Teaching of English 361. Seminar in the Teaching of Mathematics
361. Seminar in the Teaching of Science 363. Seminar in the Teaching of Social Studies
362. Seminar in the Teaching of Foreign Languages
363. Seminar in the Teaching of Art 366. Seminar in the Teaching of Home Economics
364. Seminar in the Teaching of Music
365. Seminar in the Teaching of Health Education
366. Seminar in the Teaching of Physical Education
367. Student Teaching in a J unior or Senior High School. 8 hr.; 6 cr. Prereq.: A grade of 2.75 in the major and a 3.0 average in SEYS 201, 221, and 222; a grade of B or better in SEYS 360, and average of C+ or better in English 110 and 120, and completion of all incompletes in the major and in education courses.
368. Student Teaching in English
369. Student Teaching in Mathematics
370. Student Teaching in Science
371. Student Teaching in Social Studies
372. Student Teaching in Foreign Languages
373. Student Teaching in Art
374. Student Teaching in Home Economics
375. Student Teaching in Music
376. Student Teaching in Health Education
377. Student Teaching in Physical Education
378. Supervised Student Teaching in English as a Second Language. $8 \mathrm{hr} . ; 6$ cr. Prereq.: A grade of 2.75 in the major and a 3.0 average in SEYS 201, 221, and 222; a grade of B or better in SEYS 360, an average of $\mathrm{C}+$ or better in English 110 and 120, and completion of all incompletes in the major and in education courses. Supervised student teaching in English as a second language in both elementary and secondary schools.

## E ducational and C ommunity Programs

Chair: Kenneth J. Dunn

Dept. Office: Powdermaker 051, 9975250, 5251
Professors: Brown, Dunn, Fish, Gambino, Goh, Hittleman, Margolis, Vázquez; Associate Professors: Ross, Tobias, Truesdell; Assistant Professors: Erwin, Lopez; Departmental Secretary: Hyber

Administration and Supervision
Counselor Education
Reading Education
School Psychology
Special Education
For further information about graduate programs in this department, see the Graduate Bulletin.

## courses

This Department does not offer undergraduate courses.

## E nglish

Chair: Steven F. Kruger
Associate Chair: Nancy Comley
Associate Chair for Composition: J anice Peritz
Assistant to the Chair: Michael Sargent
Assistant Chair for Composition: Amy Tucker

Director of GraduateStudies: David Richter
Dept. Office: Klapper 607, 997-4600
Distinguished Professors: Dickstein, Kaplan; Professors: Barker, Buell, Comley, D'Avanzo, Epstein, Frosch, Green, Kleinbard, Kruger, Leavy, McCoy, McKenna, Molesworth, Richter, Sargent, Schechter, Schotter, Stone, Summerfield, Tytell, Whatley, Zimroth; Associate Professors: Bowen, Friedman, Geis, Gross, Hahn, Harris, Held, Kelly, Kier, Kowal, Lyons, O'Brien, Peritz, Tucker, Waters, Weidman, Zimmerman; Assistant Professors: Allen, Bobb, Patterson, Rodway, Weir; Lecturers: Cuomo, Dignon, Goldhaber, J ennings, Lalande; Adjunct Associate Professor: Warren; Adjunct Assistant Professors: Brown, Davison, Fallon, Lewis, Seymour, Sirlin, Wadenpfuhl; Administrative Assistant: Beckerman; Office Assistants: Barberi, Diaz

Courses in the Department of English are designed to enrich students' understanding of life and the arts through the study of literature in English. Courses are organized in various ways and at a number of different levels. At the 100level, English Department courses teach rhetoric and composition and provide intensive introductions to fiction, drama, poetry, and to the contested issues generally enlivening the study of literature. Our 200-level courses include intermedi-ate-level courses in writing, period surveys of British, American, and other literature written in English, together with introductions to folklore, film study, and English linguistics. The 300level courses are advanced electives in creative writing, historical studies of the poetry, drama, and fiction of various periods, courses in literary theory, studies of major literary figures such as Chaucer, Shakespeare, and Milton, courses in minority and ethnic literatures, and other specialized approaches to literature, as well as a senior seminar "Topics in Literature." A detailed English Department Handbook can be obtained in the departmental office.

## The Major

After fulfilling the College's writing requirement, all English majors take at least 14 English courses, of which 7 are required. Transfer students must take a minimum of 18 elective credits in the major at Queens College. A student may meet the requirements for graduation as an English major by maintaining an average of 2.0 in the required and elective work in English and by completing the following course sequence:

## A. Required Courses ( 7 courses)

1. Critical Reading and Writing (2 courses)

English 140. Introduction to Poetry. English 150. Introduction to Literary Studies.
2. Literary History (4 courses) English 251. British Literaturel.
(In place of English 251, two of the following courses may be substituted:
310 or 311,312 or $313,320,321,330$ or 331, 332 or 333, 334, 340, 365.)

English 252. British Literature II.
(In place of English 252, two of the following courses may be substituted: $322,323,324,341,344,345,366$.)

Plus two courses out of the following three:

English 253. American Literature I; formerly English 350.
(In place of English 253, two of the following courses may be substituted: 352, 354, 356, 357, 358.)

English 254. American Literature II; formerly English 351.
(In place of English 254, two of the following courses may be substituted: 352, 354, 356, 359, 360.)

English 255. Twentieth-Century Literatures in English.
(In place of English 255, two of the following courses may be substituted: 346, 353, 355, 362, 363, 367, 370, 371, 373, 374, 376.)
Note: A given course may be offered in substitution for only one survey; if English 352 (or 354 or 356 ) is used in partial substitution for English 253, it may not also be used in substitution for English 254.
3. Senior Seminar (1 course) English 391. Topics in Literature.
B. Electives ( 7 courses)

To complete their majors, students will choose 7 courses from the other offerings of the English Department at the 200 or 300 level.

## Advisement

A detailed English Department Handbook can be obtained in the departmental office. Additional guidance in choosing courses within the major and supplementing the major will be provided by faculty advisers who have specialized in aiding students whose vocational interests lie in fields such as medicine, law, journalism, teaching, and drama/theatre.

Courses are listed in this Bulletin in numerical order, but in the English Department Handbook they are organized into subject areas (or "clusters") described in detail. Clusters are intended to guide majors in choosing electives, to provide a visible, comprehensive rationale for the department's offerings, and to explain the specializations and interests of departmental faculty. These subject areas fall into four general categories: 1) national literatures and historical periods; 2) studies in genres and literary forms; 3) studies in literature in its relations to language, culture, and society; and 4) writing. The current clusters are:

National Literatures and Historical Periods

The Middle Ages and Renaissance in Britain

The Enlightenment of the 17th and 18th Centuries

Nineteenth-Century Studies
Modernism and Postmodernism
American Literature
Studies in Genres and Literary F orms
Drama and Theatre
Narrative and Narrative Theory
Poetry and Poetics
Literature and Mythology
Comedy and Tragedy
Studies in Literature, Language,
Culture, and Society
Gender and Sexuality
Colonialism and Postcolonialism
Race, Ethnicity, and Cultural Identity
Classicism and Romanticism
Interdisciplinary Studies
The English Language
Writing
The clusters may change over the years in response to the needs and concerns of both faculty and students. Individual courses may belong to more than one cluster.

## Honors in English

The English Honors Program provides an opportunity for students to take a seminar with other dedicated and able English majors and to graduate from the

College with departmental honors. Open by application and upon recommendation of a member of the faculty to students with English and College grade-point averages of at least 3.3. Interested students should meet with the honors adviser to discuss the program as early as possible in their college careers.

Requirements: Students in the Honors Program take English 399 (English Honors Seminar), a course chosen by the students themselves, in place of, or in addition to, English 391. Honors students also take an English Honors Examination, generally in the upper senior semester. Performance on that examination, together with their departmental and College grade-point average, will qualify students for Honors, High Honors, or Highest Honors at graduation. Students may also write an Honors Thesis in the senior year, course work for which may be counted toward the 42credit requirement for the major.

Advisement: Students are encouraged to elect suitable patterns of study with the help and approval of the honors adviser, who is available for consultation and guidance. In addition to English department courses, these should include courses in history, philosophy, art, music, comparative literature, and foreign languages. Candidates who plan to attend graduate school should be aware that master's programs require reading knowledge of at least one and doctoral programs at least two foreign languages (of which French, German, Italian, Latin, and Greek are preferred) and experience with literary theory, such as that gained in English 382.

## The Minor

A student may meet the requirements for graduation as an English minor by maintaining an average of 2.0 in the required and elective work in English and by completing the following course sequence:

|  | credits |
| :---: | :---: |
| English 140 and 150 | 6 |
| English 251 and 252 | 6 |
| One course from English $253,254,255$ | 3 |
| Four courses from the |  |
| English elective offerings | 12 |
|  | 27 |

At least 12 credits in the minor must be completed at Queens College.

The CMP Publications Scholarship in English is awarded to a sophomore or junior who is majoring in English, has
an outstanding academic record, and intends to pursue a career in publishing. The scholarship, which carries an award of $\$ 500$, also offers the recipient an opportunity to be interviewed for a Summer position at CMP Publications, Inc., located in Manhasset, New York, for the Summer following receipt of the award. Information on the criteria and application deadline is available in the English Department.

## Pre-Journalism

Queens College does not offer a major in journalism, but does offer a minor (see page 158). Students interested in postgraduate training or careers in journalism and publishing are urged to major in English, history, political science, communication arts and sciences, or one of the other liberal arts disciplines, and to acquire as broadly based an education outside their major as they can. They can gain some valuable experience while working for the campus press as an extracurricular activity, and in journalism and publishing internships sponsored by the Departments of English and Communication Arts and Sciences.

The following courses may be of interest to prejournal ism students:
English 211. Writing Nonfictional Prose English 220. Introduction to Editing English 303. Essay Workshop Sociol ogy 218. Mass Communication and

Popular Culture
CAS 102. Introduction to Media
CAS 242. Television Production I
CAS 243. Television Production II
CAS 244. Media Analysis and Criticism
CAS 246. Freedom of Speech
CAS 345. Media Information Systems
An interdisciplinary advisory committee for pre-journalism students has been set up with representatives from the English, Communication Arts and Sciences, and Sociol ogy Departments. Students may consult any of these departments for referral to counseling on professional schools and careers.

## COURSES

## Prescribed Composition Courses

All entering freshmen should take the English Placement Examination (CUNY Writing Assessment Test). The result of this examination determines which writing course students will enroll in (see page 40). Students should complete the composition requirements by the end of their freshman year.

The English Department recognizes for transfer credit independent study courses taken in such programs as the New York State Regents External Degree Program,
the New York State College Proficiency Examination Program, the College Level Examination Program (CLEP), the College Entrance Examination Board Advanced Placement Examinations (AP), and the United States Armed Forces Institute Tests (USAFI). Students must achieve a grade of C or better (or the numerical equivalent) for transfer credit. In the CLEP examinations, only the special subject examinations are accepted. When such examinations have an optional essay provision, the essay must be included. For information about exemption policies, inquire of the Evaluations Committee of the English Department.
Questions regarding the composition requirement should be addressed to Professor J anice Peritz.

The following four courses are available for students enrolled in SEEK.

1. Basic Writing. 4 hr . plus conf.; 0 cr . Emphasis is on basic grammar, a sense of the sentence, and a sense of the paragraph. For students who score 5 or lower on CUNY Assessment Test.
2. An Introduction to Composition. 4 hr. plus conf.; 2 cr. Prereq.: Score between 6 and 9 on CUNY Assessment Test in writing. Emphasis is on the concepts of paragraphing, grammar, and usage as well as on description and narration. The course includes selected prose readings.
3. English Composition. 4 hr. plus conf.; 3 cr. Prereq.: English 100 or score of 10 or higher on CUNY Assessment Test in writing. Emphasis is on the expository essay and on the research paper. The course includes selected prose readings.
4. Introduction to Literature and Analysis. 4 hr. plus conf.; 3 cr. Prereq.: English 101. Emphasis is on analysis in reading and in writing. The course combines continued training in writing dear and effective essays with studies in literature.

## English Department Courses

95. Introduction to College Writing. 4 hr.; 3 cr. Prereq.: Entrance determined by results of placement examination. Emphasis will be on a variety of writing forms, including narration, description, and analysis; attention will be given to matters of grammar, syntax, punctuation, and diction. The student will spend one hour per week meeting in conferences, small groups, or other formats for intensive writing instruction and practice.
96. English Composition I. 4 hr.; 3 cr. Prereq.: English 95 or results of placement examination, and passing grade on the CUNY Assessment Test or its equivalent as approved by the department. Emphasis will be on clear, correct, and effective writ-

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). †Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
ing. Students will be introduced to methods of research and documentation. The student will spend one hour per week meeting in conferences, small groups, or other formats for intensive writing instruction and practice.

## 120. English Composition II: Writing

 and Literature. 3 hr. plus conf.; 3 cr. Pre req.: English 110 or high pass on placement examination. Continued practice in various modes of writing, together with close reading of different kinds of literary texts.It is recommended that students take Tier I courses (140, 151, 152, 153, 154, 155,156 ) before taking advanced electives.

## Courses Primarily for Freshmen and Sopho-

 moresStudents who plan to major in English should take English 140. Courses bel ow English 200 do not satisfy the free elective choices of the various department majors, or the minor.
140. Introduction to Poetry. 3 hr. plus conf.; 3 cr. Prereq.: English 120. Close reading and critical analysis of a wide variety of English and American poetry of various periods. This course combines the study of literature with continued training in clear and effective written expression. Meets the Humanities I, Tier 1 requirement. Designed for prospective English majors.
150. Introduction to Literary Study. 3 hr.; 3 cr. Prereq.: English 120. An inquiry into what it means to study literature, involving close reading and critical analysis of a wide variety of prose fiction, drama, and poetry, and informed by an introduction to some of the theoretical issues currently invigorating literary studies. This course combines a study of literature with continued training in clear and effective expression. Meets the Humanities III LASAR requirement. Designed for prospective English majors and other interested students.

## 151. Works of English Literature: A

 Course for Nonmajors. 3 hr.; 3 cr. Pre req.: English 120. An introduction to the devel opment of English literature from the Middle Ages to the twentieth century through a study of selected poetry, drama, fiction, and/or nonfictional prose. Authors include Chaucer, Shakespeare, Milton,Swift, Keats, Dickens, and J oyce. Meets the Humanities I, Tier 1 requirement. Designed for nonmajors.

## 152. Works of American Literature: A

 Course for Nonmajors. 3 hr.; 3 cr. Pre req.: English 120. An introduction to the development of American literature from its beginnings to the twentieth century through a study of selected poetry, drama, fiction, and/or nonfictional prose. Authors studied may include Thoreau, Hawthorne, Whitman, Dickinson, O'Neill, Hemingway, and Wright. M eets the Humanities I, Tier 1 requirement. Designed for nonmajors.153. Introduction to the Bible. 3 hr .; 3 cr . Prereq.: English 120. Selected books of the Old and New Testaments in English translation. Cannot be taken for credit if student has taken English 381. Meets the Humanities I, Tier 1 requirement. Designed for nonmajors.
154. Great Works of Fiction. 3 hr .; 3 cr . Prereq.: English 120. An introduction to fiction through a reading of great novels and short stories from various periods. Meets the Humanities I, Tier 1 requirement. Designed for nonmajors.
155. Great Works of Drama. 3 hr.; 3 cr. Prereq.: English 120. A careful reading of important plays from different periods, designed to give the student a grasp of the history of dramatic literature, the variety of dramatic forms, and the possibilities of theatrical craft. Meets the Humanities I, Tier 1 requirement. Designed for nonmajors.
156. Introduction to Shakespeare. 3 hr.; 3 cr. Prereq.: English 120. A basic course in Shakespeare's plays and poems. Meets the Humanities I, Tier 1 requirement. Designed for nonmajors.
157. Essay Writing. 3 hr . plus conf.; 3 cr . Prereq.: English 120 or exemption from English 120. The writing and criticism of formal and informal essays, various types of articles, reviews, and reportage, designed to develop effective expression in an individual and personal style. Fall, Spring
158. Essay Writing for Special Fields. 3 hr. plus conf.; 3 cr. Prereq.: English 120 or permission of instructor. An intermediate expository writing course using forms and modes appropriate to various professions and disciplines. Special fields covered in the past have included medicine, Iaw, business, computer science, teaching, psychology, music, art, and film. Some sections of this course will be limited to students enrolled in the Business and Liberal Arts minor. $\dagger \dagger$
159. Creative Writing. 3 hr . plus conf.; 3 cr. Prereq.: B in English 120 or exemption from English 120. Introduction to the writ ing of poems, stories, and plays, planned primarily for qualified sophomores. Fall, Spring
160. Writing Nonfictional Prose. 3 hr .; 3 cr. Prereq.: B in English 120 or exemption from English 120. The writing of nonfictional prose in various forms. This course is designed primarily for writing majors and for students who plan to take English 303. Fall, Spring
161. Introduction to Editing. 3 hr .; 3 cr Prereq.: English 110 or high pass on place ment examination. The art of editing, with the skills of copy editing, proofreading, and indexing, introduced against the background of language history and style. $\dagger$
162. Newspaper and Article Writing. 3 hr. plus conf.; 3 cr. Prereq.: B in English 110 or 120 or high pass on placement examination or permission of instructor.

Preparing articles for newspapers and for magazines. F all, Spring
251, 252. Great Writers of English
Literature. 3 hr .; 3 cr . each sem. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A survey of the chief figures in English literature from the Beowulf poet to the twentieth century. Both of these courses are required for all students intending to major in English. Fall, Spring
253. American Literature Survey 1.3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. American literature from its beginnings to the Civil War.
254. American Literature Survey II. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. American literature from the Civil War to 1918.
255. Twentieth-Century Literatures in English. 3 hr .; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. An introduction to selected writers in English of the 20th century. The works may be selected from a number of national literatures, such as those of Africa, Australia, Canada, the Caribbean, Great Britain, Ireland, New Zealand, South Asia, and the United States
265. An Introduction to Folklore. 3 hr.; 3 cr. Prereq.: English 110. An introduction to the study of the oral literature and lore - fairy tales, legends, ballads, etc. - which have, from the earliest times to the present, circulated within rural communities and within urban groups unified by ethnicity, age, or occupation. Study and practice of techniques for collecting, classifying, and interpreting this material. Fulfills Humanities III LASAR. $\dagger \dagger$
280. Literature and Film. 3 hr.; 3 cr. Prereq.: English 110 or high pass on placement examination. A study of the literary aspects of film art, focusing on its narrative and poetic structure. MAT charge, \$7. Fall, Spring
285. Studies in Literature and Film. 3 hr.; 3 cr. Prereq.: English 110 or high pass on placement examination. The topic of the course, announced in advance, varies each semester. The course may be taken for credit more than once if the topic is different. MAT charge, \$7.†

Note: English majors may offer only one film course ( 280 or 285), not both, as part of the major.
290. The English Language. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The study of modern English, its present structure, its early origins, and its develop ment. Attention is given to vocabulary and semantics, the English Ianguage in America, and principles of linguistic change. $\dagger$
295. Modern English Grammar. 3 hr.; 3
cr. Prereq.: English 110 or high pass on
placement examination. The study of grammatical analysis and of problems of sentence construction, usage, and diction. The course compares traditional and new techniques. Fall, Spring
301. Short Story Workshop. 3 hr . plus conf.; 3 cr. Prereq.: B in English 210 or permission of instructor. The techniques of the short story, with three or four full-length short stories written and carefully revised by the student. May be repeated once for credit toward degree. F all, Spring
302. Playwriting Workshop. 3 hr. plus conf.; 3 cr. Prereq.: B in English 210 or permission of instructor. The technique of writing plays, with at least one complete play, presumably in one act, written and carefully revised by the student. May be repeated once for credit toward degree. Fall, Spring
303. Essay Workshop. 3 hr. plus conf.; 3 cr. Prereq.: B in English 211 or permission of instructor. The writing of nonfictional prose, including the review, the essay in literary and other criticism, and the personal essay. May be repeated once for credit toward degree. Fall, Spring
304. Poetry Workshop. 3 hr. plus conf.; 3 cr. Prereq.: B in English 210 or permission of instructor. Practice in the writing of poems. May be repeated once for credit toward degree. Fall, Spring
310. Old English. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. An introduction to Old English prose and poetry in the original. $\dagger \dagger$
311. Literature of the Anglo-Saxon Period. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Old English literature in translation studied in the context of Western European culture of the period. Fulfills Pre-Industrial and/or Non-Western Civilization LASAR. $\dagger \dagger$
312. Medieval Literature, 1100-1500. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The literature of Western Europe, studied principally in modern English translation. The Arthurian tradition will not be included. $\dagger$
313. The Arthurian Tradition. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The historical, legendary, and literary developments from Gildas to Malory. $\dagger$
320. Literature of the English Renaissance. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The new English poetry and prose (non-dramatic) of the Tudor century, as illustrated in the work of such writers as More, Sidney, Spenser, Shakespeare, Bacon, Donne, and Ben J onson. $\dagger$

## 321. Literature of the Seventeenth

Century. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1

LASAR requirement. English poetry and prose of the seventeenth century with emphasis on literary movements and such authors as Donne, Herbert, Herrick, and Milton. $\dagger$
322. Literature of the Restoration and Eighteenth Century. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. English poetry and prose from 1660 to 1789, from Dryden through Swift and Pope to Samuel J ohnson, Boswell, Goldsmith, and Burns. $\dagger$
323. The Age of Romanticism in England. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The literary, social, and philosophical expression of new views of nature and man in the earlier nineteenth century, with special emphasis on Blake, Wordsworth, Coleridge, Shelley, Keats, Byron, and Hazlitt. Fall, Spring
324. Victorian Literature. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement Poetry and prose of Victorian England including such writers as Tennyson, Browning, Arnold, Hopkins, Hardy, Pater, Ruskin, and Lewis Carroll. Fall, Spring
326. Women Writers and Literary Tradition. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The study of women's tradition, through the close reading of a selection of writings by women, primarily in English and American literature. Among the topics considered are the relationship between women writers and their cultural and social backgrounds; conditions affecting women's literary production; the influence of female and male precursors; the impact of race and class; and continuities and breaks with the dominant literary tradition.
330. Chaucer: The Early Works. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR require ment. The dream-visions, Troilus and Criseyde, the short poems, and Boethian philosophy. $\dagger$
331. Chaucer: The Canterbury Tales. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. An intensive study of Chaucer's late work. $\dagger$
332. Shakespeare I. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The comedies and histories in the first part of Shakespeare's career to about 1600. Students electing both English 332 and 333 should, if possible, take 332 first. Fall, Spring
333. Shakespeare II. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The tragedies and the dramatic romances in the latter part of Shakespeare's career, after 1600. Fall, Spring
334. Milton. 3 hr.; 3 cr. Prereq.: English

140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. An intensive study of Milton's poetry and of selections from his prose, his development as a thinker and a poet, and his place as a social philosopher. $\dagger$
340. English Drama from Its Beginnings to 1642. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. English drama, exclusive of Shakespeare, from its medieval origins to the closing of the theatres in 1642. Examples of such early forms as the miracle play and the morality play will be examined, and particular attention will be paid to tragedy, tragicomedy, and satire. Playwrights studied will include figures like M arlowe, J onson, Webster, Middleton, and Beaumont and Fletch er. Conventions of the medieval, Tudor, and Stuart stage will be discussed. $\dagger \dagger$

## 341. Drama of the Restoration and

 Eighteenth Century. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The chief English playwrights and stage developments from 1600 to 1780, including Dryden, Congreve, Steele, Gay, Goldsmith, and Sheridan. $\dagger \dagger$344. The English Novel I. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The origin and development of the English novel in the eighteenth century. Readings from Defoe, Richardson, Fielding, Smollett, Sterne, and J ane Austen. Fall, Spring
345. The English Novel II. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The major novelists of the nineteenth century: Dickens, Thackeray, Trollope, the Brontës, George Eliot, and Hardy; development of the novel as social criticism. Fall, Spring
346. British Fiction, 1900-1945. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Such writers as Conrad, J ames, J oyce, Lawrence, Woolf, F orster, Orwell, H. G. Wells, Huxley, Waugh. Fall, Spring
347. The American Novel to 1918. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Such writers as Cooper, Hawthorne, Melville, Twain, Howells, J ames, Chopin, Norris, Dreiser, Wharton, Cather. Fall, Spring
348. American Fiction, 1918-1945. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Such writers as Gertrude Stein, Sherwood Anderson, Dos Passos, Fitzgerald, Hemingway, Wright, Faulkner, Steinbeck, Wolfe, Henry Miller. Fall, Spring
349. Afro-American Literature I (16191930). 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. An introduction to Afro-American literature from slave narra-
tives, songs, folklore, and early poetry and fiction through the Harlem Renaissance. Major authors include Wheatley, Douglass, Dunbar, Chesnutt, Dubois, Washington, Hughes, and Toomer. Fall

## 355. Afro-American Literature II (1930

 to the Present). 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A study of modern and contemporary Afro-American authors, including Richard Wright, Ralph Ellison, Toni Morrison, J ames Baldwin, Ishmael Reed, and Amiri Baraka. Spring356. Literature of the American Indians. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A study of the myths, tales, and poems of native American peoples and the literature by and about Indians produced since the period of European presence. $\dagger \dagger$
357. Puritanism in American Literature. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A study of Puritanism in American literature from Colonial times. $\dagger \dagger$
358. Nineteenth-Century American Transcendentalism. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Literature and philosophy of the American Transcendentalists: Emerson, Thoreau, Whitman. Countercurrents and reflections in later writers. $\dagger \dagger$
359. Regionalism, Realism, and Naturalism in American Literature. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Late nineteenth- and twenti-eth-century expressions of the new styles, contents, and philosophies represented by these literary movements. Such writers as Mark Twain, Faulkner, and O'Connor; Howells, Wharton, and Lewis; and Crane, Dreiser, and Farrell. $\dagger \dagger$
360. Southern Literature. 3 hr.; 3 cr Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The literature of the American South, from antebellum to present times. Particular emphasis will be placed on writers of the Southern Renascence. $\dagger \dagger$
361. The American Dream. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Political, social, and economic visions of America based on a selection of literature from the Puritans to the present. F all, Spring
362. The Immigrant Experience. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. This course focuses on the large body of American literature by and about immigrants. It will include literature from a range of periods. It will explore such questions as how the literature is related to its local and global historical circumstances;
how the literature dramatizes and deals with the intersection of two cultures; and how the literature contributes both to ongoing conceptualizations of American identity and to the development of American literary tradition.
363. World Literature Written in English. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. This course studies the important literature written in English by writers in or from, for example, Africa, Australia, New Zealand, Canada, India, and the Caribbean. In some semesters the course may concentrate on one particular geographical region.
364. Celtic Myth and Literature. 3 hr .; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A study of the Celtic literature of the British Isles from the age of Beowulf to the age of Chaucer, focusing primarily on the mythological and heroic sagas of Ireland and Wales. Attention is given to the relationships among Celtic, English, and Continental literatures. All readings in English translation. Fulfills Pre-Industrial and/or Non-Western Civilization LASAR. $\dagger \dagger$
365. Introduction to Irish Literature. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A survey of great works of I rish literature from the Middle Ages to the present, with emphasis on the continuity of Irish tradition as well as on the shifting political and social contexts in which Irish literature has been produced. Readings will include Celtic saga; the literature of both Anglo-Irish ascendancy and conquered Gaelic I reland during the long period of English rule; the poetry, drama, and fiction of the extraordinary literary revival which took place in the late nineteenth and early twentieth centuries; and the literature of modern Ireland.
366. Modern Irish Literature. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A study of the three greatest modern I rish writers - Yeats, J oyce, and Beckett in relation to Irish culture and to some of their important contemporaries and disciples, such as Synge, O'Casey, O'Connor, and O'Brien. An important focus will be the distinctively I rish nature of these writers' materials, attitudes, and language.
367. Irish Writers. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Detailed study of a major writer, such as J ames $J$ oyce, or of a group of writers, such as the contemporary Ulster poets, who have created a literature of considerable significance. Topic varies each semester.
368. British and American Drama, 1890-1945. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The devel opment of drama in English from 1890 to the end of World War II: Wilde, Shaw, Synge, O'Casey,

Odets, O'Neill, Anderson, and Wilder. $\dagger$
371. British and American Drama, 1945 to the Present. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The development of drama in English from World War II to the present: Williams, Miller, Albee, Osborne, Beckett, Pinter, recent experimental dramatists. $\dagger$
373. British and American Poetry, 1910-1945. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The development of poetry in English from 1910 to the end of World War II: Y eats, Pound, Frost, Eliot, Williams, Stevens, Crane, Cummings, and Auden. Fall, Spring
374. British and American Poetry,

1945 to the Present. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A study of Dylan Thomas, Lowell, Roethke, Larkin, Berryman, Creeley, and others associated with the trends and movements of contemporary verse. F all, Spring
376. British and American Fiction,

1945 to the Present. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Such writers as Beckett, Graham Greene, Snow, Murdoch, Angus Wilson, Anthony Powell, the English working-class novelists, Doris Lessing, Mailer, Bellow, Nabokov, Baldwin, Ellison, Malamud, and Barth. Fall, Spring
380. Classical Backgrounds of English

Literature. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A study of selected works of Greek and Latin literature in translation in relation to the development of English literature. Fall, Spring
381. The Literature of the Bible. 3 hr .; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A study of Biblical literature in English translation: its forms and themes, literary and historical meaning, and its influence on English and American literature. Cannot be taken for credit if student has taken English 153. Fall, Spring
382. Aspects of Literary Criticism. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A selection of critical texts illustrating approaches to literary criticism. Works of literature will be analyzed according to these approaches. $\dagger \dagger$
383. Aspects of Poetry. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A wide reading in British and American poetry of various periods, together with appropriate critical selections, dealing with poetic theory and practice. $\dagger$
384. Aspects of Fiction. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Representative British and American nov-
els and criticism of fiction. The course deals with such topics as romance, the novel of manners, realism, and stream-ofconsciousness. Fall, Spring
385. Aspects of Drama. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. A selection of representative plays and criticism. The theory and practice of drama as reflected in tragedy, comedy, and other major forms. $\dagger$
386. Literature and Religion. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Religious ideas and experiences in literature. Such writers as the Pearl poet, Donne, Milton, Bunyan, Blake, Melville, Hopkins, and Eliot. $\dagger \dagger$
387. Literature and Politics. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Tier 1, Humanities I LASAR requirement. Relationship of literature and politics. Such topics as revolution and reaction, images of kinship and government, Utopian and Apocalyptic visions, and Marxism and Existentialism. $\dagger \dagger$
388. Literature and Psychology. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR require ment. The relationship of literature and psychology is studied through readings in psychological theories and literary works. Fall, Spring
389. Myth and Archetype in Literature. 3 hr .; 3 cr . Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. The study of myth and archetype in ancient and modern literature with consideration of such writers as Frazer, J ung, Frye, and Lévi-Strauss. $\dagger$
390. Comedy and Satire. 3 hr.; 3 cr. Prereq.: English 140 or satisfaction of the Humanities I, Tier 1 LASAR requirement. Selected studies in comic fiction, drama, and satire. This course will investigate the origin and development of comedy and satire and their relation to ritual and social custom. It will consider dramatic modes, such as comedy of manners, farce, and theatre of the absurd as well as stock characters such as the trickster, the comic hero, and the clown. It will also consider the historic relationship between comedy and tragedy and the ways in which gender and cultural experience have shaped our perceptions of the comic.
391. Senior Seminar: Topics in Literature. 3 hr.; 3 cr. Prereq.: English major with senior status or consent of the instructor. This course allows the instructor and a small group of advanced English majors to pursue in depth a topic in literature or literary theory.
392. Selected English Writers. 3 hr.; 3 cr. Prereq.: Varies each semester. An intensive study of one or two figures. Writers studied vary each semester. The course may be taken for credit more than once if the topic is different. $\dagger \dagger$
393. Selected American Writers. 3 hr.; 3 cr. Prereq.: Varies each semester. An intensive study of one or two figures (a companion course to English 392). The course may be taken for credit more than once if the topic is different. $\dagger \dagger$
394. Selected Studies in English Literature. 3 hr.; 3 cr . Prereq.: Varies with topic. The topic of the course, announced in advance, varies each semester. The course may be taken for credit more than once if the topic is different. $\dagger \dagger$
395. Selected Studies in American Literature. 3 hr .; 3 cr . Prereq.: Varies with topic. The topic of the course, announced in advance, varies each semester. The course may be taken for credit more than once if the topic is different. $\dagger \dagger$
396. Studies in Language, Literature, and Culture. 3 hr.; 3 cr. Prereq.: Varies with topic. The topic of the course, announced in advance, varies each semester. The course may be taken for credit more than once if the topic is different. $\dagger \dagger$

397, 398. Seminar in Teaching Writing. 4 hr.; 4 cr. Prereq.: Permission of faculty program coordinator. Students participate in teaching English 95 with an instructor. Work includes planning and giving lessons, holding conferences, commenting on students' papers, and attending a weekly workshop. Fall, Spring
399. Departmental Honors Seminar. 3 hr.; 3 cr . Prereq.: Enrollment in Honors Program or permission of instructor. Required of departmental honors candidates. Designed to provide intensive examination of literary figures, periods, and forms that are not considered, or only partially studied, in the department's regular offerings. May be repeated for credit. Fall, Spring

## C ollege E nglish as a Second L anguage

See Special Sequences and Courses, page 196.

## E nglish <br> Language <br> Institute

For information, see page 45.

## E uropean <br> L anguages \& Literatures

Chair: Peter Carravetta

Deputy Chair: Thomas Bird
Undergraduate Advisers: Royal Brown (French); Rolf Kieser (German), Constance Tagopoulos (Greek); Rinaldina Russell (Italian); Thomas Bird (Russian)
GraduateAdvisers: Gloria Sawicki (M.S. in Education); J oseph Sungolowsky (French); Hermann Haller (Italian)
Dept. Office: King Hall 207, 997-5980; Fax 997-5072
Distinguished Professor: Y evtushenko; Professors: Anderle, Brown, Carravetta, Evans, Haller, Kieser, Lonigan, Russell, Sungolowsky; Associate Professors: Bird, Picken, Todd; Assistant Professor: Paulicelli; Lecturers: Sawicki, Tagopoulos; Department Secretaries: Aviles, Winick

Please note: As a new department, curriculum revisions are already under way, and will bereflected in the next issue of this Bulletin. Students should check with the department for the latest information concerning course offerings and requirements for the degree.

The program of instruction in the Department of European Languages and Literatures seeks, through the achievement of an accurate reading knowledge, adequate aural comprehension, and conversational proficiency, to prepare students to understand, appreciate and use professionally the language, literature, and culture of the French-, German-, Greek-, Italian-, and Russian-speaking worlds. Upon completion of the basic courses, students are expected to have a thorough, practical command of the language they have studied, including an ability to understand more fully the culture or cultures of which that language
is a reflection. Elective courses consist of both linguistic and literary studies of a more advanced and specialized nature.

In all courses, correlation with other departments of the College is encouraged whenever students' use of their language training can be made effective in their field of specialization.

## The Majors

Majors are offered in the day session in French, Italian, German, and Russian.

Up to 36 credits are required for the major. Additional credits may be taken in courses related in content and purpose, and may include political science, geography, economics, history, anthropology, art, music, and other such adjunct courses. All prospective majors must consult a department adviser before filing proper concentration forms.

Students who plan to teach French, German, or Italian in secondary schools should also take at least three courses in a second foreign language. (Note: There is no approved program in Russian secondary school teaching.) Approval for student teaching normally requires a 3.0 average in elective courses and the grade of B in intermediate conversation, phonetics, and grammar.

Students interested in a Byzantine and Modern Greek major, which has a Greek language requirement, should consult with the Director of the Byzantine and Modern Greek Studies Program (J efferson Hall 301, 997-4520).

## The Minors

A minor is offered in the day session in French, German, Greek, Italian, and Russian. Sixteen credits above language 112 are required for the minor in a European language. All prospective minors must consult a department adviser to have their programs approved.

The department offers as well courses in the German Ianguage, its literature and civilization; a variety of courses taught in English, treating literature and thought in translation; and courses in the Russian language, its literature, and culture.

For details, please check individual headings.

## French

Students who have had less than one and one-half years of high school French normally begin with course 111; those entering with two years normally begin with course 112; those presenting three years normally begin with course 203;
and those presenting four years normally begin with course 204. Native speakers should consult the Chair or a department representative for correct placement.

## The Major in French

The major in French consists of up to 36 credits taken at and above the 205 level. Successful completion of 205, 222, and 224 is required of all majors. Students should choose courses for the remaining 25 credits in consultation with the undergraduate adviser. French 205 and 206 are prerequisites for 300-level literature courses; French 224 is a prerequisite for advanced language courses. The French major offers a choice of two separate tracks: the language track or the literature track.

The department houses a chapter of Pi Delta Phi, the national French honor society.

## COURSES

## Courses in English

41. Masterpieces of French Literature in Translation. 3 hr.; 3 cr. Prereq.: English 110. Readings in English translation of some outstanding works of French literature from its beginnings to the twentieth century, illustrating a variety of genres. The specific works to be considered will vary from semester to semester and from section to section, and will be announced in advance. May be repeated for credit provided the topic is different. Fall, Spring
42. French Cinema. 4 hr .; 3 cr . The course will deal with the various elements of French cinema: historical, cultural, aesthetic, political, technical, etc. Particular courses may deal with a certain tendency (such as the "New Wave"), period, or individual director (such as Renoir, Cocteau, or Godard). Lectures and work will be done in English; films will be shown in the original language with subtitles. May be taken more than once for credit provided the topic is different.

## Basic Language Courses

111. Elementary French I. 4 hr.; 4 cr. Intended for students with no previous training in French. Designed to establish correct pronunciation, to teach the elements of grammar, to enable students to read, to understand spoken French, to become familiar with cultural aspects of French-speaking countries, and especially to establish a good basic vocabulary. Class hours include use of the language laboratory. Fall, Spring
112. Elementary French II. 4 hr.; 4 cr. Prereq.: French 111 or two years of high school French. This course is a continuation of French 111. A graded reader is introduced to present literary and cultural
aspects of French-speaking countries, and to offer topics for simple exercises in composition. Class hours include use of the language laboratory. F all, Spring

## When circumstances warrant, the

 department may offer a course of Intensive French 111 and 112 for eight credits.203. Intermediate French I. (formerly French 113) 3 hr.; 3 cr. Prereq.: French 112 or three years of high school French. Grammar review, conversation, and readings in literary and cultural materials at an intermediate level. Fall, Spring
204. Intermediate French II. 3 hr.; 3 cr. Prereq.: French 203 or four years of high school French. Continuation of French 203, with grammar review, conversation, composition, and readings in literary and cultural materials. Fall, Spring
205. Survey of French Literature I. 3 hr.; 3 cr. Prereq.: French 204 or permission of department. Reading and analysis of representative works from the Romantic period to the present day, with special emphasis on literary values and history. Required for majors and others planning to take elective courses in the department.
206. Survey of French Literature II. 3 hr.; 3 cr. Prereq.: French 205 or permission of department. Reading and analysis of representative works from the sixteenth through the eighteenth centuries, with spe cial emphasis on literary values and history. Required for majors and others planning to take elective courses in the department.
207. French Conversation. 2 hr.; 1 cr. Prereq.: French 112 or coreq. French 203. Intensive practice in spoken French for students wanting such training. Exercises in aural-oral work in the language laboratory will be required. May not be taken by students who speak French with native fluency.

## Advanced Language Courses

222. Phonetics and Diction. 2 hr .; 1 cr . Prereq.: French 203. Provides further training in the pronunciation of the foreign language. Intensive practice and exercises in diction and phonetics will be carried on in the classroom and language laboratory. $\dagger \dagger$
223. Advanced Conversation. 3 hr.; 2 cr. Prereq.: French 203. For students who want to perfect their fluency in current idiom. Prepared and impromptu group discussions on general topics and everyday situations. Frequent short talks by students. May not be taken by students who speak French with native fluency. Fall, Spring
224. Advanced Grammar. 3 hr.; 3 cr. Prereq.: French 204 or permission of

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). †Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
department. Provides instruction in advanced French grammar and idiom patterns. Fall, Spring
232. Skills and Art of Translation II. 3 hr.; 3 cr. Prereq.: French 231. Translation of more advanced texts. Texts may be chosen not only from literature but from journalism, advertising, business, and other technical or specialized areas. Spring

## 235. Commercial and Technical

French. 3 hr.; 3 cr. Prereq.: French 224.
Through the reading of specialized texts and the acquisition of business terminology, this course offers the student a practical knowledge of French business practices and procedures as well as a broad survey of the history and role of business in the devel opment of the French economy in the public and private sectors. $\dagger$
325. Advanced Composition I. 3 hr.; 3 cr. Prereq.: French 224. Grammatical analysis, stylistics, and intensive work in composition.

## 328. Literary Composition and Ex-

 plication of Texts. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: French 224 or permission of department. Provides instruction in formal composition of a literary nature; trains students in the techniques of textual analysis.
## 331. Skills and Art of Translation I. 3

 hr.; 3 cr. Prereq.: French 224. Introduction to the techniques and problems of translation; intensive practice in translating various texts.
## Civilization Courses

310. French Civilization Survey I. 3 hr.; 3 cr . Prereq.: French 206 or permission of department. A study of the development of French institutions and history. $\dagger \dagger$
311. French Civilization Survey II. 3 hr.; 3 cr . Prereq.: French 206 or permission of department. French contributions to the fine arts, music, science, education, philosophy. Students electing both French 310 and 311 should, whenever possible, take 310 first. $\dagger \dagger$

## Elective Courses in Literature

320. French Literature of the Middle Ages. 3 hr.; 3 cr. Prereq.: French 206 and 228 or permission of department. $\dagger \dagger$
321. French Literature of the Sixteenth Century. 3 hr .; 3 cr . Prereq.: French 206 and 228 or permission of department. $\dagger \dagger$
322. French Literature of the Seven-
teenth Century. 3 hr.; 3 cr. Prereq.: French 206 and 228 or permission of department. $\dagger \dagger$
323. French Literature of the Eighteenth Century. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: French 206 and 228 or permission of department. $\dagger \dagger$
324. French Novel of the Nineteenth

Century. 3 hr.; 3 cr. Prereq.: French 206
and 228 or permission of department. $\dagger \dagger$

## 360. French Novel of the Twentieth

 Century. 3 hr.; 3 cr. Prereq.: French 206 and 228 or permission of department. $\dagger \dagger$363. French Poetry of the Nineteenth and Twentieth Centuries. 3 hr .; 3 cr . Prereq.: French 206 and 228 or permission of department. $\dagger \dagger$
364. French Theatre of the Nineteenth and Twentieth Centuries. 3 hr .; 3 cr . Prereq.: French 206 and 228 or permission of department. $\dagger \dagger$
365. Seminar. 381.2, 2 hr.; 2 cr., 381.3, 3 hr.; 3 cr. Prereq.: Upper junior or senior standing; an average of B in elective courses taken in French, and permission of department. Designed especially to give qualified students experience in scholarly investigation, exploring a field of French literature, civilization, or language. (Also serves French majors specializing in language and those interested in civilization.) $\dagger \dagger$

## G ermanic

The basic courses in German (German 101 through 203) have as their aim the development in the student of the ability to read, write, speak, and understand German with accuracy and facility. Courses below German 204 may not be counted toward a major in German unless specifically required.

The courses German 204 to 399 are intended for students with an interest in the advanced study of the German Ianguage and its literature and civilization, as well as for those with professional aspirations to teach at the secondary or university level.

The courses in German literature and thought in translation (German 150 and German 253 to 289) deal with literary and cultural topics within the area of German studies. The reading is in English, and the courses are taught in English.

The German Club maintains a varied program of social and cultural events. The department also houses the Delta Omicron chapter of Delta Phi Alpha, the national German honor society.

The department encourages interested students to take the various standard examinations such as that for the Zertifikat "Deutsch als Fremdsprache," issued by the Goethe-Institut in Munich through the Goethe H ouse, New Y ork. Further information about the composition of these tests, as well as about the dates on which they are administered, may be obtained from the academic adviser.

## The Majors

Students may major in German, or in German in conjunction with secondary education (major in the teaching of German). Interested students are urged to consult with the academic adviser for German in order to plan their programs.

Major in German: Concentration in German Language \& Literature In addition to attaining proficiency in German through the level of German 203, 33 credits including German 204 are required for this major. Students must take at least 21 credits from among language courses in the 200 series beyond German 204 and from among courses in the 300 series. The remaining 9 credits may be taken from among any other German courses, including those taught in English transIation (German 150, 253-269, 281-289).

## Major in the Teaching of German

 In addition to attaining proficiency in German through the level of German 203, 33 credits including German 204 constitute the major in the teaching of German. At least 9 credits must be taken from among language courses in the 200 series beyond German 204, and at least 12 credits must betaken from courses in the 300 series. The remaining 9 credits may be taken from among any other German courses, including those taught in English translation (German 150, 253269, 281-289). Students must also enroll in a minor in Secondary Education (see page 122).
## The Minors

For a minor in German, 15 credits beyond German 203 or equivalent are required. Besides German 204, which is required, 6 credits must be taken from 215-245 and 301-310, of which 3 credits must be from 301-310. The remaining 6 credits may be taken from any course above the level of 204, including those taught in English translation (German 150, 253-269, 281-289).

For a minor in German Civilization, the completion of German 204, 6 credits from among German 215-245, and 6 credits from among German 150 and any course above the level of German 204 are required.

## Study Abroad

The department maintains connections with the University of Kiel for Summer programs and with other German universities for junior-year-abroad programs.

## COURSES IN GERMAN

Students who have studied German in an accredited college or university must have their previous language work evaluated before they may enroll for further courses in German.

## Language Courses

## 10. Elementary German for Reading

 Purposes. 4 hr.; 4 cr. Introductory course for students who require the elements of a reading knowledge of German. May not be taken for credit by students who have completed German 101 or 102, or equivalent.May not be taken in fulfillment of the Foreign Language requirement. $\dagger \dagger$
101. E lementary German I. 4 hr.; 4 cr. Intended for students with no previous training in German. Designed to teach basic grammar, practice in reading, writing, speaking, and listening comprehension, with emphasis on expression. Fall, Spring
102. Elementary German II. 4 hr.; 4 cr. Prereq.: German 101 or equivalent. A continuation of German 101. Fall, Spring
110. E lementary German: Combined III. 8 hr.; 8 cr . The contents of German 101 and 102 condensed into one semester. Usually offered only in Summer. Six hours classroom instruction plus 2 hours in language laboratory programs.
113. Intermediate German for Reading Purposes: Sciences. 3 hr.; 3 cr. Prereq.: German 10 or 102, or permission of department. Intensive practice in the reading of scientific German. $\dagger \dagger$
123. Intermediate German for Reading Purposes: Arts. 3 hr.; 3 cr. Prereq.: German 10 or 102, or permission of department. Intensive practice in the reading of expository prose in the areas of the fine arts, humanities, and the social sciences. $\dagger \dagger$
203. Intermediate German. 3 hr.; 3 cr. Prereq.: German 102 or equivalent. A continuation of German 102. Reading, conversation, grammar with emphasis on expression. Fulfills Ianguage requirement in German. Fall, Spring
204. Advanced German. 3 hr.; 3 cr. Prereq.: German 203 or equivalent. Reading, conversation, composition, vocabulary building, review of grammar. Fall, Spring
215. Expository Writing and Speaking. 3 hr.; 3 cr. Prereq.: German 204 or permission of department. Practice in expository writing and speaking on subjects of some difficulty. May be repeated for credit. $\dagger$
225. Readings in German Literature. 3 hr.; 3 cr. Prereq.: German 204 or permission of department. Practice in reading and comprehension with texts selected from various genres. May be repeated for credit provided topic is different. $\dagger$
235. German for Business and Industry. 3 hr .; 3 cr . Prereq.: At least one of the 200 series Ianguage courses beyond German 204 or permission of department.

Practice in oral and written communication related to business, banking, and industry. $\dagger$
245. The German Press of Today. 3 hr .; 3 cr. Prereq.: At least one of the 200 series language courses beyond German 204 or permission of department. Reading and discussion of present-day German newspapers and magazines; analysis of contemporary journalistic style. $\dagger$

## Courses in Literature

301. Medieval German Literature. 3 hr.; 3 cr. Prereq.: At least one of the 200 series Ianguage courses beyond German 204 or permission of department. Reading, in modern German translation, of repre sentative works of epic and lyric poetry. Brief survey of German literature in the Middle Ages. $\dagger \dagger$
302. Renaissance and Baroque. 3 hr.; 3 cr. Prereq.: At least one of the 200 series I anguage courses beyond German 204 or permission of department. The major figures and movements: Mysticism, Humanism, the Reformation, and the CounterReformation in the literature of the sixteenth and seventeenth centuries. $\dagger \dagger$

## 303. Enlightenment to Storm and

Stress. 3 hr .; 3 cr . Prereq.: At least one of the 200 series language courses beyond German 204 or permission of department Enlightenment, Storm and Stress, and Sentimentalism as the literary and theoretical foundations of Classicism. $\dagger \dagger$
304. Goethe and Schiller. 3 hr.; 3 cr. Prereq.: At least one of the 200 series language courses beyond German 204 or permission of department. Drama, poetry, prose, and some essays of Goethe and Schiller, excluding Faust. $\dagger \dagger$
305. R omanticism. 3 hr.; 3 cr. Prereq.: At least one of the 200 series language courses beyond German 204 or permission of department. Changes in sensibility and thought in early nineteenth-century German literature. $\dagger \dagger$
306. Realism. 3 hr.; 3 cr. Prereq.: At least one of the 200 series language courses beyond German 204 or permission of department. Literary, intellectual, social, and political currents in Germany, Austria, and Switzerland after the Age of Goethe. Analysis of representative works by authors such as Büchner, Keller, Meyer, Grillparzer, and Hebbel. $\dagger \dagger$
307. Modern German Literature. 3 hr .; 3 cr. Prereq.: At least one of the 200 series language courses beyond German 204 or permission of department. Currents and writers since the end of the nineteenth century. These may include such movements as Naturalism and Expressionism and such writers as Kafka, Brecht, Mann, and Rilke, as well as more recent writers. $\dagger \dagger$
310. Survey of German Literature. 3 hr.; 3 cr. Prereq.: At least one 300 level German literature course or permission of department. An overview of German litera-
ture with readings in fiction, drama, and poetry with emphasis on literary history. $\dagger \dagger$
311, 312. Seminar. 3 hr.; 3 cr. each sem. Prereq.: At least one 300 level literature course or permission of department. $\dagger \dagger$

321, 322. Special Problems. 1 conf. and 9 hr. work; 3 cr. each sem. Prereq. for 321: Upper junior or senior standing; the completion of at least four elective courses in German; and a scholastic record that indicates, to the satisfaction of the department, capacity for independent work. Prerequisite for 322 is a grade of $\mathrm{B}+$ or better in 321. Individual research under the direction of a member or members of the department. The student reports in weekly conference to the research adviser, and presents such paper or papers as may be prescribed. $\dagger \dagger$
399. Bachelor's Thesis in German. 399.1-399.6., 1-6 hr.; 1-6 cr. 1 conf. and equivalent of up to 15 hr . of work per week; up to a maximum of 6 cr . Prereq.: Senior standing only; the completion of at least four elective courses in German with a B+ or better index; a scholastic record that indicates, to the satisfaction of the department, capacity for independent work. A committee of two, appointed by the Chair, will screen the student and the project and will evaluate the thesis. $\dagger \dagger$

Courses in German Literature and Thought in English
150. Masterpieces of German Literature and Thought in Translation. 3 hr .; 3 cr . Prereq.: English 110 or equivalent.
253. The Age of Goethe and Schiller. 3 hr.; 3 cr. Prereq.: Sophomore standing or permission of department. The intensive study of representative works of Goethe, Schiller, and Lessing (except Faust), reflecting Enlightenment, Storm and Stress, and Classicism. $\dagger \dagger$
254. Goethe's Faust Parts I and II. 3 hr.; 3 cr . Prereq.: Sophomore standing or permission of department. An exploration of the Faust drama as poetry and as summary of a long literary tradition; the impact of the poem on intellectual, political, and social thought. $\dagger \dagger$
258. Significant German Authors. 3 hr.; 3 cr . Prereq.: Sophomore standing or permission of department. Study of the works of a German author of international standing. May be repeated for credit when topic changes. $\dagger \dagger$
259. Modern German Literature. 3 hr.; 3 cr. Prereq.: Sophomore standing or permission of department. Readings from such authors as Mann, Kafka, Musil, Rilke, Benn, Broch, Grass, Brecht. May be repeated for credit when topic changes. $\dagger \dagger$
261. The German Film. 4 hr.; 3 cr. This course will treat various aspects of German cinema: historical, cultural, aesthetic, political, technical, etc. In a given semester, the course may deal with a certain tendency (such as the Heimat film), period
(such as New German Cinema), or director (such as Lang, Murnau, Fassbinder, or Herzog). Lectures and work will be done in English; films will be shown in the original language with subtitles. May be taken more than once for credit provided the topic is different. MAT charge, \$7. $\dagger$
269. Seminar in German Literature and Thought in Translation. 3 hr .; 3 cr . Prereq.: Sophomore standing or permission of department. $\dagger \dagger$

## Courses in German Civilization

## 281. The Origin and Development of

 Modern German-Speaking Lands. 3 hr.; 3 cr. Prereq.: Sophomore standing or permission of department. A survey of the development of contemporary civilization and culture in Germany, Austria, and Switzerland since the nineteenth century. $\dagger \dagger$282. German Civilization in the Middle Ages. 3 hr.; 3 cr. Prereq.: Sophomore standing or permission of department. The emergence of the Germanic peoples, their impact on Greco-Roman culture, and the formation of the medieval kingdoms, as reflected in their history, literature, mythol ogy, architecture, art, music, social forms, and customs to the eve of the Renaissance. $\dagger \dagger$

## 283. Renaissance, Reformation,

 Baroque. 3 hr.; 3 cr. Prereq.: Sophomore standing or permission of department. The age of science and discovery: the Renaissance, the Reformation, the Wars of Religion, the Thirty Years War, and the emergence of the Baroque style in art, literature, and music. $\dagger \dagger$284. From Enlightenment to Romanticism. 3 hr.; 3 cr. Prereq.: Sophomore standing or permission of department. The emergence of the middle class in the eighteenth century, culminating in a profusion of thought and writing surrounding Goethe's and Schiller's Classicism, and in one of the high points of German culture, Romanticism in art and literature. $\dagger \dagger$
285. The Nineteenth Century: A Multifaceted Society. 3 hr .; 3 cr . Prereq.: Sophomore standing or permission of department. M ain currents of German culture from Goethe and Heine to Marx, Bismarck, and Nietzsche, including literature, music, technology, science, philosophy, art, and politics. $\dagger \dagger$
286. Modern Germany. 3 hr.; 3 cr. Pre req.: Sophomore standing or permission of department. Germany in the context of modern Europe. Changes and developments in German society and culture. $\dagger \dagger$
287. Seminar in German Civilization. 3 hr.; 3 cr. Prereq.: Sophomore standing or permission of department. $\dagger \dagger$

## M odern G reek

The major in Byzantine and Modern Greek Studies has a Greek Ianguage
requirement. Departmental courses in Greek literature may be used as part of a specialization within that program. A separate language major is under consideration. Students interested in a Greek minor should consult with the adviser, Prof. Constance Tagopoulos.

## COURSES

## Courses Taught in English

GRST 100. Modern Greek Culture and Civilization. 3 hr.; 3 cr . From the fall of Constantinople (1453) to the present, a survey of the political, intellectual, and social currents of Greek life.
150. Modern Greek Literature in Translation. 3 hr.; 3 cr. Surveys modern Greek literature (in translation) from the middle of the nineteenth century to the present. The authors and their works are examined not only for their individual stylistic and thematic elements but also with in the context of European literary and cultural movements. $\dagger \dagger$

## Basic Language Courses

101. Elementary Modern Greek I. 4 hr.; 4 cr. Prereq.: Permission of department or instructor. A course in basic vocabulary, grammar, and syntax. Training in reading and writing, but emphasis on oral-aural practice. Intended for students with no previous knowledge of M odern Greek.
102. Elementary Modern Greek II. 4 hr.; 4 cr. Prereq.: Greek 101 or equivalent. A continuation of Greek 101.
103. Intermediate Modern Greek I. 3 hr.; 3 cr. Prereq.: Greek 102 or equivalent. Further development of audio-lingual skills and study of essential grammar with emphasis on reading and writing
104. Intermediate Modern Greek II. 3 hr.; 3 cr. Prereq.: Greek 203 or equivalent. A continuation of M odern Greek 203. Emphasis on reading and writing. Easy selections from prose and poetry.
105. Modern Greek Conversation. 3 hr.; 3 cr. Prereq.: Greek 102 or equivalent and permission of department. Intended for students who have an elementary knowledge of Greek and wish to improve their ability to converse. Recommended especially for students in Greek 203 or 204 who come from homes where Greek is not spoken. $\dagger \dagger$

## Advanced Language and

Literature Courses
305. Modern Greek Literature I. 3 hr.; 3 cr. Prereq.: Greek 204 or equivalent. A course designed to improve the literary vocabulary and writing skills of students by a close reading of one or more twentieth-century prose works, such as Politis, The Lemon Grove; Tachtsis, TheThird Wedding; Theotokas, Leonis; Venezis, Aeolian Land; and a selection of short stories.
306. Modern Greek Literature II. 3 hr.; 3 cr. Prereq.: Greek 305 or equivalent. An introduction to the principal genres of nineteenth- and twentieth-century Greek literature. Selections will be read from lyric and narrative poetry, the novel, short stories, drama, and essays.
315. Writing about Literature: Theory and Practice. 3 hr.; 3 cr. Prereq.: Greek 306 or Greek high school diploma or special permission. Designed to introduce students to various critical approaches to literature, and to give them practice in writing analyses of literary works, both poetry and prose. Readings from a selection of Greek writers and literary critics. Recommended for students taking literature courses. $\dagger \dagger$
321. Survey of Modern Greek Literature I: Eighteenth Century to 1880. 3 hr.; 3 cr. Prereq.: Greek 306 or Greek high school diploma or special permission. Prose and especially poetry from the period of the Greek Enlightenment and of Romanticism, with attention to the social, cultural, and political changes that affected that literature. Topics to be discussed will include the theories of Korais, Classic as opposed to Romantic, the influence of folk poetry, and the rise of the Greek novel. Readings from the works of Solomos and the Heptanesian poets, Vikelas's Loukis Laras, and Makriyannis's Memoirs. $\dagger \dagger$
322. Survey of Modern Greek Literature II: 1880 to 1930. 3 hr .; 3 cr . Prereq.: Greek 306 or Greek high school diploma or special permission. A study of the major writers of the period, with emphasis on the poetry of Palamas, Cavafy, and Sikelianos and regionalist prose writers such as Papadiamantis and Karkavitsas. Discussion of European literary movements such as Realism, Naturalism, and Symbolism and their manifestations in Greece. $\dagger \dagger$
323. Survey of Modern Greek Literature III: 1930 to Present. 3 hr.; 3 cr. Pre req.: Greek 306 or Greek high school diploma or special permission. A study of the principal modern writers with selected readings from among the following: Seferis, Elytis, Ritsos, K azantzakis, Venezis and the "generation of the '30s," and contemporary novelists. Discussion of the European and Greek settings that gave rise to Symbolism, M odernism, Surrealism, and ideological literature. $\dagger \dagger$

## 330. Early Modern Greek Literature:

 Fourteenth to Seventeenth Century. 3 hr.; 3 cr. Prereq.: Greek 321 or 322 or 323 or Greek high school diploma or special permission. A survey from the last days of Byzantium through the period of the Renaissance. Topics to be discussed will include the nature of oral poetry and folk song, the flowering of Cretan literature, the literary genre of the romance. Selections will be read from such works as Digenis Akritis, Erotokritos, Erofili, and Cypriot lyric poetry. $\dagger \dagger$335. Studies in Modern Greek Literature. 3 hr.; 3 cr. Prereq.: Greek 321, 322 or 323 or Greek high school diploma or special permission. Intensive study of two or three major authors. Subject for each semester to be announced in advance. May be taken for credit more than once when the subject changes.

## Italian

Students who have had less than one and one-half years of high school Italian normally begin with course 111; those entering with two years normally begin with course 112; those presenting three years usually begin with course 203; and those presenting four years normally begin with course 204. Native speakers should consult the Chair or a department representative for correct place ment.

## The Major in Italian

The major in Italian consists of 36 credits taken at and above the 205 level. Successful completion of 207, 208, 209, and 224 is required of all majors. Students should choose courses for the remaining 24 credits in consultation with the undergraduate adviser. Italian 207, 208, and 209 are prerequisites for 300-level literature courses; 224 is a pre requisite for advanced language courses.

The department houses a chapter of Gamma Kappa Alpha, the national Italian honor society.

## COURSES

## Courses in English

## 41. Masterpieces of Italian Literature

 in Translation. 3 hr .; 3 cr . Prereq.: English 110. Readings in English translation of some outstanding works of Italian literature from its beginnings to the twentieth century, illustrating a variety of genres. The specific works to be considered will vary from semester to semester and from section to section, and will be announced in advance. $\dagger \dagger$50. Italian Cinema. 4 hr .; 3 cr . The course will deal with the various aspects of Italian cinema: historical, cultural, aesthetic, political, technical, etc. Particular courses may deal with a certain tendency (such as neo-Realism), period, or an individual director (such as De Sica, Visconti, Fellini, or Antonioni). Lectures and work will be done in English; films will be shown in the original Ianguage with subtitles. May be taken more than once for credit provided the topic is different. $\dagger \dagger$

## Basic Language Courses

111. E lementary Italian I. 4 hr.; 4 cr intended for students with no previous training in Italian. Designed to establish
correct pronunciation, to teach the ele ments of grammar, to enable students to read, to understand spoken Italian, to become familiar with cultural aspects of Italy, and especially to establish a good basic vocabulary. Class hours include use of the language laboratory. Fall, Spring
112. Elementary Italian II. 4 hr .; 4 cr . Prereq.: Italian 111 or two years of high school Italian. This course is a continuation of Italian 111. A graded reader is introduced to present literary and cultural aspects of Italy, and to offer topics for simple exercises in composition. Class hours include use of the language laboratory. Fall, Spring
When circumstances warrant, the department may offer a course of Intensive Italian 111 and 112 for eight credits.
113. Intermediate Italian I. (formerly Italian 113) 3 hr.; 3 cr. Prereq.: Italian 112 or three years of high school Italian. Grammar review, conversation, and readings in literary and cultural materials at an intermediate level. Fall, Spring
114. Intermediate Italian II. 3 hr .; 3 cr . Prereq.: Italian 203 or four years of high school Italian. Continuation of Italian 203, with grammar review, conversation, composition, and readings in literary and cultural materials. Fall, Spring

## Introductory Literature Courses

207. Survey of Italian Poetry. 3 hr .; 3 cr. Prereq.: Italian 204 or permission of department. Reading and analysis of representative works from the Middle Ages through the present; special emphasis on the history of literary movements. Required for majors and others planning to take elective courses in the department.
208. Survey of Italian Prose. 3 hr .; 3 cr . Prereq.: Italian 204 or permission of department. Reading and analysis of representative works from the Middle Ages through the present; special emphasis on the history of literary movements. Required for majors and others planning to take elective courses in the department.
209. Introduction to Italian Culture. 3 hr.; 3 cr. Prereq.: Italian 204 or permission of department. Background for the meaningful study of Italian literary culture. This includes major historical developments from ancient times through the comuni, the Renaissance, the Enlightenment, up to Unification, and the recent economic miracle.

## Advanced Language Courses

223. Advanced Conversation. $3 \mathrm{hr} . ; 2 \mathrm{cr}$. Prereq.: Italian 203. For students who want to perfect their fluency in current idiom. Prepared and impromptu group discussions on general topics and everyday situations. Frequent short talks by students. May not be taken by students who speak Italian with native fluency. $\dagger \dagger$
224. Advanced Grammar. 3 hr.; 3 cr. Pre req.: Italian 204 or permission of department. Provides instruction in advanced Italian grammar and idiom patterns. Spring
225. Advanced Composition (Dissertation and Explication of Texts). 3 hr.; 3 cr. Prereq.: Italian 204 or permission of department. Provides instruction in formal composition of a literary nature; trains students in the techniques of textual analysis. Fall
226. Skills and Art of Translation I. 3 hr.; 3 cr. Prereq.: Italian 224 or permission of department. Introduction to the techniques and problems of translation; intensive practice in translating texts of various types. $\dagger \dagger$
227. Skills and Art of Translation II. 3 hr.; 3 cr. Prereq.: Italian 231. Translation of more advanced texts. Texts may be chosen not only from literature but from journalism, advertising, business, and other technical or specialized areas. $\dagger \dagger$
228. Commercial and Technical Italian. 3 hr.; 3 cr. Prereq.: Italian 224. Provides adequate training in the use of Italian for business, technical, and consular purposes by giving extensive practice in written and oral usage of the forms in use in these fields. Drill will be required in translation techniques, use of special vocabularies and other adjuncts as needed in practical usage in these and related fields of work. $\dagger \dagger$

## Elective Courses in Literature

329. Textual Analysis. 3 hr.; 3 cr. Prereq.: Italian 224 or permission of department. Introduction to the idea of text, stylistics, research, and criticism. Explication of different methodologies and theories of interpretation, with strong emphasis on practical strategies of identifying and contextualizing the literary artifact.
330. The Italian Language. 3 hr .; 3 cr . Prereq.: Italian 224 or permission of department. Introduction to key aspects of the Italian Ianguage. The course will provide basic linguistic tools and an overview of the historical development of the language and its dialects. Emphasis may be on such topics as Italian dialects, Ianguage use in contemporary society, Italian as an immigrant language. May be repeated for credit provided the topic is different.
331. Studies in Medieval Literature I: Dante. 3 hr.; 3 cr. Prereq.: Italian 207 and 328. Studies of various aspects of the poet's aesthetic and vision through analysis of representative works such as the Vita Nuova, The Rime, and the Commedia. May be repeated for credit provided topics and selections are different.
332. Studies in Medieval Literature II: Poetry. 3 hr.; 3 cr. Prereq.: Italian 207 and 328. Focuses on specific works and poetics of medieval Italian poetry represented by Petrarch and other early poets. May be repeated for credit provided topics and selections are different.

## 346. Studies in Medieval Literature

III: Prose. 3 hr.; 3 cr. Prereq.: Italian 207 and 328 . Studies specific works and narrative techniques in Italian prose represented by Boccaccio and the Italian novella May be repeated for credit provided topics and selections are different.
355. Studies in Renaissance Literature I: Theatre. 3 hr.; 3 cr. Prereq.: Italian 207 and 328, or permission of the department. Study of selected dramatic texts from the Sacra Rappresentazionethrough Aretino and Monteverdi to Alfieri. May be repeated for credit provided topics and selections are different.

## 356. Studies in Renaissance Literature

 II: Poetry. 3 hr.; 3 cr. Prereq.: Italian 207 and 328, or permission of the department. Focuses on specific works and poetics of Renaissance Italian poetry represented by Lorenzo de Medici, Boiardo, Ariosto, Tasso, Marino, and others. May be repeated for credit provided topics and selections are different357. Studies in Renaissance Literature III: Prose. 3 hr.; 3 cr. Prereq.: I talian 208 and 328, or permission of the department. Studies specific prose works and narrative techniques of authors such as Alberti, Valla, Poliziano, Machiavelli, Guicciardini, and Castiglione. May be repeated for credit provided topics and selections are different.
358. Studies in Modern Literature I: Theatre. 3 hr.; 3 cr. Prereq.: I talian 207 and 328, or permission of the department. Study of sel ected dramatic texts from such authors as Manzoni, Boito, Pirandello, and Fo. May be repeated for credit provided topics and selections are different.
359. Studies in Modern Literature II: Poetry. 3 hr.; 3 cr. Prereq.: Italian 207 and 328, or permission of the department Focuses on specific works or problems in poetic of modern Italian poetry represented by 19th- and 20th-century poets from Foscolo and Leopardi to Montale, Ungaretti, and others. May be repeated for credit pro vided topics and selections are different.
360. Studies in Modern Literature III: Prose. 3 hr.; 3 cr. Prereq.: I talian 208 and 328 , or permission of the department. Studies specific works and narrative techniques of authors such as F oscolo, Verga, Svevo, Pirandello, Moravia, and Eco. May be repeated for credit provided topics and selections are different.
361. Seminar. 381.2, 2 hr.; 2 cr.; 381.3, 3 hr.; 3 cr. Prereq.: Upper junior or senior standing, an average of B in elective cours es in Italian, and permission of department. Designed especially to give qualified students experience in scholarly investigation. Fields chosen for in-depth study may be in literature, civilization, linguistics, or interdisciplinary areas including film, visual arts, music, etc. May be repeated for credit provided the topic is different.

## Russian

The division offers courses in the Russian language and Russian literature. The basic program of instruction seeks to prepare students in the four language skills of listening comprehension, speaking, reading, and writing. Elective courses in Russian provide intermediate and advanced instruction in both language and literature.

Because language learning is cumulative in nature, and further development depends on the mastery of preceding language courses, students must obtain department permission to register in any course if two semesters have passed since satisfying the pre requisites.

The department houses the Chi Chapter of Dobro Slovo, the national Slavic honor society.

## The Major

Students wishing to major in Russian must take a minimum of 24 elective credits of work in Russian with a grade of B - or better. The rest of the 36 credits that constitute the major should be selected from courses in related fields, such as linguistics, comparative literature, history, philosophy, English, and other foreign languages and literatures. Primary consideration should be given to the following courses: Comparative Literature 218, 331, 333, 334, 335, 336, 337; History 109, 110; Philosophy 106, 263; Political Science 235, 261. Students interested in Russian and East European area studies may consider pursuing an interdisciplinary major program, combining Russian language and literature with other disciplines related to the area, under the supervision of the Director of Interdisciplinary and Special Studies and the departments concerned.

## The Minor

A minimum of 15 credits of Russian is required beyond the basic language courses (Russian 101, 102, 203, 204, 215), including Russian 155 and 225. Students with a background in Russian may substitute an elective for Russian 225 with the permission of the academic adviser.

## Study Abroad

The department can arrange for study in St. Petersburg for students of Russian. Depending upon the nature of the courses, credit may be granted toward the major and toward the degree at Queens College. The academic adviser
can supply further information on these programs.

## Elective Courses

Students considering a major must consult an adviser in the department before filling out appropriate concentration forms. Either Russian 301 or 302 is required of all majors unless specifically waived by the department because of special competence in these fields. Students may choose a program that emphasizes either language or literature; however, a language concentration requires at least one literature elective in addition to Russian 331.

A literature major must also submit a substantial term paper - the topic to be determined in consultation with the faculty - for a literature course chosen from either the 200 or 300 series. Majors should consult with their adviser before registering for the next semester.

## COURSES IN RUSSIAN

## Basic Courses

101. Elementary Russian I. 3 hr.; 3 cr. For students with no previous training in Russian. Designed to introduce basic grammar, correct pronunciation, and reading and writing. To be taken simultaneously with Russian 101.2.
101.2. Elementary Oral Practice I. 2 hr.; 2 cr. Basic training in speaking and aural comprehension. Must be taken simultaneously with Russian 101.
Note: Students with no formal training in grammar but with some native speaking ability, may take Russian 101 but are exempted from 101.2.
102. Elementary Russian II. 3 hr.; 3 cr. Prereq.: Russian 101 or equivalent. A con tinuation of Russian 101. To be taken simultaneously with Russian 102.2

### 102.2. Elementary Oral Practice II. 2

hr.; 2 cr. Prereq.: Russian 101 and 101.2. A continuation of Russian 101.2. Must be taken simultaneously with Russian 102. Students with native speaking skills are exempted from Russian 102.2.
203. Intermediate R ussian I. 4 hr.; 4 cr. Prereq.: Russian 102 or equivalent. Intermediate training in listening, speaking, reading, writing. Based on both oral-aural practice and the coordinated study of grammar, including morphology and syntax. $\dagger \dagger$
204. Intermediate Russian II. 4 hr.; 4 cr. Prereq.: Russian 203 or equivalent. A continuation of Russian 203. $\dagger \dagger$
214. Intermediate R ussian Conversation. 214.1-214.3, 1-3 hr.; 1-3 cr. Prereq.: Russian 203. Intensive practice in spoken Russian. May not be taken by students who speak Russian with native fluency.
215. Advanced Intermediate Russian I. 4 hr.; 4 cr. Prereq.: Russian 204 or equivaIent. A continuation of Russian 204. $\dagger \dagger$

## 225. Advanced Intermediate Russian

II. 4 hr.; 4 cr. Prereq.: Russian 204 or equivalent. An introduction to reading Russian. $\dagger \dagger$

## Courses in Russian Language

113. Phonetics and Intonation. 3 hr.; 3 cr. Prereq.: Russian 102 or permission of department. A theoretical and practical analysis of contemporary standard Russian phonetics and intonation patterns. May be repeated for credit. $\dagger \dagger$

## 301. Advanced Grammar and

Composition I. 3 hr.; 3 cr. Prereq.: Russian 215 or permission of department. Intensive practical study of advanced problems in Russian grammar, syntax, and idiom. Normally to be taken simultaneously with the student's first electives in literature. $\dagger \dagger$
302. Advanced Grammar and Composition II. 3 hr.; 3 cr. Prereq.: Russian 301 or permission of department. A continuation of Russian 301. $\dagger \dagger$
311. Advanced Oral Practice I. 3 hr.; 1 cr. Prereq.: Russian 215 or permission of department. Normally taken by majors at the same time as Russian $301 . \dagger \dagger$
321. Translation. 3 hr.; 3 cr. Prereq.: Russian 215 and English 120 or permission of department. A practical study in the problems and skills of translation of Russian and English. May be repeated for credit. $\dagger \dagger$
325. Stylistics. 3 hr.; 3 cr. Prereq.: Russian 302 and 331 or permission of department. A theoretical and practical study of problems of stylistics in literary and nonliterary Russian. $\dagger \dagger$
327. Contrastive Grammar. 3 hr.; 3 cr. Prereq.: Russian 302 or permission of department. A theoretical analysis of modern Russian contrasted with English. $\dagger \dagger$

Courses in Russian Literature and Thought In English
150. Russian Culture and Thought. 3 hr.; 3 cr . A survey of the institutions and cultural developments of Russia and the former Soviet Union.
155. Keys to Russian Literature. 3 hr .; 3 cr . A study of key works by the greatest Russian writers of the nineteenth century. Readings will include: Pushkin, Gogol, Turgenev, Dostoevsky. Lectures and readings in English. $\dagger \dagger$
233. Survey of Russian Literature: The Beginnings. 3 hr.; 3 cr . The development of Russian literature from the beginnings to the end of the eighteenth century.
234. Survey of Russian Literature: The Nineteenth Century. 3 hr.; 3 cr. The development of Russian literature from Pushkin to the 1890s.
235. Survey of Russian Literature: The Twentieth Century. 3 hr .; 3 cr . The devel opment of Russian literature from the end of the tsarist monarchy through socialist realism and perestroika to the present day.
243. Russian Drama. 3 hr.; 3 cr. The principal trends of Russian drama from the eighteenth century to the present. Lectures and readings in English. May not be taken for credit by students who have taken Russian 343.††
244. Russian and East European Film. 4 hr .; 3 cr . This course will treat various aspects of Russian and East European film: aesthetic, cultural, political, historical. In particular semesters the course may deal with specific topics, periods, or directors. Lectures in English. Films will be shown in the original languages with English subtitles. May be repeated once for credit provided that the topic is different.
245. Russian Short Story. 3 hr.; 3 cr. The Russian short story in the nineteenth and twentieth centuries. Lectures and readings in English. $\dagger \dagger$
280. Dostoevsky. 3 hr .; 3 cr . A close study of the author's life, major works, and their influence on Russian literature. Lectures and readings in English. May not be taken for credit by students who have taken Russian 380.††
281. Tolstoy. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. A close study of the author's life, major novels, selected short stories, and essays, and their influence on Russian and world literature. Lectures and readings in English. May not be taken for credit by students who have taken Russian 381. $\dagger \dagger$
282. Chekhov. 3 hr.; 3 cr. A close study of the author's principal stories and plays and his place in the history of Russian and world drama. Lectures and readings in English. May not be taken for credit by students who have taken Russian 382.††

## Courses in Russian Literature

331. Introduction to Russian Literature I. 3 hr.; 3 cr. Prereq.: Russian 225 or equivalent. A critical reading and analysis of Russian prose and poetry to introduce the student to the concepts, methods, and terminology of literary analysis. $\dagger \dagger$
332. Nineteenth-Century Russian

Poetry. 3 hr.; 3 cr. Prereq.: Russian 331 or permission of department. A critical study of the major poets of the nineteenth century. The classic, romantic, and realist trends of Russian poetry are studied and analyzed. Emphasis is placed on the interpretation and discussion of the works of Zhukovsky, Pushkin, Lermontov, Nekrasov, Tyutchev, and Fet. $\dagger \dagger$

## 351. Nineteenth-Century R ussian

Prose. 3 hr.; 3 cr . Prereq.: Russian 331 or permission of department. A critical study of the major prose texts of the nineteenth
century. Emphasis is placed on those writers whose works are not considered in separate courses, including Lermontov, Gogol, Goncharov, Turgenev. $\dagger \dagger$
360. The Silver Age of Russian Literature. 3 hr.; 3 cr. Prereq.: Russian 331 or permission of department. An introduction to some of the works of the most important Russian writers and critics of the beginning of the twentieth century. Emphasis is placed on the evolution of literary trends and on the analysis of literary movements such as Symbolism, Acmeism, Formalism, Futurism. $\dagger \dagger$
362. Twentieth-Century Russian Poetry. 3 hr.; 3 cr. Prereq.: Russian 331 or permission of department. A critical study of the major poets of the twentieth century from the Symbolists to the present. $\dagger \dagger$
375. Pushkin. 3 hr.; 3 cr. Prereq.: Russian 331 or permission of department. A close reading of selected works, with lectures on Pushkin's life, times, and literary influence. $\dagger \dagger$
376. Gogol. 3 hr.; 3 cr. Prereq.: Russian 331. A critical study of the author's life and principal writings, and their influence on Russian literature.

391, 392. Seminar. 3 hr.; 3 cr. each sem. Prereq.: Upper junior or senior standing; an average of $B$ in elective courses taken in Russian; and permission of department.
Designed especially to give qualified students experience in scholarly investigation Those admitted explore a field of Russian literature. Each student examines intensively a special phase of the field, reporting his or her findings orally to the group as well as in a term paper. $\dagger \dagger$

## 399. Bachelor's Thesis in Russian.

 399.1-391.6, 1-6 hr.; 1-6 cr. Prereq.: Senior standing. The Bachelor's Thesis in Russian may be done by students who have completed at least four elective courses in Russian with a B+or better index; a scholastic record that indicates, to the satisfaction of the department, capacity for independent work. A committee of two faculty members, appointed by the Chair, will screen the student and the project and will evaluate the thesis.Elective Courses in Slavic and East European Languages
240. Studies in Slavic and East E uropean Languages. 240.1-240.3, 1-3 hr.; 1-3 cr. Different special language topics not covered by other courses will be assigned from time to time. May be repeated for credit if the topic changes. $\dagger \dagger$
250. Studies in Slavic and East European Literatures. 250.1-250.3, 1-3 hr.; 13 cr . From time to time, various special literary topics not covered by other courses will be assigned, such as Childhood in Russian Literature, Russian Women Writers, The Prose of Russian Poets, The Image of theJ ew in Russian Literature, etc.

## Courses in Reserve

FRENCH
10. Elementary French for General Reading Purposes I.
11. Elementary French for General Reading Purposes II.
45. French Civilization.
226. Advanced Composition II.
236. Language Workshop.

GERMAN
221. German Phonetics.
257. German Speculative Writers.
262. German Literature and Music.
264. German Literature and the Visual Arts
266. German Literature and Religious Thought.
268. German Literature and Society.
331. Structure of Modern German. ITALIAN
45. Italian Civilization.

ROMANCE
41. Romance Literatures.
42. Modern Romance Literatures.
45. Romance Language Civilization. RUSSIAN
10. Elementary R ussian for General Reading Purposes I
11. Elementary R ussian for General Reading Purposes II.
12. Introduction to Russian Conversation.
110. Intensive E lementary R ussian I and II.
210. Intensive Intermediate Russian I and II.
312. Advanced Oral Practice II.
326. Structure of Contemporary Russian.
332. Introduction to Russian Literature II.
380. Dostoevsky.
381. Tolstoy.
382. Chekhov.

395, 396. Special Problems.

# Family, N utrition, and Exercise Sciences 

Chair: J acqueline M. Newman
Deputy Chairs: Margaret K. Franco, Elizabeth D. Lowe
Graduate Advisers: Lakshmi Malroutu, Michael M. Toner

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Professors: Fardy, Magel, McArdle, Newman, J. M.; Associate Professors: Catelli, Hoehn, Kant, Lowe, Ludman, Toner; Assistant Professors: Franco, Lin, Malroutu; Lecturer: Miller; Dietetic Internship Director: Braverman; Teacher Education Adviser: Travers; Chief Laboratory Technician: DeLuca; Senior Laboratory Assistant: M. Newman; Administrative Assistants: Manus, Weinman

The Family, Nutrition, and Exercise Sciences Department (FNES) offers programs in Family and Consumer Sciences, Exercise Science, and Physical Education with several specializations under those programs.

The Family and Consumer Sciences program is accredited by the Council for Accreditation of the American Association of Family and Consumer Sciences. The professional programs offered by this accredited unit include specializations in Family and Consumer Studies, Food and Nutrition and Dietetics, Secondary School Teacher Education, and Textiles and Apparel.

Coursework synthesizes knowledge from the physical sciences, the social sciences, and the humanities, and applies this knowledge to an interdisciplinary study of various aspects of individual and family life. Courses in the program are designed for men and women who want to enter the profession of Family and Consumer Sciences, those who want to relate some phase of this program to their major, and those who want to fulfill a general cultural interest in one or more courses within the field.

A new program in Nutrition and Exercise Sciences is being developed (see department for details).

The Physical Education program offers a sequence of courses leading to the Bachelor of Science in physical edu-
cation and a program of instruction in physical activities.

Unless designated, all activity courses are offered for beginners. Students are not permitted to enroll in activities for which they possess a high level of proficiency. Opportunity to study specific areas in depth is provided through intermediate and advanced courses.

## Requirements in Physical

 EducationAll baccalaureate students at Queens College shall complete satisfactorily one course in physical education selected from the liberal arts electives (FNES 11 through 30 or, for ACE students only, FNES 32). Students with physical and medical problems whose physician has stated in writing that it would be medically inadvisable to complete a physical activity course may select FNES 30, a 3credit academic course that does not require any physical component.

## The Program in Family and Consumer Sciences

Family and Consumer Scientists are employed in such diverse areas as dietetics and nutrition, food service, teaching, business and industry, consumer and social welfare, extension, merchandising, fashion and textiles, research, and communications. Because each Family and Consumer Scientist is a trained professional who shares certain common understandings with all others in this profession, all students majoring in the Family and Consumer Sciences programs take a common core of basic courses. These include FNES $106,147,151,153,163$ or 263 and 264 , and 380; Art 1; Chemistry 16 and 17 or 19 and 59; and either Biology 11, 20, 22, or 102. In addition to these courses, students must complete one of the following areas of specialization:

Dietetics: The department offers a specialization for students who wish to go beyond the required coursework in food and nutrition in order to satisfy the professional certification requirements of the American Dietetic Association (ADA). As the Didactic Program in Dietetics (ADA DPD) requires numerous courses in the Family, Nutrition, and Exercise Sciences Department and in other departments beyond those outlined below for the general Food and Nutrition area, students should consult an adviser at the earliest possible point in their academic career to ascertain those specific requirements.

Family and Consumer Studies: FNES 101, 140, 203, 248, 252, and 350.

Food and Nutrition: FNES 101, 104 203, 275, and 307. (N ote: In this specialization, students must complete Chemistry 19 and 59 and FNES 263 and 264, or equivalents.)

Secondary School Teacher Education: Students seeking to qualify for a New Y ork State provisional teaching certificate can do so by completing a compe-tency-based program which, in addition to the core, includes FNES 101, 121, 125, 140, 156, 203, 228, 335, and Secondary Education 201, 221, 222, 366, and 376.

Textiles and Apparel: FNES 121, 125, 128,157 or $158,227,228,325$ and 327 ; Economics 101.

## The Minor in Family and Consumer Sciences

A minor in Family, Nutrition, and Exercise Sciences is available in two areas: Food and Nutrition, and Textiles and Apparel. Students who want to have the minor noted on their transcript must register with the department.

The minor in Food and Nutrition includes F NES 101, 263, 264, and at least six credits selected from among FNES 104, 203, 275, 307, and 378.

The minor in Textiles and Apparel includes FNES 121, 125, 128, 227, and at least six credits selected from among the following courses: FNES 157, 158, $226,228,325,327$, and 358.

## FIT Study Option

Majors who are interested in fashion design or merchandising may have the opportunity, if eligible, to study these specializations at the Fashion Institute of Technology (FIT) for one or two semesters and earn transfer credits. Queens College cannot guarantee that the program will be available every semester, but will attempt to make appropriate arrangements for qualified students. Interested students should consult the department office for information as soon as possible in the semester prior to the term(s) in which FIT study is desired.

Fashion Design (Fall only)
To qualify, if the program is available, the student must have completed with a grade of B or higher: FNES 125, 128, 226 (if offered), and 327. In addition, the following courses must be completed: FNES 121 and one or more of the following courses: FNES 157, 158, 227, 325 and Art 151.

FIT requires that students studying fashion design present a portfolio before being accepted into this visiting student
program. At FIT the following are required:
AP 105. Apparel Design
AR 105. Fashion Art and Design
CL 111. Fashion in Contemporary Living and five to seven credits of electives.

## Merchandising

To qualify, if the program is available, the student must have completed FNES $121,125,151$, and 227 , plus one or more of the following: FNES 128, 156, 157 or $158,228,322,325$, and 327 and one course from the following: Computer Science 12, Economics 101, or Psychology 226.

At FIT, the following are required:
AC 111. Promotion and Advertising; 3 cr.
FM 111. Introduction to the F ashion Business; 3 cr .
FM 118. Consumer Motivation; 3 cr . and six to nine credits of electives.

Note: Queens College will accept credits for these courses if prior permission is obtained from the department. All fees and tuition are paid to FIT at its rates.

## The Program in Physical Education

The academic program in physical education prepares individuals for a Bachelor of Science degree and for service as teachers in physical education. It leads to New Y ork State Provisional Certification for teaching physical education in pre-kindergarten through grade 12 with a concentration in human movement, sport, and exercise science. The program prepares individuals to assume the following professional roles: movement specialists in the primary grades; coaches and instructors of sports in the middle and upper grades; and healthrelated fitness specialists.

Students who are interested in physical education should seek advice about program planning as early as their freshman year. The department will provide detailed information about the curriculum, course schedules, and standards. All students who have met Queens College admissions requirements will be required to file a signed, approved course of study with a department adviser.

The program includes a pre-professional component (the freshman and sophomore years) and a professional component (the junior and senior years). The pre-professional component consists of required College-wide baccalaureate courses, courses in liberal arts and sciences (LASAR categories), and courses
in physical education. The academic standards and requirements for successful completion of the pre-professional component are as follows:

1. Queens College English requirements with an average grade of B - in English 110 and 120. With less than a $B$ - the student will be required to take additional writing courses;
2. QC and CUNY mathematics entrance requirements including successful completion of Math 6, if required;
3. Successful completion of FNES 11 (Physical Conditioning) with a minimum grade of B- (course meets the QC Physical Education requirement);
4. At least 26 credits in the LASAR area achieving a minimum cumulative grade-point average of 2.0;
5. A minimum grade of $C$ in all physical education courses with an average grade of $B$ - in the human movement studies area (FNES 160, 340, 341, 342, 343) and an average grade of $B$ in at least 7 of the 9 credits required in the movement performance area (FNES 12, 13, 14);
6. A minimum total of 63 credits with an overall grade-point average of 2.5 including the pre-professional component of the program, the Queens College baccalaureate requirements, LASAR, and physical education program course requirements.

## Pre-Professional Component

During the freshman and sophomore years, the following courses are required of Family, Nutrition, and Exercise Sciences majors in the physical education program:
Physical and Biological Sciences \& Quantitative Reasoning ( 15 credits) Biology 11, Chemistry 19, Biology 43, and one course in statistics from the following: Psychology 107, Communication Arts \& Sciences 283 (or other approved course).
Human Movement Studies ( 15 credits) FNES 160, 340, 341, 342, 343.

Movement Performance
Level I, Beginning; Level II, Intermediate/Advanced
FNES 11, 12 (Basketball, Levels I \& II; Volleyball, Levels I \& II ), 13, 14 (Tennis, Levels I \& II)
To begin study in the professional component of the major program, students must satisfy all requirements and standards of the pre-professional component and submit one letter of recommendation from a professor teaching one or more courses in the physical education program.

## Professional Component

During the junior and senior years, courses are arranged in professional blocks by semester and co-block experiences. The professional block courses are taken together and are offered in conjunction with the Secondary Education and Youth Services Department. During the junior and senior years, students may also complete their remaining Queens College baccal aureate and LASAR requirements.

Professional Block I: Fall Semester, J unior Year (10 credits)
FNES 143, 146.3, 230, 266
Professional Block II (Prereq.: Block I)
Spring Semester (9 credits)
FNES 253, 352, 392
Professional Block III (Prereq.: Block II)
Fall Semester, Senior Year ( 6 credits)
FNES 145.3, 353
Co-Block Course Experiences in
Physical Education ( 6 credits)
FNES 161 (Prereq.: Professional Block I and SEYS 201), 370 (Prereq.: a minimum of 7 of the 9 credits required in the movement performance area)
Movement Performance Area
FNES 12 (Level I Soccer or Softball), 14
(Individual/dual elective)
General Education Courses:
J unior and Senior Years (20 credits)
SEYS 201, 221, 222, 369, 379
The academic progress standards and requirements for the professional component of the physical education program include:

1. Maintenance of a 3.0 grade-point average in courses included in the professional component.
2. A minimum grade of C in all physical education major courses. A student may not repeat a major course more than twice beyond the initial enrollment in the course. A student must obtain written permission from an adviser prior to registering for a required course at another institution, and a minimum grade of C is required in that course.
3. An average grade of $B$ or better in SEYS 201, 221, 222; also a grade of B or better in SEYS 369 is required.
4. Satisfactory completion of professional blocks as scheduled. Because these blocks are structured, a student who has not satisfactorily completed required courses in one block will require written permission to proceed to any of the courses in the next block.
5. Satisfactory performance and completion of competencies included in the dinical/field work portion of the program.
6. Satisfactory performance of competencies identified in the pedagogical area of the program (FNES 161, 266, 370; SEYS 369, 379).

In general, a student's progress will be monitored. A student whose progress as outlined above is not satisfactory will be placed on departmental probation for one or more semesters. A student who seems unable to remove the probationary status in an appropriate time frame will be advised to follow another program if remedial action is not possible. In addition to the above:
7. Students may be asked to produce a writing sample to exhibit writing proficiency. Students may be required to improve their writing skills through enrollment in additional College writing courses or by some other plan as determined and approved by an adviser.
8. Students who are found to have difficulty in oral communications will be required to take and complete with a minimum grade of $C$ one or more of the following courses: CAS 165 and 251, Drama/ Theatre 100 and 241.
9. Completion of all College requirements not previously specified.
10. Submittal during the student's senior year of valid certificates in First Aid and Cardiopulmonary Resuscitation.

## H onors Study

Coordinator: William D. McArdle
The Department of Family, Nutrition, and Exercise Sciences offers honors work within the Interdisciplinary and Special Studies Program. The purpose of the program is to identify students of exceptional ability and potential and to provide the kinds of academic experiences that will enable them to pursue, in greater depth, a specific area in which they demonstrate both aptitude and interest. This work may take the form of specific honors courses or research tutorials for 1,2 , or 3 credits. Within the framework of the tutorials, guided research may be undertaken in conjunction with a specific major course, or a project may be supervised by a faculty member with an interest in a specialized area. In this manner, students are not limited by the scope of the coursework for a particular semester but are free to work independently with members of the faculty. Honors work in physical education is not limited to majors in this department.

All interested students should see the department honors coordinator.

## Courses

11. Physical Conditioning (Elementary, Intermediate, Advanced). $2 \mathrm{hr} . ; 1$ cr.
Designed to help women and men to improve muscular strength and cardiovascular efficiency through the application of scientific methods to weight training and physical conditioning activities. Fall, Spring
12. Team Sports. 2 hr.; 1 cr. Courses in team sports activities. Opportunity is also provided for participation in intercollegiate athletics. Refer to Class Schedule for specific course offerings each semester.
13. Dance. 2 hr .; 1 cr . Courses in selected areas of dance. Refer to Class Schedulefor specific course offerings each semester.
14. Individual Sports. 2 hr.; 1 cr. Courses in a wide variety of individual sport activities. Refer to Class Schedulefor specific course offerings each semester.
15. Aquatics. 2 hr .; 1 cr. Courses in a variety of swimming and water sports. Refer to Class Schedule efor course offerings each semester.

Swimming
Non-Swimmer - no swimming experience. Fall, Spring
Beginning Swimmer - ability to swim length of pool (25 yards). Fall, Spring
Intermediate Swimmer - ability to jump into deep water and swim length of pool on back; turn over and swim length of pool; float on back with minimum actions. Fall, Spring
Advanced Swimmer - ability to swim two consecutive lengths of pool with each of these strokes: side stroke, any back stroke, front crawl; surface dive in 10 feet of water; dive from diving board. $\dagger \dagger$

## $0 \mathrm{ff}-\mathrm{C}$ ampus and 0 utdoor A ctivities

## Coordinator: H. Harry Hoehn

1. Courses in a wide variety of individual and group sport activities are conducted in their natural settings.
2. Most outdoor courses are conducted during the school semester partially on-campus and partially off-campus.
3. The courses below involve extended field trips and generally take place during Winter and Summer intersessions. All outdoor courses involve field fees.
Canoeing - 15
Camping-14
Skiing - 14 (Spring)
Skin \& Scuba (int. \& adv.) - Florida, 21

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
†Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.

## (Spring)

Refer to the Class Schedule for specific course offerings each semester.
20. Wilderness and Outdoor Skills. 3 hr. plus 2 field trips; 3 cr. A survey of outdoor skills including camping, backpacking, orienteering, rock climbing, canoeing, and survival skills. $\dagger \dagger$
21. Basic Skin and Scuba Diving. 3 hr. plus minimum of three open water dives; 3 cr. F or swimmers with little or no knowledge of the activity and persons seeking basic national certification. Training combines pool and classroom experiences with open water dives. Fall, Spring
22. Advanced Scuba Diving. 3 hr . field trips; 3 cr. Prereq.: FNES 21 or equivalent national certification. The science and technol ogy of life-supporting systems in hyperbaric environments. National certification in basic and advanced open water, dive master, and other specialty ratings for those students who qualify. Spring
23. Advanced Swimming and Lifeguard Training. 3 hr .; 3 cr . Prereq.: Ability to swim 50 yards of each of the four basic swimming strokes. Course designed to improve personal competence in basic and advanced swimming rescue, first aid, and artificial resuscitation, as well as advanced techniques in small-craft safety and aquatics leadership. Students may qualify for the American Red Cross Lifeguard Training Certificate. $\dagger \dagger$
24. Methods of Teaching Aquatics. 3 hr.; 3 cr. Prereq.: Ability to swim 500 yards with advanced skill in five different swimming strokes and current American Red Cross Emergency Water Safety Certificate or Lifeguard Training Certificate. Course designed to provide experience in the analysis of basic and advanced swimming skills, techniques of teaching advanced life saving, small-craft safety, and artificial resuscitation, as well as improvement in personal competence and leadership qualities in aquatics. Students may qualify for the American Red Cross Water Safety Instructor's Certificate. $\dagger \dagger$
30. Fitness through Diet, Exercise, and Weight Control. 3 hr.; 3 cr. Current concepts and principles of nutrition, energy balance, body composition, weight control, and obesity, and physiological basis of physical conditioning. Opportunity for practical experience in managing diet and exercise programs. Not open to students who have taken FNES 230. Fall, Spring

## 32. Adult Fitness through Diet and

Exercise. 3 hr .; 3 cr . Prereq.: Open to ACE students only. A specialized lecture/laboratory course that satisfies the physical education requirement for ACE students. Topics include body image, healthful food intake, and physical fitness. Through an individualized nutritional survey, an indepth activity profile, and a thorough assessment of body constitution and physi-
cal fitness status, an exercise program wil be planned to meet individual needs. Fall
101. The Science of Foods. 2 class hr., 3 lab. hr.; 3 cr . Chemical and physical properties of foods that affect handling, preparation, and storage. MAT charge, \$40. Fall, Spring
104. Social, Cultural, and Economic Aspects of Foods. 3 hr.; 3 cr. Multidisciplinary study of world food patterns and nutritional implications in various cultures. Fall
106. Introduction to Family and Consumer Sciences. 3 hr.; 3 cr. Provides an introduction to the profession, its history and philosophy. Special emphasis will be placed on the distinct areas of the profession and the ways in which individual specializations are related and integrated. This course is open to majors and nonmajors. As it provides an introduction to the profession, it should be taken as early in their College program as possible by those who anticipate majoring in family and consumer sciences. Fall, Spring
121. Textiles. 3 hr .; 3 cr . A study of textile fibers, fabrics, and finishes. Testing and identification of fabrics. MAT charge, $\$ 10$. Fall, Spring
125. Clothing Construction I. 1 class hr., 2 lab. hr.; 2 cr . Instruction in fundamental techniques, use of equipment, and commercial patterns. MAT charge, \$20. Fall, Spring
128. Apparel Analysis. 2 hr.; 2 cr. Investigation, analysis, and evaluation of processes used in the development and manufacture of apparel products as they relate to consumer satisfaction and performance. Students are advised to take FNES 125 as a pre or corequisite.
140. Child Care. 3 hr.; 3 cr. Child development and home health practices as they relate to family living.
142. Officiating in Physical Education. 3 hr.; 1 cr. Prereq.: Successful completion of the basic courses in the activities being covered in any particular semester. Evaluated individual performance in officiating techniques. Ratings are available to interested and qualified students. Fall

## 143. Workshop in Fundamental Motor

Skills. 2 hr.; 1 cr. Prospective teachers of physical education will demonstrate skill and knowledge of developmental activities so that they can facilitate motor skill acquisition and skill-related fitness of K-12 population. Fall
144. Sport Skill Analysis: Teaching Individual Sports K-12. 144.1, 2 hr.; 1 cr., 144.2, 4 hr.; 2 cr., 144.3, 6 hr.; 3 cr. Prereq.: FNES 143. Focus is on the acquisition and demonstration of developmental K-12 content of teaching a designated sport to a $\mathrm{K}-12$ population.
145. Advanced Workshop in Physical

Education. 145.1, 2 hr.; 1 cr., 145.2, 4 hr.;

2 cr., 145.3, 6 hr.; 3 cr. Prereq.: Permission of instructor. Current theories of teaching and coaching. The sports and skills studied will vary from semester to semester. This course may be repeated for credit provided the subject area is not the same. Only one credit may be applied toward the major physical activity requirement. F all, Spring

## 146. Sport Skill Analysis: Teaching

Team Sports K-12. 146.1, 2 hr.; 1 cr., 146.2, 4 hr.; 2 cr., 146.3, 6 hr.; 3 cr. Prereq.: FNES 143. Focus is on the acquisition and demonstration of developmental K-12 content of teaching a designated sport to a $\mathrm{K}-12$ population. Fall
147. Family Relations. 3 hr.; 3 cr. Interpersonal relations in contemporary American marriage and family life. Topics include dating, courtship, sex attitudes and behavior, family preplanning, communication, marital conflict, the unmarried, and elements of a successful marriage. Fall, Spring
151. The Family and Consumer Studies. 3 hr .; 3 cr . A study of consumer issues as they affect the family, with special emphasis on cultural, social, psychological, and economic factors influencing consumer behavior; consumer rights and responsibilities; and public policy issues. Fall, Spring
153. Family Resource Management. 3 hr.; 3 cr . The effective management of resources for individuals and families. Fall, Spring
156. Interior Design. 3 hr .; 3 cr . The study and application of the theory of interior design in the selection of home furnishings and accessories.
157. History of Costumes and Furnishings: Ancient Egypt to the French Revolution. 3 hr .; 3 cr . The study of the relationships between the history of Western civilization; sociocultural, technological, and artistic developments; and the evolution of styles of furnishings and costumes from Ancient Egypt to the French Revolution.
158. History of Costumes and Furnishings: French Revolution to the Present. 3 hr .; 3 cr . The study of the relationships between the history of Western civilization; sociocultural, technological, and artistic developments; and the evolution of styles of furnishings and costumes from the French Revolution to the present.
160. Principles and Foundations of Physical Education. 3 hr .; 3 cr . Exposes prospective major students to the principles and philosophies on which contemporary physical education is based. Fall
161. Introduction to the Teaching of Physical Education. 3 hr.; 3 cr. Prereq. or coreq.: FNES 160. Role of the physical educator; development of a professional concept of teaching through structured study, observation, and participation. Fall, Spring
163. General Nutrition. 3 hr.; 3 cr. Fundamental principles of normal nutrition and their application to the selection of adequate diets for individuals and families. Fall, Spring
166. First Aid and Safety. 3 hr.; 3 cr. First aid techniques and principles and problems of safety in relation to the home, school, and community. Fall, Spring
168. Athletic Training and Conditioning. 3 hr.; 3 cr. Prereq.: FNES 166. Provides an understanding of athletic injuries and studies methods of training and conditioning, both preventive and rehabilitative. Fall, Spring
203. Meal Planning and Meal Management. 2 class hr., 3 lab. hr.; 3 cr. Prereq.: FNES 101 or permission of department. Understanding the meaning of foods in family meals, and basic principles of meal planning, preparation, and service effectively using money, time, and energy. MAT charge, $\$ 40$. Fall, Spring
226. Clothing Construction II. 1 class hr., 2 lab. hr.; 2 cr. Prereq.: FNES 125. Continuation of FNES 125. Students are required to supply their own materials. $\dagger \dagger$
227. Interdisciplinary Aspects of Textiles and Clothing. 3 hr.; 3 cr. Prereq.: J unior standing. A survey of sociocultural, scientific, and aesthetic aspects of clothing and textiles. $\dagger$

## 228. Individual and Family Clothing

 Problems. 3 hr.; 3 cr. Prereq.: FNES 121 and 125 . Identifying special problems in clothing for individuals and families and solving these problems through experimentation and research. Spring230. Exercise, Energy Balance, and Weight Control. 3 hr . plus laboratory demonstration; 3 cr . Concepts and principles of energy balance, body composition weight control, and obesity as they relate to exercise for the general public. Opportunity for practical experience in managing diet and exercise programs, as well as objectively assessing the level of energy input and output through laboratory experiences. Not open to students who have taken FNES $30 . \dagger \dagger$
231. Problems in Marriage and the

Family. 3 hr.; 3 cr. Prereq.: FNES 147. An exploration of current factors that precipitate family crisis, and the effect of crises on the family as a group. F all

## 252. Current Problems in Family and

 Consumer Studies. 3 hr.; 3 cr. Prereq.: FNES 151. Investigation of consumer problems of individuals and families. Spring253. The Psychology of Sports Participation. 3 hr .; 3 cr . The psychological factors related to sport in contemporary society. $\dagger \dagger$
254. Nutrition I. 3 hr.; 3 cr. Prereq.: Chemistry 59. A study of carbohydrate, lipid, protein, and energy requirements; the utilization of nutrients in the body; and
the application of nutritional principles. Fall, Spring
255. Nutrition II. 3 hr.; 3 cr. Prereq.: FNES 263. A study of vitamin and mineral requirements; the utilization of nutrients in the body; and the application of nutritional principles. Fall, Spring
256. Current Issues and Problems in

Physical Education. 3 hr.; 3 cr. An indepth analysis of the current problems in the profession, with special emphasis on future trends. Spring
266. Physical Education: Pre-School through Elementary School Levels. 3 hr.; 3 cr. Prereq.: FNES 160 and 161. Examines relevant principles, methods, and materials of physical education in relation to teaching experiences. Spring
267. Advanced First Aid and Emergency Care. 3 hr.; 3 cr. Prereq.: FNES 166 or equivalent. Further development of knowledge and personal competency in providing emergency life-sustaining measures, including cardiopulmonary resuscitation. American Red Cross certification in Advanced First Aid for students who qualify.t†
269. Advanced Athletic Training. 3 hr .; 3 cr. Prereq.: FNES 168. Advanced athletic training is designed to develop proficiency in evaluating athletic injuries and in constructing rehabilitation and reconditioning programs for athletes. Spring
275. Institutional Management. 3 hr.; 3 cr. Prereq.: FNES 101. An overview will be provided of the food service industry and theories and strategies of management. Topics to be discussed include staff selection and supervision, budget devel opment and resource allocation, marketing and merchandising, and sanitation and safety. Spring
307. Experimental Food Science. 2 lec., 3 lab. hr. plus conf.; 4 cr. Prereq.: FNES 101 and Chemistry 59. Techniques in food experimentation. The completion of an individual food study required including interpretation and evaluation of results. MAT charge, \$40. Fall, Spring
322. Survey of Recent Developments in Textiles. 3 hr .; 3 cr . Prereq.: FNES 121 or equivalent and permission of department. $\dagger \dagger$
325. The Apparel Industry. 3 hr .; 3 cr . Prereq.: Economics 101; FNES 121 and 227. An overview of the domestic and international apparel industry, including its historical evolution and current trends. Types of enterprises, merchandising practices, and relationships within and among sectors of this industry are explored. F all
327. Apparel Design. 4 hr.; 3 cr. Prereq.: FNES 121 and 125. The design process as it is applied in the apparel industry. The utilization of design principles, techniques for designing including sketching, draping, and pattern drafting, and a study of the role of the apparel designer. A field trip is
required. Spring
335. The Media and the Profession. 3 hr.; 3 cr . Prereq.: FNES 106. A survey of the contributions of the various media to family, nutrition, and exercise sciences. $\dagger$
337. Nutrition Education. 3 hr .; 3 cr . Prereq.: FNES 263. An overview of nutrition education that explores the settings in which nutrition education is carried out, introduces nutrition students to learning theory, and review techniques and
resources for teaching nutrition. Students learn to assess the needs of different learner groups and select and evaluate appropriate nutrition education materials. $\dagger$
340. Kinesiology. 3 hr. plus lab. demon.; 3 cr . Study of the structure and function of the skeletal, articular, and muscular systems in relation to human motor performance. F all
341. Biomechanics. 3 hr . plus lab. demon.; 3 cr. Prereq.: FNES 340. Mechanical principles and physical laws of motion as applied to human movement and motor skill development. Spring
342. Physiology of Muscular Activity. 3 hr. plus lab. demon.; 3 cr . Prereq.: Biology 43 and Chemistry 19. The acute and longterm physiological adjustments occurring in the human organism as a result of sport and other physical activities. Spring
343. Motor Learning and Performance. 3 hr. plus lab. demon.; 3 cr. Prereq.: Biology 11 and SEYS 221. Psychological and neurophysiological factors related to the acquisition and performance of motor skills, including laboratory experience and application to teaching. Fall
350. Practicum in Personal and Family Finance. 2 hr . seminar plus 2 hr . lab.; 3 cr . Prereq.: FNES 151. Students will apply their understanding of family management and consumer finance to the solution of specific consumer problems of individuals and families learning to organize and operate a service dispensing financial information and counseling dients.
351. Seminar in Family Management and Consumer Behavior. 3 hr.; 3 cr. Prereq.: FNES 151. An examination of the effect of corporate marketing strategies on the family as a consuming unit. This course is designed for the consumer affairs professional who will be acting as: 1) an interpreter of family interests within the corporate environment, and 2) a spokesperson for the corporation to consumers.
352. Physiological Principles of Exercise Training. 3 hr . plus lab. demon.; 3 cr . Prereq. or coreq.: FNES 342. Physiological basis of long-term exercise training with special consideration of the body's morphologic and physiologic adaptation to specific forms of training. Various training and conditioning methods are examined. Not open to students who have taken FNES 31. $\dagger \dagger$
353. Fitness Assessment and Prescription of Exercise Programs. 3 hr . plus
ab. demon.; 3 cr. Prereq.: FNES 342; coreq.: FNES 352. Application of scientific principles of exercise physiology to the measurement and evaluation of healthy individuals. Techniques of exercise testing commonly used in corporate and adult fitness settings. Training methods for improvement in exercise capacity and good health. Designing exercise programs for individuals and groups. $\dagger \dagger$
358. Research in Historic Costume.
$358.1,1$ hr.; 1 cr. 358.2, 2 hr.; 2 cr., 358.3, 3 hr.; 3 cr. Prereq.: FNES 121, 125, 158, and permission of the department. Develop ment of an independent research project in the conservation, analysis, dating, and/or restoration of historic costume materials. Students may register for 1,2 , or 3 credits depending on the scope of the project. $\dagger \dagger$
364. Special Projects in Family and Consumer Sciences. 3 hr.; 3 cr. Prereq.: FNES 263. Students will participate in developing and carrying out research in field settings. Such factors as health status, food habits, nutrition, or other topics are studied. Using the data gathered, instruction in library research and the use of the computer and various techniques of analysis will be included. $\dagger \dagger$
365. Nutrition, Counseling, and Assessment. 3 hr.; 3 cr. Prereq.: Chemistry 79 and FNES 263. Introduction to nutrition assessment, counseling, and other components of medical nutrition therapy. Fall
366. Medical Nutrition Therapy. 3 hr.; 3 cr . Prereq.: FNES 264 and 365 . Nutrition and dietary principles for pathological conditions. Spring
368. Advanced Nutrition. 3 lec. hr.; 3 cr. Prereq.: Biology 43; prereq. or coreq.: FNES 264. Special problems in nutrition, including needs during the different stages of life, current research, international nutrition, public health aspects, laws, dissemination of information, and nutrition quackery. Spring
370. Practicum in Teaching. Hr. to be ar ranged; 1 cr. Prereq.: FNES 143, 144, 146. The purpose of the course is to provide stu dents with learning experiences enabling them to practice selected teaching competencies required for successful student teaching. Teaching competencies required in the department's CBTE Program are developed in a "real-world" setting under the guidance and assistance of a master teacher of the College. Students are expected to directly apply content knowledge and skills acquired in previous courses to the design, implementation, and evaluation of lessons focused on sport and physical education activities. Fall, Spring

## 371 Through 376. Field Work Courses.

 Prereq.: J unior or senior standing and per mission of department. Field work courses provide professional experience for majors in approved institutions, agencies, firms, or community activities in areas related to family and consumer sciences. (One or two semesters; the two semesters may be taken concurrently.) MAT charge, $\$ 30$. Fall, Spring371. Field Work in Institutional Management. 371.1, 3 hr.; 1 cr., 371.2, 6 hr.; 2 cr
372. Field Work in Nutrition. 372.1, 3
hr.; 1 cr., 372.2, 6 hr.; 2 cr.
373. Field Work in Textiles and Apparel. 373.1, 3 hr.; 1 cr., 373.2, 6 hr.; 2 cr.
374. Field Work in Foods. 374.1, 3 hr.; 1 cr., 374.2, 6 hr.; 2 cr.
375. Field Work in Family and Consumer Sciences. 375.1, 3 hr.; 1 cr., 375.2, 6 hr.; 2 cr.
376. Field Work in the Community. 376.1, 3 hr.; 1 cr., 376.2, 6 hr.; 2 cr.
377. Internship in Exercise Science. 90 hr. per semester plus 1 hr . seminar; 3 cr . Prereq.: FNES 353 or permission of instructor. In-depth, structured, practical experience in a formalized program dealing with fitness and health enhancement of individuals. Experiences in existing clinical or corporate programs are integrated with academic preparation through regular seminar meetings on campus. The minimal on-site hourly requirement is 90 hours but varies according to the nature of the site's program. $\dagger \dagger$
378. Quantity Food Purchasing, Production, and Equipment. 3 hr . and practicum; 3 cr. Prereq.: FNES 203 and 275. This course includes institutional menu planning and purchasing, inventory control, production, and distribution. Topics will include layout and design, equipment selection, and compliance with codes and standards. Fall

## 380. Seminar in Family and Consumer

 Sciences. 1 hr.; 1 cr. Prereq.: J unior standing with a minimum of 18 credits in family and consumer sciences. An overview of the profession including its scope, trends, new developments. Fall390. Studies in Family, Nutrition, and Exercise Sciences. 390.1, 1 hr.; 1 cr., 390.2, 2 hr.; 2 cr., 390.3, 3 hr.; 3 cr. Prereq.: Permission of department. The topic for each semester will be announced in advance. May be repeated for credit provided the topic is not the same. $\dagger \dagger$
391. Research in Physical Education. 391.1, 3 hr.; 1 cr., 391.2, 6 hr.; 2 cr., 391.3, 9 hr .; 3 cr . Prereq.: Permission of instructor and department. The student works on a research problem under the supervision of a member of the physical education faculty. Fall, Spring
392. Principles of Coaching. 3 hr .; 3 cr . Prereq.: FNES 145 (Sport Workshop). This is a lecture course in the theory and principles of coaching and program devel opment. It is designed to explore the relevant aspects of sport performance and places special emphasis on training and analytical techniques in movement. In addition, areas such as motivation, team interaction and synergy, and styles of coaching will be included.
393. Coaching Internship. 90 hr . plus 1 hr. conf. per wk.; 3 cr. Prereq.: FNES 392. The internship is designed to give students
a coaching experience in a specific sport. Students taking this course will be placed in a Queens or Nassau County school.
They will work in a varsity or junior varsity program directed by the head coach of the school program.
394. Seminar in Physical Education. 3 hr.; 3 cr. Prereq.: Designated according to topic and permission of instructor. Selected topics in physical education. Topics will vary from semester to semester. May be repeated for credit provided the topic is not the same.
395. Seminar in Special Physical Education. 3 hr.; 3 cr . Prereq.: Permission of instructor. Selected topics in the theory and special problems of providing for the physical education needs of special individ uals. Topics will vary from semester to semester. May be repeated for credit provided the topic is not the same.

The following graduate courses are open to qualified undergraduate students with permission of department.
634. Adult and Occupational Educa-
tion. 3 hr .; 3 cr . History, philosophy, and resources in adult and occupational education in the United States with emphasis on legislation that has been devel oped to fund these programs related to Family and Consumer Sciences. $\dagger \dagger$
636. Writing for the Professional. $3 \mathrm{hr} . ; 3$ cr. Preparation of copy for press and news releases, promotional material, newspapers, magazines, and business publications. $\dagger \dagger$

## Courses in Reserve

31. Physiological Principles of Physical Conditioning and Weight Control.

## 141. Camping.

150. Socio-Historical Aspects of Sport.
151. Introduction to Statistical Methods in Physical Education.
152. History of American Physical Education.
153. Social Perspectives of Sport.
154. Curriculum Development and Program Organization in Physical Education.
155. Current Issues and Problems in Physical Education.
156. Introduction to Outdoor Education.
157. Outdoor Education and the Marine Environment.
158. Homesteading and Related Technology.
159. Outdoor and Conservation Education.
160. Measurement and Evaluation in Physical Education.

## 381. Special Physical Education.

## Film Studies

Chair: Royal Brown (European Languages)<br>Committee Members: Buchsbaum, Carlson, Kapsis

Program Office: Kiely 073, 997-5748
The purpose of the B.A. program in film studies is to afford students the opportunity to study in depth the aesthetic, cultural, sociol ogical, political, philosophical, and psychological elements of the cinema.

The film studies major and minor are composed of film courses offered by a number of departments in the Divisions of the Arts and Humanities and the Social Sciences.

## The Major (36 credits)

Students majoring in film studies will plan their program of study in accordance with the following course groupings. (A full description of each course will be found in the course listings for the particular department involved.)

Depending on their individual background and orientation, students may be advised to take additional courses in modern art, modern history, modern languages and literature, or music appreciation.

Students who have not yet completed their basic requirements in English or who wish additional training in writing are advised to take English 201 (Essay Writing for Special Fields).
Required ( 15 credits)
Communication Arts and Sciences 143, 144, 147, 341, 342

Elective (Choose 7 courses; 21 credits) Art 364 (3-hour course; the fourth hour to be earned by extra field or lab work) Communication Arts and Sciences 245,

343, 344, 348
Comparative Literature 241
Education 390 (only when "Documen-
tary Film and Education" is offered)
English 280, 285
Film Studies 201, 211, 380
French 50
German 261
Italian 50
Philosophy 105
Political Science 209
Russian 244
Sociology 249
Spanish 50
Special Studies 95. Only when studies in
film aesthetics, criticism, form, theme, directors, or genres are given under this number.

## The Minor (18 credits)

The film studies minor, consisting of 18 credit hours, is designed to allow students to supplement their major in another field with a concentration of work in film studies. Students minoring in film studies must take CAS 143, 144, and 147 plus a total of nine hours chosen from the elective category designated above for the film studies concentration.

## Advisory Services and Extra-Curricular Activities

The Film Studies Committee advises students on careers in film, graduate film study programs at CUNY and at other institutions, film festivals, grants and awards in filmmaking and film research, and film organizations. The substantial library of films held by Queens College and augmented by the CUNY Film Consortium provides opportunities for individual film study.

The Film Studies Program endorses and will be happy to supply information on the Norman Silverstein Prize in Film Criticism sponsored by the English Department. It also sponsors screenings and talks by filmmakers and other individuals involved in the various facets of the cinema.

## COURSES

201. Great Directors. $4 / 3 \mathrm{hr}$.; 3 cr . Prereq.: Sophomore standing; CAS 143 and 144 or permission of instructor. A historical and artistic evaluation of the work of such directors as Antonioni, Bergman, Eisenstein, Ford, Godard, Hawks, Hitchcock, Lang, Ray, Welles, et al. The course may be limited to the work of a single director, or it may involve a comparative study of two or more directors. May be repeated provided the topic is different.
202. Film Genres. $4 / 3 \mathrm{hr}$.; 3 cr . Prereq.: Sophomore standing; CAS 143 and 144 or permission of instructor. A historical, theoretical, and artistic evaluation of such film genres as the western, horror film, musical, science fiction, thriller, and so on. The course may be limited to work on a single genre or it may involve a comparative study of two or more genres. May be repeated for credit provided the topic is different.
203. Special Topics. $4 / 3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: J unior or senior standing; CAS 143 and 144; at least one Film Studies elective. An advanced course dealing with film studies areas of specialized interest and offering the opportunity for intensified study and research in particular areas. May be repeated for credit provided the topic is different.

## Geology

Chair: Allan Ludman
Deputy Chair: Nicholas K. Coch
Advisement: Patrick W. G. Brock
Assistant Chair for Graduate Advise ment: Daniel Habib
Dept. Office: Science BIdg., D216, 9973300

Professors: Brueckner, Coch, Finks, Habib, Ludman, Mattson, Speidel; AssociateProfessor: Brock, P.W.G.; Assistant Professors: Blackwell, McHugh; Chief Laboratory Technician: Cinquemani; Senior Laboratory Technician: Cannone; Department Secretary: Mancia; Research Associates: Blickstein, Brock, P.C., Woolley; Professors Emeriti: Alexandrov, Commoner, Mcl ntyre, Schreiber, Thurber

The Geology Department offers two Bachelor degree options. The Geol ogy major prepares a student for professional employment in the geosciences and related environmental sciences, and for graduate study leading to advanced professional employment or college teaching. The Geoscience Education major (in conjunction with prescribed education courses) prepares a student for teaching earth science or general science in elementary, intermediate, or secondary school. Minors in Geology, Environmental Science, and Physical Science are designed for students majoring in other areas who want a balanced introduction to these aspects of the earth sciences.

Students deciding to major in the department are assigned an adviser, with whom they should consult frequently.

Both a B.S. and a B.A. degrees are offered. The B.S. may be chosen by those students who have met all the departmental and Queens College requirements for the B.A. degree; and have a total of at least 64 credits that are applicable toward the major in biology, chemistry, computer science, geol ogy, mathematics, and physics.

## The Geology Major

The required courses include Geology 232, 233, 234, 335, 339, 359, 360 (or 361 and 362), and 380; M athematics 111 and 112 (or equivalent); Chemistry 113 and

Note: English 95 or its equivalent is the minimum
corequisite for all courses (see pp. 40, 125).
tOffered either Fall or Spring; see Class Schedule
$\dagger \dagger$ May be offered; see Class Schedule.

114; and Physics 121 and 122 or Biology 107 and 108 (or equivalent); Computer Science 12; and a course in statistics. If a course or other program equivalent to Geology 360 is taken at another school, it must be approved in advance if credit toward the major is required.

Students majoring in geol ogy are advised to take an additional 12 to 15 credits selected from geol ogy courses numbered 200 or above.

## The Geoscience <br> Education Major

The Geoscience Education Track is designed to prepare students for teaching in elementary, intermediate, or high school (Earth Science Teacher, 7-12). In order to meet the requirements of the Department of Education, a student must also register either as a minor in Secondary Education (Powdermaker 193, 997-5150) or as a co-major in Elementary and Early Childhood Education (Powdermaker 171, 997-5300).

The required courses in the Geoscience Education track include: 1) Geology 101, 102, 233, 234, 237, 261, 339, 373; 2) two elective courses chosen from the following list: Environmental Geology, Oceanography, Geochemistry, Hydrology, Groundwater Geol ogy, Planetary Geology, and Meteorology; 3) Chemistry 113 (or equivalent); and 4) Physics 116 (or equivalent). Mathematics 101 is a prerequisite for Geology 234, Physics 116, and several of the electives.

## The Minors

Geology: Geol ogy 101, 102, 232, 233, 234, 339. Students are advised, but not required, to have Geol ogy 359 and Geology 360.

Environmental Science: Geol ogy 101, 102, 248, 342, 347, 349 . Students are advised, but not required, to have Geology 376 and Geol ogy 377.
Physical Geography: Geology 8, 11, 101, 110, 248, 347, 349. Qualified students should take Geol ogy 342 instead of Geol ogy 11 and Geology 356 instead of Geology 8.
Students may not have a course with a grade below C- credited toward their department minor requirements.

## Departmental Standards

Before registering for a course, a student must have obtained a grade of C - or higher in any specified prerequisite course(s). A grade below C- in a geology course may not be credited towards the department major requirement. A mini-
mum average of C is required in geol ogy courses numbered above 200 and courses in other departments that are counted towards the major. A student may not repeat a course more than twice, and credit toward the degree may be given only once.

COURSES
Nonmajor Courses
3. The Physical Environment. 3 hr .; 3 cr . The use and misuse of the atmosphere, the oceans, surface and underground water supplies, soils, and mineral deposits. Fall, Spring
6. The Fossil Record. 2 lec., 1 rec. hr., field trips; 3 cr . The study of fossils as they relate to the history and evolution of life on earth; to geol ogical time; to ancient environments and climates. MAT charge, $\$ 9 . \dagger \dagger$
7. Dinosaurs. 3 hr .; 3 cr . The geol ogical, biological, and evolutionary development of dinosaurs and their close relatives in the Mesozoic Era. The environments they lived in ; their relationship to other reptiles and birds; their preservation as fossils and their final extinction. MAT charge, \$9.㲺

## 8. Introduction to Oceanography. 2

 lec., 1 rec. hr., field trips; 3 cr . A survey of the oceans, including their physical structure, biology, chemistry, and geol ogy. Special emphasis is placed on the interactions of society and sea. Science majors are advised to take Geology 356. Fall, Spring9. Environmental Issues. 9.2, 2 hr.; 2 cr., $9.3,3 \mathrm{hr}$.; 3 cr . The scientific background for some major environmental issues is introduced. These issues may include the availability and use of renewable and nonrenewable resources; conservation, recycling, waste disposal, and pollution; land use; human impact on the global environment. Possible solutions for recognized environmental problems are examined from both scientific and social points of view. (Field trips may be scheduled.)
10. A Survey of Atmospheric Science. 3 hr .; 3 cr . An introduction to weather and climate for students competent in high school science. Not open to students who have taken Geology 342. Fall, Spring
11. Natural Disasters. 12.2, 2 hr.; 2 cr., $12.3,3 \mathrm{hr} . ; 3 \mathrm{cr}$. A course dealing with natural hazards and the devastation they cause. The hazards include floods, vol canic explosions, earthquakes, landslides, and asteroid impacts.
12. The Ice Ages. 3 lec. hr.; 3 cr. A study of the Earth's climatic variations during the ice ages and the effects of these changes on the physical environment. Fall, Spring
13. Earthquakes, Volcanoes, and Moving Continents. 3 lec. hr.; 3 cr . The great changes on the Earth's surface, how they affect us, and how we may predict or attempt to control them. The influence of plate tectonics on the environment, natural
resources, and human history. Fall, Spring
14. E arthquakes. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. How, when, and where earthquakes happen. Location and measurement. Daily, weekly, monthly, yearly seismicity of the earth. The relation of earthquakes to lithospheric plate movements; seismic hazard and mitigation; possible earthquake prediction. Great historic earthquakes and their effect on human activities.
15. Volcanoes. 3 hr .; 3 cr . How volcanoes form, where they form, what they erupt. The relation between volcanism and major earth movements. How vol canoes change during their lifetimes. Possible prediction of vol canic eruptions. The influence of volcanoes on human activities now and in the past.
16. Natural Resources and the Environment. 3 hr .; 3 cr. World distribution, production, and requirements for mineral and energy resources. Use, abuse, conservation, and pollution of resources. Fall, Spring
17. Special Topics in Geology. 40.1, 1 lec. or 3 lab. hr.; 1 cr.; 40.2, 1 or 2 lec., 3 lab. hr.; 2 cr.; 40.3, 2 or 3 lec., 3 lab. hr.; 3 cr. Topic varies from semester to semester. Designed for nonscience students. $\dagger \dagger$
18. Water: The Ultimate Resource. 3 lec. hr. for 5 weeks; 1 cr. A five-week course focusing on problems of water supply, water use, and present and potential pollution problems. Special attention is paid to local problems.

## 55. Physical Environment of Long

Island. 5 field trips; 1 cr. A field course stressing the physical geography of our local area. Study sites include urban Queens, Caumsett State Park (with overnight stay at the Queens College Center for Environmental Teaching and Research), Fire Island National Seashore, and the Pine Barrens of central Long Island and Montauk Peninsula. Particular emphasis on the origins of land-forms and changing human/land relationships through time. Field trip fee will be required.
64. Planetary Geology. 3 lec. hr.; 3 cr. An introduction to the surface features, composition, geological activity, and probable history of the planets, moons, and comets of the solar system, based on the results of space exploration.

## Introductory Courses

101. Physical Geology. 3 lec., 3 lab. hr.; 4 cr. A study of the earth, including the relationship of man to his environment.
Required field trip(s). MAT charge, $\$ 25$. Fall, Spring
102. Historical Geology. 3 lec., 3 lab. hr.; 4 cr. Prereq.: Geology 101 (or passing grade in Physical Geology, NYS College Profi-

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
†Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
ciency Exam). A history of the origin and development of the universe, with emphasis on the Earth. Required field trip(s). MAT charge, $\$ 18$. Fall, Spring
110. Physical Geography. 3 lec., 3 lab. hr.; 4 cr. Earth in space; weather and climate; hydrol ogic cycle and landforms; geologic factors in the distribution of soils, plants, and animals. MAT charge $\$ 25 . \dagger \dagger$

## Major Courses

Consult the Geol ogy Department for scheduling information.
232. Mineralogy and Optical Mineralogy. 7 hr. (4 lec., 3 lab. hr.); 5 cr. Prereq.: Geology 102 and Chemistry 113 or permission of the department. The course covers the behavior of elements in the solid state, with reference to the origins, occurrences, and properties of minerals. Topics covered include crystallography, crystal chemistry, the petrographic microscope, and silicate and nonsilicate minerals. MAT charge, \$9.
233. Principles of Stratigraphy. 2 lec., 3 lab. hr., field trips; 3 cr. Prereq.: Geology 102 or permission of department. Study of rock sequences as genetic units. Stratigraphic classification and nomenclature. Correlation. Laboratory emphasizes practical exercises in stratigraphy. MAT charge, \$9.
234. Structural Geology. 2 lec., 2 lab. hr.; 3 cr. Prereq.: Geology 102; prereq. or coreq.: Mathematics 100, 101, or 111, or permission of department. The deformation of the earth's crust; faults, folds, and other geol ogic structures. MAT charge, $\$ 9$.
237. Earth Materials. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Geology 101 or 110. The study of rocks and minerals and the particular chemical and physical properties that have made these materials of past and present use to society. Laboratories are designed to emphasize these properties. Special emphasis will be placed on construction material, on cultural artifacts from pottery to plasters, and on tools.
248. Geomorphology. 2 lec., 3 lab. hr.; 3 cr. Prereq.: Geology 102 or permission of department. The origin and development of landforms that result from the diverse types of rock structure, weathering, and other conditions. $\dagger \dagger$
261. Geology in the Field. 9 hr . field work; 3 cr. Prereq.: Geol ogy 101, 102, or permission of the instructor. The application of geologic principles to the study of rocks, geol ogic structures, and landforms in the New york metropolitan area; introduction to geol ogic mapping. Offered in Summer or Intersession.
335. Petrography and Petrology. 7 hr (4 lec., 3 lab. hr.); 5 cr. Prereq.: Geology 232. The description, analysis, and identification of igneous, sedimentary, and metamorphic rocks; rock-forming processes are studied in the laboratory using suites of rocks, and in the field. Topics include hand-specimen and microscopic petrogra-
phy and igneous, sedimentary, and metamorphic petrology. MAT charge, $\$ 9$.
336. Igneous and Metamorphic Petrology. 2 lec., 3 lab. hr.; 3 cr. Prereq.: Geology 335 or permission of department. Description, distribution, and origin of plutonic, vol canic, and metamorphic rocks; studied in rock suites and on field trips.
337. Sedimentary Petrology. 2 lec., 3 lab. hr.; 3 cr. Prereq.: Geology 335. The description, analysis, and genesis of sediments, sedimentary rocks, and stratigraphic sequences.
339. Paleontology. 2 lec., 3 lab. hr.; 3 cr. Prereq.: Geology 102 or permission of department. The nature and significance of extinct animals and plants; their ecology, morphology, and geologic history. MAT charge, $\$ 9$.
342. Introduction to Meteorology. 2 lec., 3 lab. hr.; 3 cr. Prereq. or coreq.: Mathematics 103 or 112. An introductory study of meteorology for science majors. $\dagger$
347. Principles of Hydrology. 2 lec., 3 lab. hr.; 3 cr. Prereq.: Geology 101, Chemistry 112 or 113, Physics 121. A survey of surface water and ground water hydrology, including discussion of water quality, pollution, and water resource management. $\dagger \dagger$
349. Environmental Geology. 2 lec., 3 lab. hr.; 3 cr. Prereq.: Geology 101 or permission of instructor. Geological processes affecting the quality of the environment. Analysis of geologic problems affecting the quality of the environment. $\dagger$
351. Introduction to Geochemistry. 2 lec. 3 lab. hr.; 3 cr. Prereq.: Geology 232 and Chemistry 114, or permission of department. A study of chemical processes active in geologic environments. $\dagger \dagger$
353. Stratigraphy. 2 lec., 3 lab. hr.; 3 cr. Prereq.: Geology 233 or permission of department. The study and interpretation of layered rocks. $\dagger$
354. A Survey of Geophysics. 3 lec. hr.; 3 cr. Prereq.: Mathematics 112, Geol ogy 231 or 232; coreq.: Geology 234. An elementary introduction to the principles of geophysics and its impact on geol ogic thought, with respect to recent discoveries. $\dagger \dagger$
356. Principles of Oceanography. 2 lec., 3 lab. hr., field trips; 3 cr . Physical, chemical, biological, and geol ogical oceanography for science majors. Open to science or mathematics majors of upper-class standing, or by permission of instructor. $\dagger$
357. Principles and Practice of Oceanographic Research. 1 lec., 3 lab. hr.; 2 cr. Prereq.: J unior or senior standing and permission of instructor. Includes shipboard work. Open only to majors in the sciences and mathematics.
359. Introduction to Field Methods. 6 lab. hr.; 2 cr. Prereq. or coreq.: Geology 234 and either Geology 335, 335, or demonstration of proficiency by passing a test in identification of hand specimens. Field
mapping and sampling; use of maps, air photos, various instruments; preparation of geol ogic maps and sections. MAT charge, \$18.
360. Field Geology. 360.5, 5 wk.; 5 cr. 360.6, 6 wk.; 6 cr. Prereq.: Geol ogy 359. Geol ogical mapping; offered in the Summer; requires residence in field camp or dormitories. MAT charge, \$36.
361. Introductory Field Geology. 3 wk.; 3 cr. Prereq.: Geology 359. Geological mapping; offered in the Summer; requires residence in field camp or dormitories.
362. Advanced Field Geology. 3 wk.; 3 cr. Prereq.: Geol ogy 361. A continuation of Geol ogy 361 at a more advanced level. Usually offered in the Summer; requires residence in field camp or dormitories.

## 363. Oceanographic Field Course.

363.2-2 wk.; 2 cr., 363.3-3 wk.; 3 cr. Prereq.: Geology 357 and Geol ogy 360 or 361. Entails taking part in an oceanographic cruise, collection of raw data, compilation, analysis, and interpretation of the data, and reporting on the results of the study. An approved field-oriented course at an oceanographic research institute may be substituted. May be used to satisfy field course requirements for environmental science program students only. Usually offered in the Summer.
364. Comparative Planetary Geology. 2 lec., 3 lab. hr.; 3 cr. Prereq.: Geol ogy 102 or permission of department. A detailed study of the surface features, tectonics, vol canism, petrology, and aeolian, glacial, and sedimentary processes of the planets and moons of the solar system. The laboratory work will use geologic maps and spacecraft imaging of the planetary bodies. (Students who have taken Geol ogy 64 may not take Geology 364 without departmental approval.)
370. Environmental Geochemistry. 3 hr.; 3 cr . Prereq.: J unior class standing for science majors. study of the behavior of elements in processes on the Earth's surface. Evaluation of geochemical reservoirs and trace element movement in the atmosphere, soils, water, plants, and animals. $\dagger$
373. Geological Reasoning. 3 hr.; 3 cr. A senior-level course for geol ogic education majors. Various topics pertaining to the history and philosophy of geology, and techniques of problem-solving in the earth sciences will be covered through discussions and individual research projects.
375. Techniques of Environmental Analysis. 1 lec., 3 lab. hr.; 2 cr. Prereq.: Chemistry 241 and permission of department. Taken with Chemistry 342. Techniques used in the collection of samples in the field in their preparation for analysis. Water, air, soil, stream sediment, and biological samples are examined. Spring
376. Environmental Assessment: Methods and Exposition. 2 lec., 2 lab. hr.; 3 cr. Prereq.: Biology 102, Chemistry 241,

Geol ogy 349, E conomics 228. A survey of methods used to obtain environmental data, with emphasis on the writing of reports and impact statements. $\dagger$
377. Field Methods in Environmental Science. 1 lec., 6 hr. field work; 3 cr . Pre req.: Geol ogy 349 and 375, or 376. Supervised field work in environmental science. Collection and analysis of several types of environmental data, and preparation of a comprehensive report. This course may not be used to satisfy the field course requirements for the geol ogy major.

## 380. Advanced Principles of Geology. 3

 hr.; 3 cr. A senior-level course for geol ogy majors. Various topics pertaining to earth sciences will be considered.381, 382 . Seminar. 2 hr.; 2 cr. each sem. Prereq.: Permission of department. Advanced topics in geology. Offered primarily for seniors. $\dagger \dagger$
383. Special Topics in Geology. 2 lec., 3 lab. hr.; 3 cr. Prereq.: Permission of department. The topic varies from semester to semester. May be repeated for credit provided the topic is not the same. $\dagger \dagger$

391, 392, 393. Special Problems. 391, 1 lec. hr.; 1 cr., 392, 2 lec. hr.; 2 cr. 393, 3 lec. hr.; 3 cr. Prereq.: Permission of department. The student works on a research problem under the supervision of a member of the faculty. Fall, Spring

Courses in Reserve
10. Rocks, Minerals, and Gems.
51. Energy: Sources and Alternatives.
53. The Coastal Challenge.
54. Symmetry: Framework of the Earth.
57. Precious Metals and Metallic Minerals.
58. Gems and Nonmetallic Minerals.
231. Elements of Mineralogy.
332. Optical Mineralogy and Petrography.
350. Sedimentation.
352. Economic Geology.
355. Petroleum Geology.
366. Principles and Techniques of X-Ray Mineralogy.

# H ealth and Physical E ducation 

The courses previously offered by the Health and Physical Education Department are now offered through the Department of Family, Nutrition, and Exercise Sciences.

## H ispanic $L$ anguages and Literatures

Chair: Andrés Franco
Deputy Chair: Emilio De Torre
Undergraduate Adviser: Edward Strug
Graduate Advisers: Emilio DeTorre
(M.A. Program); Gloria Sawicki (M.S. in Education Program)

Dept. Office: Kiely 243, 997-5660;
Fax 997-5669
Distinguished Professor: Rabassa; Professors: Glickman, Green, K ozer; Associate Professors: DeTorre, Franco, Picciotto; Assistant Professor: Llorens; Lecturers: Romero, Strug; Department Secretary: Mendelsohn

Please note: At the time this Bulletin went to press, the Hispanic Languages and Literatures Department was revising its curriculum. Students should check with the department for the latest information concerning course offerings and requirements for the degree.

The program of instruction in the Department of Hispanic Languages and Literatures seeks, through the achievement of an accurate reading knowledge, adequate aural comprehension, and con versational proficiency, to prepare students to understand and appreciate the language, literature, and culture of the Spanish-speaking world. U pon completion of the basic courses, students are expected to have a thorough, practical command of Spanish, including an ability to understand more fully the culture or cultures of which that language is a reflection. Elective courses consist of both linguistic and literary studies of a
more advanced and specialized nature Although the Portuguese program has been temporarily suspended, a limited number of courses in Portuguese language instruction may be offered in the future.

In all courses, correlation with other departments of the College is encouraged whenever students' use of their language training can be made effective in their field of specialization.

## The Major in Spanish

The major in Spanish consists of 36 credits taken in the following sequence:

1. Spanish 221 or 223; Spanish 224 (These courses are prerequisites for all higher-numbered courses.)
2. Spanish 227, 228, 250, 260, 270. (These courses are prerequisites for all higher-numbered courses.)
3. Spanish 333 and 12 credits chosen from Spanish 50, 225, 310, 312, 320, $336,337,341,342,343,355,365,375$, 376, 381

All prospective majors must consult a department adviser before filing concentration forms.

Students planning to teach Spanish in secondary schools must al so take at least three courses in a second Romance language. Approval for student teaching normally requires a 3.0 average in elective courses and a grade of $B$ in conversation and grammar. The major in Spanish is offered in both the day and evening sessions.

## The Minor in Spanish

Eighteen credits in Spanish beyond the level of Spanish 112, chosen in consultation with a department adviser, are required for the minor in Spanish. Minors must file departmental concentration forms.

## PORTUGUESE COURSES

## Basic Language Courses

111. Elementary Portuguese I. 4 hr.; 4 cr. Intended for students with no previous training in Portuguese. Designed to establish correct pronunciation, to teach the elements of grammar, to enable students to read, to understand spoken Portuguese, to become familiar with cultural aspects of Portuguese-speaking countries, and especially to establish a good basic vocabulary. Class hours include use of the language laboratory. Fall
112. E lementary Portuguese II. 4 hr.; 4

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). †Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule
cr. Prereq.: Portuguese 111 or equivalent. This course is a continuation of Portuguese 111. A graded reader is introduced to present literary and cultural aspects of Por-tuguese-speaking countries, and to offer topics for simple exercises in composition. Class hours include use of the language laboratory. Spring

When circumstances warrant, the department may offer a course of Intensive Portuguese 111 and 112 for eight credits.
203. Intermediate Portuguese I. (formerly Portuguese 113) 3 hr.; 3 cr. Prereq.: Portuguese 112 or equivalent. A continuation of Portuguese 112, with a grammar re view, conversation, and readings in literary and cultural materials. $\dagger \dagger$
204. Intermediate Portuguese II. 3 hr.; 3 cr . Prereq.: Portuguese 203 or its equivalent. Continuation of Portuguese 203, with grammar review, conversation, composition, and readings in literary and cultural materials. $\dagger \dagger$

## SPANISH COURSES

Students who have had less than one and one-half years of high school Spanish normally begin with course 111; those entering with two years normally begin with course 112; those presenting three years usually begin with course 203; and those presenting four years normally begin with course 204. Native speakers should consult the Chair or a department representative for correct placement.

## Courses Taught in English

(Only Spanish 50 is applicable to the major.)

## 41. Masterpieces of Hispanic Litera-

ture in Translation. 3 hr .; 3 cr . Prereq.: English 110. Readings in English translation of some outstanding works of Hispanic literature from its beginnings to the twentieth century, illustrating a variety of genres. The specific works to be considered will vary from semester to semester and from section to section, and will be announced in advance. $\dagger$
50. Hispanic Cinema. 4 hr.; 3 cr. This course will deal with the various aspects of Spanish and Latin American cinema, historical, cultural, aesthetic, political, technical, etc. From semester to semester the course may deal either with certain tendencies and periods or with individual directors. Lectures will be in English; films will be shown in the original language with subtitles. May be taken more than once for credit provided the topic is different. $\dagger \dagger$
60. Hispanic Literature and Culture in the United States. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. An overview of the culture and, particularly, the literary production of Latinos in the United States. The course will focus on selected works - fiction, poetry, drama, etc. that reflect the complex cultural and linguistic realities of the Hispanic experience in this country.

Basic Language Courses
111. Elementary Spanish I. 4 hr.; 4 cr. Intended for students with no previous training in Spanish. Designed to establish correct pronunciation, to teach the elements of grammar, to enable students to read, to understand spoken Spanish, to become familiar with cultural aspects of Spanish-speaking countries, and especially to establish a good basic vocabulary. Class hours include use of the language laboratory. Fall, Spring
112. E lementary Spanish II. 4 hr.; 4 cr. Prereq.: Spanish 111 or two years of high school Spanish. This course is a continuation of Spanish 111. A graded reader is introduced to present literary and cultural aspects of Spanish-speaking countries, and to offer topics for simple exercises in composition. Class hours include use of the language laboratory. F all, Spring

When circumstances warrant, the department may offer a course of Intensive Spanish 111 and $\mathbf{1 1 2}$ for eight credits.
203. Intermediate Spanish I. (formerly Spanish 113) 3 hr.; 3 cr. Prereq.: Spanish 112 or three years of high school Spanish. Grammar review, conversation, and readings in literary and cultural materials at an intermediate level. F all, Spring
204. Intermediate Spanish II. 3 hr.; 3 cr. Prereq.: Spanish 203 or four years of high school Spanish. Continuation of Spanish 203, with grammar review, conversation, composition, and readings in literary and cultural materials. Fall, Spring
214. Spanish Conversation. 2 hr .; 1 cr. Prereq: Spanish 112 or coelective with Spanish 203. Intensive practice in spoken Spanish for students wanting such training. Exercises in aural-oral work in the language laboratory will be required. May not be taken by students who speak Spanish with native fluency. $\dagger \dagger$

## Introductory Literature Courses

210. Survey of the Literature of Puerto

Rico. 3 hr.; 3 cr. Prereq.: Spanish 227 and 228 or permission of department. Development of the literary form in Puerto Rico. The course will examine the early myths and folklore as foundations for the emergence of the novel, essay, and poetry. The survey will include an analysis of important Puerto Rican writers within the context of major literary movements from the 1930s to the present. $\dagger \dagger$
227. Introduction to Hispanic Literature. 3 hr.; 3 cr. Prereq.: Spanish 204 or permission of department. Develops oral and written language skills while it pre sents to students some of the outstanding writers of the Spanish-speaking world. Representative readings in the short story, novel, drama, and poetry will provide models and materials for class discussion and frequent written assignments. Prepares students for more advanced courses in lit-
erary analysis and surveys of literature.
228. Introduction to Literary Analysis. 3 hr.; 3 cr. Prereq.: Spanish 224 or permission of department. Designed to provide students of Spanish with practice in the use of the fundamental tools and terminology necessary to the appreciation and evaluation of literature. Fall, Spring

## 250. Survey of Spanish Literature I.

 (formerly 205) 3 hr.; 3 cr. Prereq.: Spanish 227 and 228 or permission of department. Reading and analysis of representative works from the Middle Ages through the seventeenth century; special emphasis on literary values and history. Required for majors and other students planning to take elective courses in the department. F all, Spring260. Survey of Spanish Literature II. (formerly 206) 3 hr.; 3 cr. Prereq.: Spanish 227 and 228 or permission of department. Reading and analysis of representative works from the Romantic period to the present, with special emphasis on literary values and history. Required for majors and other students planning to take elective courses in the department. Fall, Spring

## 270. Survey of Spanish-American

Literature. (formerly 207) 3 hr.; 3 cr. Prereq.: Spanish 227 and 228 or permission of department. Reading and analysis of repre sentative works of Spanish-American literature from the period of the Conquest to the present, with special emphasis on literary values and history. Required for majors and other students planning to take elective courses in the department. Fall, Spring

## Advanced Language Courses

221. Language Workshop for Students of Spanish-Speaking Background. 3 hr. 3 cr. Prereq.: Spanish 204 or equivalent. De signed to meet specific needs of students of Spanish-speaking background. It will focus on the correction of deficiencies and difficulties in written language and formal oral communication through intensive grammar review, vocabulary building, spelling, punctuation, and the development of advanced composition skills.
222. Advanced Conversation. 3 hr .; 3 cr Prereq.: Spanish 203. For students wanting fluency in speaking and writing Spanish. Prepared and impromptu group discussions on general topics and everyday situations. Frequent oral presentations and compositions. May not be taken by students who speak Spanish with native fluency. $\dagger$
223. Grammar. 3 hr.; 3 cr. Prereq.: Spanish 204 or permission of department. A thorough review of Spanish grammar and usage on an advanced level; systematic practice in composition. Fall
224. Advanced Composition. 3 hr .; 3 cr . Prereq.: Spanish 224. Advanced work in special problem areas of usage and style. Intensive practice in writing.
225. Advanced Grammar and Phonology. 3 hr.; 3 cr. Prereq.: Spanish 224 or permission of department. A study of those advanced features of Spanish grammar which present major difficulties to both native and non-native students of Spanish Practice in complex structures in speech prose fiction, and expository writing. Intensive study of the phonological structure of Spanish with regular practice in application of these structures
226. Skills and Art of Translation I. 3 hr.; 3 cr. Prereq.: Spanish 224 or permission of instructor. Introduction to the techniques and problems of translation; intensive practice in translating texts of various types. $\dagger$
227. Skills and Art of Translation II. 3 hr.; 3 cr. Prereq.: Spanish 341. Translation of more advanced texts. Texts may be chosen not only from literature but from journalism, advertising, business, and other technical or specialized areas. $\dagger \dagger$
228. Commercial and Technical Spanish. 3 hr.; 3 cr. Prereq.: Spanish 224 or equivalent. Provides adequate training in the use of Spanish for business, technical and consular purposes by giving extensive practice in written and oral usage of the forms in use in these fields. Drill will be re quired in translation techniques, use of special vocabularies and other adjuncts as needed in practical usage in these and reated fields of work.t†

## Civilization Courses

310. The Culture and Civilization of Spain. 3 hr.; 3 cr. Prereq.: Spanish 260 or permission of department. Attention to ethnic, political, and artistic aspects. $\dagger \dagger$
311. The Culture and Civilization of Latin America. 3 hr.; 3 cr. Prereq.: Spanish 270 or permission of department. Attention to ethnic, political, and artistic aspects. $\dagger \dagger$

## Advanced Literature Courses

320. Studies in Medieval Literature. 3 hr.; 3 cr. Prereq.: Spanish 228 and 250 plus one elective beyond Spanish 228, or permission of department. Studies a variety of masterworks and literary currents from the Spanish Middle Ages. May be repeated for credit provided the topics and selections are different. $\dagger \dagger$
321. Don Quijote 3 hr.; 3 cr. Prereq.: Spanish 228, 250, and 260, or permission of de partment. A detailed reading and analysis of Don Quijote, with attention to its influence in Spain and on world literature. $\dagger$
322. Studies in Golden Age Literature. 3 hr.; 3 cr. Prereq.: Spanish 228 and 250 or permission of department. Studies a variety of masterworks and literary currents of Spain's Siglo deOro. Representative works in poetry and prose by authors such as Gón gora, Fray Luis de Leon, San J uan de la Cruz, Quevedo, and dramatic works of Calderón, Lope de Vega, and others will pro-
vide a wide range of topics. May be repeated for credit provided the topics and selections are different
323. Studies in Eighteenth- and Nine-teenth-Century Spanish Literature. 3 hr.; 3 cr. Prereq.: Spanish 228 and 260 or permission of department. A study of literary works and currents of thought leading from such eighteenth-century thinkers such as Feijóo and Cadalso to Costumbrismo and the Romantic Movement and the development of the realist novel. May be repeated from credit provided topics and selections are different
324. Studies in Twentieth-Century Spanish Literature. 3 hr.; 3 cr. Prereq.: Spanish 228 and 260 or permission of de partment. Spanish literature from 1898 through the Civil War and to the present, with attention to major authors and works in the drama, essay, novel, and lyric poetry. May be repeated for credit provided the topics and selections are different.
325. Studies in Colonial and Nine-teenth-Century Spanish American Literature 3 hr .; 3 cr . Prereq.: Spanish 228 and 270 or permission of department. The significant literary works produced in Spanish America from the Colonial period to Ruben Darió, the realist novel, and development of the essay. May be repeated for credit provided the topics and selections are different

## 376. Studies in Twentieth-Century

 Spanish American Literature 3 hr.; 3 cr. Prereq.: Spanish 228 and 270 or permission of department. A study of significant literary works produced from thePost-M odernist period to the present, with special emphasis on recent narrative fic tion. May be repeated for credit provided the topics and selections are different
381. Seminar. 381.2, 2 hr.; 2 cr., 381.3, 3 hr.; 3 cr. Prereq.: Spanish 228, 260, and 270. Focus with intensive student participation on varying themes, problems, move ments, authors, genres, and theories in Spanish and Spanish-American literature. May be repeated for credit provided topics and selections are different

Courses in Reserve
PORTUGUESE
41. Masterpieces of Luso-Brazilian Literature in Translation
43. Afro-Brazilian Culture.
45. Portuguese Civilization
205. Survey of Portuguese and Brazilian Literature I.
206. Survey of Portuguese and Brazilian Literature II.
223. Advanced Conversation, Phonetics, and Diction
224. Advanced Grammar, Composition, and Translation.
235. Commercial and Technical Portuguese.

## 310. The Civilization of Portugal.

312. The Civilization of Brazil.

381, 382. Seminar.
SPANISH
10. Elementary Spanish for Genera Reading Purposes.
42. Spain and the Development of the Modern Novel.
43. New Narrative in Latin America.
45. Hispanic Civilization.
101. F undamental Language Skills for Students of Spanish-Speaking Background.
102. F undamental L anguage Skills for Students of Spanish-Speaking Background.
236. Language Workshop.
237. Advanced Language for Teachers of Spanish.

## H istory

## Chair: Frank A. Warren

Graduate Adviser: Frank Merli
Dept. Office: Powdermaker 200, 9975350
Distinguished Professors: Avrich, Cannis traro, Yavetz; Professors: Alteras, Della Cava, Frangakis-Syrett, Gruder, Hershkowitz, Hirshson, K aplan, Kinsbruner, McManus, O'Brien, Pine, Prall, Rossabi, Syrett, Warren, Wreszin; AssociateProfessors: Carlebach, Haan, Merli, Peterson Assistant Professor: Gordon; Lecturer: Rosenblum; Research Associate: Nuxoll; Department Secretaries: Harris, Kapchan

History, usually classified as a social science, also retains strong links with the humanities. Its various approaches political, economic, social, and intellectual - require a wide range of different methods. Courses offered by the department acquaint students, both history and non-history majors, with the aims, methods, and results of historical research. The contemporary trend to expand the study of history beyond a national and Western framework is reflected in the of ferings of the department.

Historical studies provide the background needed for graduate work, for positions in government, the civil service, law, and journalism, as well as the teaching of history and social studies at different levels.

## The Majors

Majors are required to take a minimum of 36 credits in history. As part of the 36 credits, the following courses are required: History 101, 102, 103, and 104; one course ( 3 credits) from among the following courses: History 105, 106, 111, 112, 117 (or Arabic 160), 140 through 143; and at least one colloquium (History 392). Also, as part of the 36 credits, majors must take a minimum of 12 credits (in addition to the required courses) in any one of the following special areas:

1. Ancient History. Includes History $113,114,201$ through 208, and 249.
2. European History since the F all of Rome. Includes History 100, 107 through 110, 115, 116, 130, 209 through 242, 247, 250 through 254, 289, 291, 292, 300 through 306.
3. United States History. Includes History 257 through 286, 288, 331, 332, 391.
4. History of areas of the world other than the United States and Europe. Includes History 105, 106, 111, 112, 117 through 119, 140 through 143, 243, 244, 255, 256, 287, 360.
(History 200, 362, 392, 393, and 394, have subjects that vary. They will be included in whichever special area is appropriate for the particular section of the course.)

To graduate with a major in history, students must have a cumulative gradepoint average of at least 2.0 in history courses taken at Queens College. Transfer students majoring in history must take a minimum of 18 credits in the History Department, regardless of the number of history credits earned at other institutions.

Students majoring in history must consult with the concentration advisers in order to insure that their programs satisfy department requirements. A concentration form should be filed with the department during the junior year. Introductory surveys (History 100 through 116) should be taken by majors as soon as possible and should normally precede more advanced courses in each of the areas covered. Those who plan to do graduate work in any field of history should consult the Chair or department members as early as possible and should pay special attention to the language requirements for advanced study.

History majors seeking to qualify for secondary school social studies licenses should study the relationships between history and education requirements when planning their courses. For guidance, consult history and secondary education advisers

Department honors will be granted to majors who have a 3.5 grade-point average in history.

## The Minor

The minor in history consists of 18 credits in history, of which at least 6 credits must be in United States history and at least 6 credits in history other than that of the United States. Transfer students minoring in history must take a minimum of 12 credits in the History Department. To be graduated with a minor in history, students must have a cumulative grade-point index of at least 2.0 in history courses taken at Queens College.

## COURSES

1. Survey of Western Civilization from

Ancient Times to 1715. 3 hr .; 3 cr . The broad outline of Western history from the golden age of Greece through the seventeenth century, with emphasis on institutional, intellectual, and artistic development. Readings will include primary source material. Fall, Spring
2. Survey of Western Civilization, from 1715 to the Present. 3 hr .; 3 cr . The broad outline of Western history from the eighteenth century to recent times, with emphasis on institutional, intellectual, and artistic development. Readings will include primary source material. Fall, Spring
100. E urope in the Middle Ages. 3 hr.; 3 cr . Europe from the end of the ancient world through the late Middle Ages. Fall, Spring
101. Modern E urope, 1500-1815. 3 hr.; 3 cr. European history from the late Middle Ages through the Napoleonic era. Fall, Spring

## 102. Modern E urope, 1815 to the Pre-

 sent. 3 hr.; 3 cr . European history from the Congress of Vienna to the atomic era. Fall, Spring103. American History, 1607-1865. 3 hr.; 3 cr . The United States from col onial times to the end of the Civil War. Fall, Spring
104. American History, 1865 to the Present. 3 hr.; 3 cr. The United States from Reconstruction to the present time. Fall, Spring
105. History of Latin America to 1825.

3 hr .; 3 cr . Survey of major developments from the era of colonization through the wars of independence. F all
106. History of Latin America, 1825 to the Present. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Survey from the
wars of independence to the present; spe cial attention to political concepts, foreign imperialism, social and economic problems. Spring
107. History of England to 1603. 3 hr.; 3 cr. English political, religious, and social institutions from early times to the death of Elizabeth I. Fall

## 108. History of Great Britain since

1603. 3 hr .; 3 cr . English history from the death of Elizabeth I to the present. Spring
1604. History of Russia to 1855. 3 hr.; 3 cr. From the Kievan period to the death of Nicholas I. Fall, Spring
1605. History of Russia since 1855. 3 hr. 3 cr . From the accession of Alexander II to the present time. Fall, Spring
1606. Introduction to East Asian History. 3 hr .; 3 cr . A topical survey of the major characteristics of Chinese and J apanese civilizations.
1607. Ancient History. 3 hr .; 3 cr . The ancient world from the earliest civilization of Egypt and Mesopotamia to the decline of the Roman Empire. Fall, Spring
1608. History of the J ewish People I. 3 hr.; 3 cr . The ancient period. Emphasis on the interpretation of literary and archaeological evidence in the light of modern scholarship. Fall
1609. History of the J ewish People II. 3 hr.; 3 cr . TheJ ewish Middle Ages from the decline of the Palestinian center to the beginnings of civic emancipation (ca. 200 A.D. to 1789). Fall, Spring
1610. History of the J ewish People III. 3 hr.; 3 cr . The varieties of the J ewish experience since 1789; religious and secular, political and cultural. Fall, Spring

## 117./Arabic 160. The History and

Civilization of Islam. 3 hr .; 3 cr . Explores the institutions and intellectual traditions of the civilization of Islam from the days of the Prophet Muhammad through the modern period.
118. The Caribbean: A Historical Survey. 3 hr .; 3 cr . This course traces the social, economic, and political development of the Caribbean countries from preColumbian times to the present, emphasizing the nature and role of slavery and foreign domination. Fall, Spring
119. The Spanish Caribbean in the Twentieth Century. 3 hr .; 3 cr . A comparative study of the history, societies, and migrations of the peoples of the Dominican Republic, Puerto Rico, and Cuba in the twentieth century.
121. History of Brazil. 3 hr.; 3 cr . The major developments from col onial times to the present. $\dagger \dagger$

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
†Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule
130. History of Christianity. 3 hr.; 3 cr. A survey of the history of Christianity from its origins to the present, primarily in Europe, and with attention to its interaction with state, society, and civilization.
140. China to 1500. 3 hr.; 3 cr. Survey from earliest times to the eve of the first contacts with the West. Fall
141. China after 1500. 3 hr.; 3 cr. The initial Western impact and China's response. Spring
142. History of J apan. 3 hr.; 3 cr . The major cultural and political trends in J apan from the earliest times. F all
143. The History of the Indian Subcontinent. 3 hr .; 3 cr . Survey of the Indian Subcontinent from the onset of Hinduism to contemporary times, emphasizing cultural and religious development in the traditional era and the rise of Indian nationalism in the 19th and 20th centuries.
200. Selected Studies in History. 3 hr.; 3 cr . Topic to be discussed varies and is announced in advance. May be repeated for credit provided the topic is not the same. Fall, Spring
201. Ancient Egypt. 3 hr.; 3 cr. The first two millennia. A broad survey of Egyptian political, social, cultural, and religious institutions from their origin to the end of the middle kingdom. Fall

## 202. Ancient Egypt: The E mpire and

 After. 3 hr.; 3 cr. The history of Egypt from the establishment of the Empire until the coming of the Greeks. Spring203. The Origins of Civilization in the Near East. 3 hr .; 3 cr . A broad survey of the political, social, cultural, and religious institutions of ancient West Asia from the Sumerians until the Biblical Patriarchs.
204. The Ancient Near E ast: The Assyrian Empire. 3 hr .; 3 cr . The history of ancient West Asia during the first millennium B.C. Spring
205. Greece from the Sea-Peoples to Alexander the Great. 3 hr .; 3 cr . From the Sea-Peoples' migration-invasions through the Persian Wars, the city-state, the Peloponnesian War, the destruction of Greek democracy, and the rise of Macedonia. Fall

## 206. The Hellenistic World to the

Roman Conquest. 3 hr .; 3 cr . The conquest of Persia, the wars of the Diadochi, and the political and social institutions of the Hellenistic world with emphasis on the Hellenistic East. Spring

## 207. The Rise of the West: The Roman

 Republic. 3 hr.; 3 cr . The early civilization of Italy and the foundation, growth, and expansion of Rome, with emphasis on the history of the republic, the decline of republican institutions, and the emergence of authoritarian government. Fall208. History of the Roman Empire. 3 hr .; 3 cr . The devel opment of imperial in-
stitutions, the imperial bureaucracy, the spread of Oriental religions, the decline of classical civilization, and the transition to the Middle Ages. Spring
209. The Byzantine Empire, 324-1025. 3 hr.; 3 cr . The history of the Byzantine Empire to the end of the Golden Age; the founding of Constantinople; the transfer of the Imperial Capital to the East; Christianization of the Empire; barbarian invasions; wars with the Persians and the Arabs; expansion and cultural renaissance.
210. The Byzantine Empire, 1025-1453. 3 hr .; 3 cr . From the Empire's apogee to its fall: the Crusades and the dismemberment of the Empire; last recovery; conquest by the Ottoman Turks.

## 213. An Intellectual History of the

Renaissance. 3 hr .; 3 cr . An analysis of the views on human nature and society by such major Renaissance thinkers as Petrarch, Pico, More, Erasmus, Machiavelli, and Montaigne. Fall
214. Studies in the Italian Renaissance, 1300-1600. 3 hr .; 3 cr . A study of Italian Renaissance civilization including artistic, political, and intellectual developments. Spring
215. E urope in the Age of Reformation, 1517-1648. 3 hr .; 3 cr . The growth of religious unrest, the Protestant Reformation, the Catholic or Counter-Reformation, and the wars of religion, to the Peace of Westphalia. Fall
216. The Old Regime: E uropean Society and States. 3 hr .; 3 cr . The political, social, economic, and intellectual structures of Europe and their transformation from the late seventeenth century to the end of the eighteenth century (1789).

## 217. E urope in the Era of the French

 Revolution and Napoleon. 3 hr .; 3 cr . The causes and unfolding of the French Revolution, its impact on France and Europe during the years of revolution and war, 1789-1815. Spring219. Fascism, Nazism, and Stalinism. 3 hr.; 3 cr. A comparative historical analysis of three totalitarian systems with attention to their genesis, ideology, techniques of repression and terror, and foreign policies. Fall, Spring
220. The Second World War. 3 hr.; 3 cr. Outbreak of War; Blitzkrieg; Battle of Britain and the invasion of Russia; Pear Harbor and the War in Asia; the Resistance and Holocaust; the search for peace. Spring
221. E urope since 1945. 3 hr .; 3 cr . Western European recovery; the East European revolutions and the devel opment of communist regimes; the Cold War and nuclear armament; the problems stemming from the end of colonial empires, population increase, and economic development. Fall, Spring
222. Anarchism. 3 hr.; 3 cr . The history of
anarchism with emphasis on such modern thinkers as Bakunin and Kropotkin, as well as anarchism in action in Russia and Spain, and the anarchist movement in the United States. Fall, Spring
223. Utopias. 3 hr.; 3 cr. A historical analysis of the great utopias from Plato to Skinner, and the application of utopian ideas to communitarian experiments. Readings will include Plato's Republic, More's Utopia, Bellamy's Looking Backward, M orris's News from Nowhere, Huxley's BraveNew World, Orwell's 1984, and Skinner's Walden Two. Fall, Spring

## 225. England under the Tudors and

 Stuarts. 3 hr.; 3 cr. Selected topics in the history of England during the Tudor and Stuart periods. Fall227. Victorian England, 1815-1901. 3 hr .; 3 cr . The impact of industrialization, changing attitudes toward the state, the individual, poverty, morality, the family and the church, the emergence of new classes, new parties, and new social ethic. Spring
228. Twentieth-Century Britain. 3 hr.; 3 cr . The Labor Party and the Welfare State, the decline of the Liberals, the economy and the Empire, the impact of war, "appeasement," party politics, the Irish question, and the women's movement. Spring
229. English Constitutional History. 3 hr.; 3 cr . The English constitution from the Norman Conquest to the present. Spring
230. Ireland from the Norman Conquest to 1690. 3 hr.; 3 cr . An investigation of Celtic culture and its near destruction by the English in the sixteenth and seventeenth centuries. Fall
231. Ireland since 1690. 3 hr.; 3 cr. A study of Irish nationalism from the Battle of the Boyne to the present troubles in the North. Spring
232. France since 1815. 3 hr.; 3 cr. The history of France from the Battle of Waterloo to the present. $\dagger \dagger$
233. History of Modern Italy. 3 hr.; 3 cr. Examines the development of Italy from the rise of national consciousness in the 18th century to the foundation of the republic after World War II. Emphasis on national unification (1750-1870), the Liberal State (1870-1922), and the Fascist era (1922-1945). Topics include programs for national unity and state formation, domestic and foreign policies of the Kingdom of Italy, including social, cultural, and economic devel opments; the Southern Question, immigration, and World War I; the rise of Mussolini, the F ascist regime and the anti-F ascist resistance, World War II, and the origins of the republic.
234. Germany from 1870 to the Present. 3 hr.; 3 cr . Emphasis on Germany in world politics, industrial transformation and social change, the nature and origins of National Socialism, and the develop-
ment of East and West Germany since 1945. Spring
235. The Holocaust. 3 hr.; 3 cr. Centered on the Nazi attempt to exterminate the J ewish population of Europe, the course covers the background of German-J ewish relations, the Nazi movement, Nazi measures against the J ews culminating in the death camps, and the J ewish response. Supplemented by documentary films. Fall, Spring
236. The Industrial Revolution. 3 hr.; 3 cr . The origins of the industrial revolution, and the political and social impact of technological and scientific innovation. Fall, Spring
237. History of Southeastern E urope, 1354-1804. 3 hr.; 3 cr. Institutions, politics, economy, society, and culture of Southeastern Europe under Ottoman rule.
238. History of Southeastern E urope, 1804 to the Present. 3 hr .; 3 cr . The rise of nationalism, the dissolution of the Ottoman empire, and the formation of the Southeastern European states.
239. Modern Greek History, 1821-1923. 3 hr .; 3 cr . The formation of the modern Greek state: politics, economy, society; nationalism and the international relations of Greece.
240. Modern Greek History, 1923 to the Present. 3 hr.; 3 cr. Political, social, economic, and intellectual development in post-1923 Greece, as well as the Greek state in world politics.
241. Women in Modern European History. 3 hr .; 3 cr . A study of the myths and realities of women's roles in European history, from the eighteenth century to the present; including their roles in the home and family, in the public spheres of education, work, and politics.

## 251. The J ews in Medieval Christen-

 dom. 3 hr .; 3 cr . A study of medieval J ewish life in the Roman Catholic world. Attention will focus on the development of northern European J ewry, its alliance with the political powers, its communal organization, and its religious and intellectual vitality.252. Medieval Spanish J ewry. 3 hr.; 3 cr. A study of the large and important Spanish J ewish community from its roots in the Roman world through its status under Christian rule, Muslim domination, and renewed Christian control. The pattern of development of the community will be studied, followed by an analysis of its eventual decline and expulsion in 1492.
253. The J ews in Early Modern Europe.
$3 \mathrm{hr} . ; 3 \mathrm{cr}$. Analysis of the reestablishment of J ewish communities in western Europe during the sixteenth and seventeenth centuries, followed by consideration of the broad societal changes that resulted in the emancipation and modernization of western European J ewry.
254. The J ews in E astern E urope. 3 hr .;

3 cr . The history of medieval eastern-Euro pean J ewry, from the thirteenth century on, followed by consideration of the early modern period, including the persecutions of 1648-49, the effort at rebuildingJ ewish life, and the development of Hasidism. The course will conclude with the rapid modernization of the late nineteenth century.
255. History of Zionism. 3 hr.; 3 cr. A study of the emergence of the Zionist movement and its impact on the creation of the State of Israel. The political, cultural, and religious aspects of Zionism will be analyzed. Fall, Spring
256. History of Modern Israel. 3 hr.; 3 cr . The history of Israel from the founding of the state to the present; emphasis on the circumstances leading to the establishment of the J ewish state and on the domestic and foreign policy of Israel. F all, Spring
257. American J ewish History. 3 hr.; 3 cr . This course will examine the major developments in the history of theJ ews in America. Topics covered will include: the influence of the several waves of immigration from Europe, the mutual effects of American and $J$ ewish culture on one another, the evolution of American J ewish institutions and identity, and the impact of prejudice in American J ewish life.
259. The American Revolutionary War, 1763-1789. 3 hr.; 3 cr. American history from Revolutionary era to establishment of the federal union. Fall, Spring
260. The United States in the Early National Period: 1789-1824. 3 hr.; 3 cr. Federalism and the emergence of political parties; the settlement of the Midwest and the Louisiana Purchase; the War of 1812 and the Era of Good Feeling. Spring
261. The Age of J ackson. 3 hr.; 3 cr. The $J$ ackson era, its origins and effect on American life. $\dagger \dagger$
262. Civil War and Reconstruction. 3 hr.; 3 cr . The origins of the Civil War; the antebellum South, North, and Midwest; secession and conflict; the aftermath and Re construction. Fall, Spring
263. The New America: 1878-1898. 3 hr.; 3 cr . The end of the frontier; industrial capitalism and the transformation of agriculture; the labor movement; urbanization and the agrarian revolt. Fall
264. Progressivism, Power, and Prosperity: 1898-1928. 3 hr .; 3 cr . The progressive movement, foreign relations and imperialism, World War I and its consequences. Fall
265. The New Deal and World War II: 1929-1945. 3 hr.; 3 cr. Political, economic, and social devel opments, 1929 to 1945. Fall, Spring
266. Contemporary America: 1945 to the Present. 3 hr .; 3 cr . Political, economic, and social developments of postWorld War II years. Fall, Spring
267. Diplomatic History of the United States to 1895. 3 hr .; 3 cr . The diplomacy
of expansion and national security; the political, economic, social, and intellectual aspects of national life as sources of foreign policy. Fall
270. History of Women in the United States, Colonial to 1880. 3 hr.; 3 cr. A study of women in the colonies, the young republic, the J acksonian period, the Civil War, and Reconstruction. Includes women's role in Westward Expansion and the origins of the Women's Rights Movement.

## 271. History of Women in the United

 States, 1880 to the Present. 3 hr.; 3 cr. A study of women in the late 19th-century era of rapid industrialization and large-scale immigration and in 20th-century reform movements. Analysis of women in the work force and in the home. Includes the postWorld War II feminist movement and women's issues of the 1980s and 1990s.273. American Labor History to World War I. 3 hr .; 3 cr . The development of the labor movement, its ideology and its relation to social movements and to the economic structure of society, from J effersonian America to the first World War.
274. American Labor History from World War I to the Present. 3 hr.; 3 cr. Special attention is given to emergence of the CIO during the New Deal, the role of the Left, the Cold War, multinational corporations, the shift to the service and public sector, automation, the increase of women in the work force, the movement of industry to the Sun Belt, new workingclass ideologies, and political approaches.
275. Business in American Life. 3 hr.; 3 cr. A survey of major developments in the history of businessmen, firms, and organizations from col onial history to the present. Emphasis is placed on the relation between the business sector and other elements of American society. Fall, Spring
276. The Immigrant in American History. 3 hr.; 3 cr . The E uropean background of immigration and the role of immigrants in American social, political, and economic life. Fall, Spring
277. Afro-American History I. 3 hr.; 3 cr A survey of Negro life and history in the United States up to the first World War, with emphasis on the years after the Civil War. Fall
278. Afro-American History II. 3 hr.; 3 cr. The role of the Negro people in the economic, political, and social development of the United States since 1914. Spring
279. History of the American City. 3 hr.; cr. Studies in the intellectual, social, technological, and demographic forces that have determined the growth of American cities. Spring
280./Urban Studies 251. Urban Planning in the American Past. 3 hr.; 3 cr . How Americans designed and built towns and cities; an examination of the city-building process, emphasizing landmark urban plans.
280. American Constitutional History to $\mathbf{1 8 6 5} .3 \mathrm{hr}$.; 3 cr . The history of the Constitution of the United States, its sources in the col onial era, and its evolution through decisions of the Supreme Court and constitutional controversies through the Civil War. Fall
281. American Constitutional History since 1865. 3 hr .; 3 cr . The continuing evo lution of the Constitution since the Civil War and Reconstruction, changing conceptions of the federal system and rights guaranteed by organic law. Spring
282. History of New York State. 3 hr.; 3 cr. From its beginnings as a Dutch colony to the present. Special attention to original materials, biographers, diaries, and travels that describe New York from generation to generation. Fall
283. History of the City of New York. 3 hr.; 3 cr. From frontier settlement to world metropolis. Special attention to origina materials, letters, diaries, official records, and other primary sources. Spring
284. History of the Borough of Queens. 3 hr .; 3 cr . This course is devoted to the historical development of Queens, colonial times to the present. Each student must have a 3.0 grade average and will conduct an original investigation and submit a substantial documented report. Fall, Spring
285. American Military History. 3 hr.; 3 cr. The development of American military institutions fromJ amestown to the present. $\dagger \dagger$
286. Subversion and Terrorism in the Modern World. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. An analysis of the role of intelligence, subversion, and armed resistance in modern politics. The use of institutional violence, either physical or mental, by governments or rebels to effect or prevent political changes. Also the devel opment of "people's war" and "revolutionary warfare." Fall
287. The Emergence of Science in Antiquity and the Middle Ages. 3 hr.; 3 cr . The emergence of a recognizable science and technology in primitive societies; ancient Babylonian, Egyptian, and Greek science, with emphasis on ancient medicine the foundations of modern science in the Middle Ages.
288. The Rise of Modern Science. 3 hr.; 3 cr . The scientific revolution of the seventeenth century, concentrating on the astronomical work of Copernicus, Kepler, Galileo, and Newton; Darwinian evolution; the conquest of epidemic diseases; the development of nuclear weapons.
289. Nazi Germany. 3 hr.; 3 cr. From beer hall to the bunker, an analysis of the origins and nature of Nazism; the leading personalities; domestic and foreign policies; popular support and resistance.
290. The Air War in E urope, 1939-45. 3 hr.; 3 cr . The use of air power as a strategic weapon in Europe during World War II. Spring
291. Colloquium. 4 hr.; 4 cr. Prereq.:

Open to students with at least 18 credits in history or by special permission of department. An intensive study in a selected field of history. The subject to be studied will vary from semester to semester and will be announced in advance. May be repeated for credit provided the subject is not the same. Fall, Spring
393. Tutorial. 393.1-393.3, 1-3 hr.; 1-3 cr. Prereq.: Permission of department. Students undertake and complete an individual research problem in their field of special interest under the direction of an instructor in the History Department. May be repeated up to a total of six credits in the 393.1-393.3 series provided the subject is not the same. Fall, Spring
394. Seminar in History. 3 hr.; 3 cr. An intensive study in a sel ected field of history. The subject to be studied will vary from semester to semester and will be announced in advance. This seminar may be repeated for credit provided the subject is not the same. Fall, Spring

Courses in Reserve
111. History of Africa.
120. History of Mexico.
125. World Civilizations to 1715.
126. World Civilizations since 1715.
211. Western Europe in the Early Middle Ages.
212. Western E urope in the High Middle Ages.
218. Liberalism, Nationalism, and Social Change: E urope, 1815-1870.
220. Dynasties to Dictators: E urope, 1870-1939.
226. England under the Hanoverians.
234. The Hapsburg Empire, 1526-1918.
235. Central E urope from 1648 to the Unification of Germany.
243. The History of Puerto Rico.
244. History of the Far East in Modern Times.
249. The J ews in Greco-Roman Palestine.
250. The J ews in the Medieval Islamic World.
258. Colonial History of America.
268. Diplomatic History of the United States, 1895-1945.
269. Diplomatic History of the United States since 1945.
272. Studies in American Intellectual History.
287. War in History
300. Studies in Medieval History
301. Studies in the Enlightenment.
302. Studies in European Intellectual History since 1800.
331. American Radicalism in the Twentieth Century.
332. Anti-Radicalism in TwentiethCentury America.
360. History of Medicine.
362. Studies in Diplomatic History.
390. E uropean Historiography.
391. American Historiography.

## Home E conomics

The courses previously offered by the Home E conomics Department are now offered through the Department of Fam ily, Nutrition, and Exercise Sciences.

# H onors in the M athematical \& $N$ atural Sciences 

Coordinator: G. W. K oeppl

Office: Remsen 120, 997-4110, 4192
Committee: K oeppl, G. W. (Chemistry and Biochemistry), Winnick, W. (Psychology), Brown, T. (Computer Science), Emerson, W. (Mathematics), Finks, R. (Geology), Mundinger, P. C. (Biology), Genack, A. (Physics), Bayne-Smith, M. (Family, Nutrition \& Exercise Sciences), Kant, A. (Family, Nutrition \& Exercise Sciences)

Honors Studies in the Mathematical and Natural Sciences is intended for students who have demonstrated exceptional ability in mathematics and science at the high school level and plan to continue these studies at Queens College. Honors Studies is designed to provide research skills, enrich the academic life of participants, and to encourage in-
teraction among students who have similar interests. Students will be expected to enroll in the Honors Science Seminar in the first two semesters of participation and in individual study and research projects thereafter.

## Eligibility

Students with interests and demonstrated ability in mathematics and science are invited to apply for admission into Honors Studies. Although most students enter during their freshman year, sophomore entry will be permitted. All applications for admission will be reviewed by the faculty committee.

## COURSES

101. Science Honors Seminar. 2 hr.; 2 cr. Prereq.: By permission of the Honors Committee only. Examination of the scientific method, introduction to library and computer research skills, and discussion of selected modern research problems in the mathematical and natural sciences.
102. Science Honors Seminar. 2 hr.; 2 cr. Prereq.: By permission of the Honors Committee only. Discussion of selected modern research problems in the mathematical and natural sciences.

## 291-293. Science Honors Research.

 291.1, 3 hr.; 1 cr., 291.2, 6 hr.; 2 cr., 291.3, 9 hr .; 3 cr . Prereq.: By permission of the Honors Committee only to students who have completed Science Honors Seminars 101 and 102. (Sophomores may register for no more than 2 credits each semester.) Introduction to the methods and techniques of research in the mathematical and natural sciences. Each student works on an individual research project of defined scope under the supervision of a member of the faculty in the Division of Mathematics and Natural Sciences. Students will be expected to write a report based upon progress made in the laboratory or upon study of the literature in a specific field of scientific research.
# H onors in the W estern Tradition 

Director: Robert Haan

Office: Delany 305, 997-3180
Secretary: Patricia Cusanelli
Honors in the Western Tradition (HWT) is intended for students who wish to gain an understanding of the fundamental works of literature, religion, and philosophy that have shaped the Western tradition. It is particularly meant for students who wish to do so without sacrificing the possibility of majoring in a traditional field. In order to allow sufficient time to study these major works with some care and to see their relationship to each other, Honors in the Western Tradition offers the planned sequence of courses listed below. E ach course in the sequence is taught as a special section.

English 381. Literature of the Bible English 140. Introduction to Poetry Philosophy 140. History of Ancient Philosophy
Classics 250. Ancient Epic and Tragedy HWT 151. Medieval Thought HWT 201. Early Modern Thought HWT 251. Pre-Enlightenment and Enlightenment Thought
HWT 301. Nineteenth-Century Thought HWT 351. Senior Seminar

Any student who has been admitted to the College and has passed the CUNY Assessment Tests in writing and reading may enter HWT. Retention requires maintaining a $B$ (3.0) average in courses. Although most students enter the courses in their freshman year, sophomore entry is permitted.

The sequence satisfies the collegewide requirements in English composition and the following Liberal Arts and Sciences Area Requirements: Humanities I, Tier 1 and Tier 2, Humanities III, and Pre-Industrial and/or Non-Western Civilization. In addition, completion of the entire sequence will satisfy one of the social science course requirements. Any social science course on the LASAR list may be used to complete the social science requirement.

## The Minor

A minor in the Western Tradition con-
sists of any six courses (18 credits) from
among the offerings, one of which must be the Senior Seminar.

## COURSES

Note: HWT 101 and 102 are open only to Townsend Harris High School seniors:

## 101, 102. Freshman Humanities

 Colloquium. 3 hr.; 3 cr . each sem. Prereq.: Passing grade on the CUNY Assessment Test. Selected readings from the classic texts of the Western Tradition, from the Bible and the Greeks to the present. The course will emphasize reading, writing and student discussion.Townsend Harris High School graduates who elect to matriculate at Queens College and who continue in the Honors in the Western Tradition may use HWT 101 and 102 in lieu of English 140 and one of the HWT senior seminars to complete the tencourse sequence in HWT. F or Townsend Harris graduates who do not choose to complete the sequence in Honors in the Western Tradition, HWT 101 and 102 will satisfy the Hum. I, Tier 1 and Pre-Industrial and/or Non-Western Civilization components of LASAR.
151. Medieval Thought. 3 hr.; 3 cr. Prereq.: By permission only. Christian thought and literature in the late ancient and medieval periods as reflected in selected writings from the New Testament, Augustine, Aquinas, Dante, and some of their contemporaries.
201. Early Modern Thought. 3 hr.;

3 cr . Prereq.: By permission only. Renaissance literature, Reformation theology, and early modern philosophy as reflected in selected writings by Machiavelli, Luther, Montaigne, Shakespeare, Descartes, Hobbes, and some of their contemporaries.

## 251. Pre-Enlightenment and Enlight-

 enment Thought. 3 hr.; 3 cr . Prereq.: By permission only. The impact of the new science and philosophy on Western thought as reflected in selected writings by Spinoza, Pascal, Locke, Leibniz, Swift, Voltaire, Rousseau, Hume, and some of their contemporaries.
## 301. Nineteenth-Century Thought. 3

 hr.; 3 cr . Prereq.: By permission only. Nine-teenth-century philosophy, theology, and literature as reflected in selected writings by Kant, Goethe, Hegel, Flaubert, Marx, Kierkegaard, Tolstoy, Dostoevsky, Nietzsche, and some of their contemporaries.351. Senior Seminar. 3 hr.; 3 cr. Prereq.: By permission only. Discussion of selected works from the Western Tradition. Works covered will range from ancient times to the present, and will include literature, philosophy, history, religion, etc. May be repeated for credit provided the subject is not the same.

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
†Offered either Fall or Spring; see Class Schedule t†May be offered; see Class Schedule

375, 376. Honors Seminar for College Teaching. 4 hr.; 4 cr. Prereq.: Permission of Director. Students participate in teachng the Freshman Humanities Colloquium with two other instructors: A Queens College professor and a Townsend Harris High School teacher. Includes planning and conducting seminar sessions, holding conferences, commenting on students' papers, and attending a weekly workshop.

## Interdisciplinary \& Special Studies

Assistant Provost: M. Hratch Zadoian
Office: Kiely 1107, 997-5782

## The Interdisciplinary Major

The interdisciplinary major is designed for students who wish to develop their own concentration area in a subject not covered by any one existing department or program. Students who are interested in an interdisciplinary major should confer with the Office of Interdisciplinary Studies, which will provide guidance in developing an appropriate proposal for approval. The proposed concentration must have a distinct, coherent interdisciplinary theme and the course work required for it should provide substantial expertise in that theme. Since an interdisciplinary concentration requires competence in more than one discipline, the major involves a minimum of 36 credits and may require the approval of several departments.

Interested students should seek guidance at the Interdisciplinary Office, Kiely 1107. ACE students interested in an interdisciplinary major should see Mr. Robert Weller, the Director of ACE, Kiely 134.

## Courses and Special Programs

Each semester the program offers a great variety of courses in a wide range of subjects. These courses are staffed by teachers from the various departments, but offer the advantages of smaller class sections, flexible scheduling, and curricular experimentation. The courses, except when otherwise specified, are open to every student in good standing at the College, freshman through senior.

Tutorials
A tutorial enables a motivated, advanced student to undertake independent study of a topic under the direct supervision of a full-time faculty member. To take a tutorial, a student must first find a faculty member willing to supervise and grade the work, and must obtain the faculty member's approval of the topic and of the work to be performed.

A tutorial card can be obtained at the Interdisciplinary and Special Studies Office, Kiely 1107. The card must be completed including a full description of the work to be done, signed by the student, the supervising faculty member and the Chair of the respective department. The card is then returned to the Interdisciplinary and Special Studies Office for approval. The Special Studies Office will register the student in the tutorial.

Note: In order to receive credit, students must be registered for the tutorial during the scheduled registration period.

## COURSES

Interdisciplinary and Special Studies

## SPST 94. Art of Puerto Rico and the

 Hispanic Caribbean. 3 hr .; 3 cr .This course is a survey in the visual arts of the Greater Antilles. It will cover the development of the arts in Puerto Rico, Dominican Republic, and Cuba from PreColumbian times to the twentieth century. We will trace and define Caribbean art through the use of slides, films, and museum visits.

SPST 195. Interdisciplinary and Special Studies. (formerly Special Studies 95) 195.1-195.4, 1-4 hr.; 1-4 cr. Students may earn degree credit for work done in colloquia, seminars, and special topics. The courses include subject material not found in approved departmental curricula. Students may enroll in SPST 195 more than once provided the topics are different.
SPST 196. Tutorial. (formerly Tutorial 96) 196.1-196.4, 1-4 hr.; 1-4 cr. Students may arrange to earn degree credit for work done with a faculty member in an area of joint interest by means of a mutually agreed-upon educational contract for one semester. Tutorials bear 1, 2,3, or 4 course credits. Students may enroll in tutorials more than once, but no more than one per semester.

SPST 198. Independent Study for the CUNY B.A. (formerly Independent Work 98) 198.1-198.16, 1-16 hr.; 1-16 cr. Prereq.: Acceptance into the CUNY B.A. Program. Students enrolled in the CUNY B.A. Program may earn a flexible number of independent work credits. Consult the CUNY B.A. Bulletin.

SPST 295. Interdisciplinary and Special Studies. 295.1-295.4, 1-4 hr.; 1-4 cr. Prereq.: Sophomore standing. An intermediate level, variable title, experimental or interdisciplinary course. The course may be repeated for credit.
SPST 296. Tutorial. 296.1-296.4, 1-4 hr.; 1-4 cr. Prereq.: J unior standing. For tutorials to be given at an intermediate level. See SPST 196.

SPST 395. Interdisciplinary and Special Studies. 395.1-395.4, 1-4 hr.; 1-4 cr. Prereq.: J unior standing. An advanced level, variable title, experimental or interdisciplinary course.
SPST 396. Tutorial. 396.1-396.4, 1-4 hr.; 14 cr. Prereq.: Senior standing. A tutorial on a topic at an advanced level of study, comparable to a senior seminar. See SPST 196.
SPST 399. Honors Project. (formerly Honors Project 399) 399.1-399.6, 1-6 hr.; 16 cr. Prereq.: Upper junior standing and grade-point average of 3.3 or above. Student undertakes an advanced project under the supervision of a full-time member of the faculty. The total number of credits which can be applied to the baccalaureate degree under 399 is twelve. Exceptions to the credit limits may be granted to students whose grade-point average is 3.6 or above upon approval of the department Chair and the director of Interdisciplinary and Special Studies. Interested students should consult Assistant Provost H ratch Zadoian, Kiely 1107.

## Ethnic Studies

310. Ethnic Studies. Six Ethnic Groups in New York City. 3 hr.; 3 cr. Prereq.: J unior standing. This course focuses on the sociological, historical, and cultural perspectives of six major ethnic groups in New Y ork City: Afro-Americans, Greek-Americans, Irish-Americans, Italian-Americans, J ewish-Americans, and Puerto RicanAmericans. Factors of migration and immigration will be explored for each group. The course is open to all students with an interest in the social sciences and is strongly recommended for education majors specializing in bilingual/multicultural education.

## Irish Studies

Director: Catherine McKenna
Administrative Committee: Bird, Brady, McKenna, Waters

Office: J efferson 306, 997-4526

The general aim of Irish Studies is that of any of the humane disciplines - literature, history, philosophy - that constitute the curriculum of a first-rank liberal arts college. In particular, it is aimed at an understanding of the historical and cultural development of the Irish people, their language, literature, social institutions; the significance of their contribution - intellectually, spiritually, artistically - to Western civilization; their experience as one of the first post-colonial nations; their experience as an emigrant diaspora.

As such, Irish Studies is intended for all students interested in the study of a rich and varied culture, and is of special interest to those students of I rish antecedents for whom it will provide a new or renewed awareness of their place - historical and contemporary - in a pluralistic society.

For students majoring in English, comparative literature, communication arts and sciences, or political science, a wide selection of courses in Irish Studies may provide a logical corollary to their principal interest. Students interested in an interdisciplinary major in Irish Studies (through Interdisciplinary and Special Studies) should consult with the director of Interdisciplinary and Special Studies and the director of Irish Studies.

## The Minor (18 credits)

A student may meet the requirements for graduation as an Irish Studies minor by maintaining a grade-point average of 2.5 in the following courses:

1. English 366. Introduction to Irish Literature
credits
Irish Literature 3
2. History 230. Ireland from the Norman Conquest to 1690

$$
\text { History 231. I reland since } 16903
$$

3. One course from among the following: 3
English 365. Celtic Myth and Literature
English 367. Modern Irish
Literature
English 368. Irish Writers

[^12]4. Two free choi ces from among
the following:
I rish Studies 101, 102, 103, 105, 390

English 265. Introduction to Folklore
*English 365. Celtic Myth and Literature
*English 367. Modern Irish Literature
*English 368. Irish Writers
6

In special circumstances, and with the approval of the Director, an appropriate department or Special Studies course not listed above may be offered in fulfillment of requirement 4.

## COURSES

101. Elementary Irish I. 3 hr.; 3 cr. An introduction to modern Irish. The course concentrates on the basic patterns of the spoken language and provides the student with the vocabulary and grammatical forms commonly used in daily conversation.
102. E lementary Irish II. 3 hr.; 3 cr. Prereq.: Irish Studies 101 or permission of instructor. A continuation of Elementary Irish I.
103. The Irish in America. 3 hr.; 3 cr. A chronological survey of the Irish experience in America from the Colonial period to the present. The course examines the social, political, religious, and cultural interaction of the Irish with established American society and with other emigrant groups who had preceded and followed them. Special emphasis is given to the role of women in American-I rish society, and to the part played by Irish immigrants in Iabor, politics, religion, and education.
104. E arly Christian Ireland, 450-800. 3 hr.; 3 cr . A study of the development of IreIand's Christianized civilization from the origins in the fifth century to the Carolingian Renaissance.
105. Seminar in Irish Studies. Hr. to be arranged; 3 cr. Prereq.: Upper junior or senior standing. Advanced study of special problems to be taken on a tutorial basis during upper junior or senior year.

## Italian- <br> A merican Studies

Director: Richard Gambino
Office: J efferson 306, 997-4527
Italian-American Studies was founded at Queens College in 1973 out of a conviction that the ethnic experience in America is a key to a full understanding of American culture and history.

The purpose of Italian-American Studies is to offer courses on all dimensions of Italian participation in American life, both historical and contemporary. The approach is an interdisciplinary one, and draws upon the fields of history, political science, psychology, literature, sociology, art, and music. Within the curriculum, stress is placed not only on developing an understanding of ItalianAmericans and their culture, but also on the relations of Italian-Americans to other groups - and, in fact, to all elements and facets of American society.

In addition to the courses designated specifically as offerings of Italian-American Studies, students are encouraged to take certain departmental courses related to Italian and Italian-American culture. Students are urged to consult lists of Italian-American offerings, which are distributed on campus each semester, or call Italian-American Studies.

## The Minor

The Italian-American Studies minor consists of 21 credits of coursework plus a foreign language requirement. The foreign language requirement consists of Italian 111, 112, and 113, or the equivalent level of Ianguage proficiency in Italian. Students electing a minor in Italian-American Studies will receive certificates attesting to their successful completion of the prescribed curriculum upon their graduation from Queens College.

## Core Curriculum

Group I
Twelve credits from the following:
IAS 100. Italian-Americans: An Interpretation of a People. 3 hr .; 3 cr .
IAS 101. The Heritage of Italy's South. 3 hr .; 3 cr .

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp.40, 125)
†Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.

IAS 202. The Italian-American Experience Through Literature. 3 hr .; 3 cr . and
IAS 300. Seminar in Italian-American Studies. 3 hr.; 3 cr.

Ethnic Studies 310. Six Ethnic Groups in New York City. 3 hr .; 3 cr .
Group II
Nine credits from the following:
European Languages. All courses offered in Italian beyond Italian 113 and all courses in Italian literature or culture in translation.
History 233. History of Modern Italy. 3 hr .; 3 cr .
History 276. The Immigrant in American History. 3 hr .; 3 cr .
Political Science 211. Urban Politics. 3 hr.; 3 cr.
Political Science 217. Voting Behavior in the American Polity. 3 hr .; 3 cr .
Political Science 219. Pressure Groups and the Political Process. 3 hr .; 3 cr . Sociology 214. The Family. 3 hr .; 3 cr .

## COURSES

## 100. Italian-Americans: An Interpre-

 tation of a People. 3 hr .; 3 cr . An interdisciplinary study of Italian-Americans, stressing the period from 1880 to the pre sent, using works of history, sociology, and literature.
## 101. The Heritage of Italy's South. 3

hr.; 3 cr . An analysis of the contribution that the Mezzogiorno has made to Italian culture since the mid-thirteenth century, and an exploration of the ways in which an awareness of such a contribution affects Italian-Americans' search for identity.

## 202. The Italian-American Experi-ence

 through Literature. 3 hr .; 3 cr . Prereq.: English 120 or completion of LASAR Humanities I, Tier 1. Reading, analysis, and discussion of selected works, mostly of the twentieth century.
## 300. Seminar in Italian-American

Studies. 3 hr.; 3 cr . Prereq.: J unior standing and two courses from Italian-American Studies. An interdisciplinary course focusing on topics that vary from semester to se mester.

## Jewish Studies

Acting Directors: Ammiel Alcalay, Thomas E. Bird, Elisheva Carlebach

Administrative Committee: Acker, AIteras, Carlebach, Goldsmith, Schwarcz
Office: J efferson Hall 311, 997-4530
The aim of J ewish Studies is to provide students with an understanding of the history, philosophy, religion, politics, sociology, anthropology, folklore, languages, and literature of theJ ewish people. The program is intensive yet flexible, tailored to a wide range of interests normally included in the broad concept of J ewish studies. Students who wish to discuss particular curriculum problems should confer with the director or any member of theJ ewish Studies Committee:
Hebrew: J. Acker, A. Alcalay
History: I. Alteras, E. Carlebach
Philosophy: E. Schwarcz
Sociology: S. Heilman
Yiddish: T. Bird, E. Goldsmith
Students should also consult the course offerings in Hebrew language and literature and in Yiddish language and literature (see Classical, Middle Eastern \& Asian Languages \& Cultures).

J ewish Studies majors or minors must file a concentration form with the program office at their earliest convenience.

The primary emphasis in the program is to offer majors or minors a basic core curriculum and then give them an opportunity to pursue intermediate and advanced courses in any two of four disciplinary areas subsumed by J ewish Studies:

1. J ewish social and intellectual history
2. The anthropol ogy, sociol ogy, political life, and folklore of J ews
3. J ewish religious and philosophical thought
4. J ewish languages and literatures

## The Major

Majors in J ewish Studies are required to take 36 credits, distributed as follows:
I. Core Curriculum: 9 cr.
II. Area Studies Courses: 15 cr .
III. Related Departmental Courses: 9 cr . IV. Senior Seminar: 3 cr.

They are also required to demonstrate competence in Hebrew or Yiddish through level 4. The language require ment is independent of the 36 credits required for the major.

## I. Core Curriculum (9 cr.)

Students majoring in J ewish Studies will be required to take 3 core curriculum courses, two from Part A and one from Part B.
A. J ewish History (Choose 2; 6 cr.)

History 114. History of theJ ewish Peoplel
History 115. History of theJ ewish Peoplell
History 116. History of theJ ewish People III
B. J ewish Philosophy and Religion
(Choose 1; 3 cr .)
Philosophy 250. Plato and the Bible
Philosophy 251. Aristotle and Maimonides
Philosophy 252. Existentialism and Modern J ewish Philosophy
Religious Studies 103. Introduction to J udaism
II. Area Studies Courses ( 15 cr .) In addition to the Core Curriculum as noted above, students will select five intermediate and advanced courses (at the 200 level or above) from any two of the four disciplinary areas. In so doing, the student will acquire a more intensive understanding of the major areas of research and scholarship within the field of J ewish Studies. Courses relevant to the areas are:

1. J ewish Social \& Intellectual History

History
237. The H ol ocaust
249. TheJ ews in Greco-Roman Palestine
250. The J ews in the Medieval Islamic World
251. TheJ ews in Medieval Christendom
252. Medieval Spanish J ewry
253. M odern Western European J ewry
254. The J ews in Eastern Europe
255. History of Zionism
256. History of Modern Israel
257. American-J ewish History
2. The Anthropology, Sociology, Political Life, and Folklore of J ews

Sociol ogy
241. The American-J ewish Community
242. Modern Israel: Sociol ogical Aspects 348. Orthodox J ews in America

Music
144. J ewish Music.
3. J ewish Religious and Philosophical Thought
Philosophy
124. Philosophy of the Hol ocaust
250. Plato and the Bible
251. Aristotle and Maimonides.
252. Existentialism and Modern J ewish Philosophy.

J ewish Studies
202. J ewish Ethics
301. J ewish Mysticism and Hasidism

Religious Studies
103. Introduction to J udaism
4. J ewish Languages and Literatures

J ewish Languages: Hebrew
150. Modern Hebrew Literature in Translation
160. Masterpieces of Hebrew Literature in Translation
190. Topics in Hebrew Culture and Literature in Translation
101. Elementary Hebrew I
102. Elementary Hebrew II
203. Intermediate Hebrew I
204. Intermediate Hebrew II
305. Advanced Modern Hebrew
307. Classical Hebrew
311. Hebrew Conversation
315. Hebrew Grammar and Composition
317. Skills and Art of Translation
335. Biblical Aramaic: Daniel and Ezra
361. History of the Hebrew Language
362. Hebrew Root Studies
390. Studies in Language, Literature, and Culture
J ewish Languages: Yiddish
140. History of the Yiddish Language
156. J ewish Thought and Modern Yiddish Literature
161. The Culture of East European J ewry
162. J ews in the Soviet Union, 1917 to the Present
167. The Development of Yiddish Culture in the United States
172. Hasidism and J ewish Mysticism
101. Elementary Yiddish I
102. Elementary Yiddish II
203. Intermediate Yiddish I
204. Intermediate Yiddish II
210. Intermediate Conversational Yid-
dish 305. Advanced Yiddish
390. Studies in Yiddish Language, Literature, and Culture

J ewish Literatures: Hebrew
321. Biblical Literature I: Genesis
322. Biblical Literature II: Exodus
323. Biblical Literature III: Leviticus/ Numbers
324. Biblical Literature IV: Deuteronomy
325. Biblical Literature V: J oshua \& J udges
326. Biblical Literature VI: Samuel I and II
327. Biblical Literature VII: Kings I and II
328. Biblical Literature VIII: Major Prophets
329. Biblical Literature IX: Minor Prophets
330. Biblical Literature X: Megillot
331. Biblical Literature XI: Psalms
332. Biblical Literature XII: Wisdom Literature
340. Talmudic Literature I
341. Talmudic Literature II
345. Medieval Literature I
346. Medieval Literature II
351. Modern Israeli Drama
352. Modern Hebrew Poetry I
353. Modern Hebrew Poetry II
354. The Modern Hebrew Essay.
356. Contemporary I sraeli Literature I
357. Contemporary Israeli Literature II
358. The Modern Hebrew Press

J ewish Literatures: Yiddish
150. An Introduction to Yiddish Literature
330. Yiddish Literature from the Beginnings to Mendele
331. Mendele and His Contemporaries
332. Peretz, Sholem Aleichem, and Their Contemporaries
336. Soviet Yiddish Literature
338. Polish and Rumanian Yiddish Literature, 1917 to Present
340. American Yiddish Literature, 18801915
341. American Yiddish Literature, 1915 to the Present
345. Yiddish Literature in Israel since World War II
154. Yiddish Drama
352. The Yiddish Theatre in Eastern Europe
353. The Yiddish Theatre in the United States
356. The Yiddish Novel in the Twentieth Century
357. Yiddish Poetry in the Twentieth Century
176. The Literature of the Holocaust
174. The East Side in American Literature in Yiddish and in English
355. Yiddish Historical Fiction and Drama
III. Related Departmental Courses (9 cr.)
In the area where the student has taken the greatest number of intermediate and advanced J ewish Studies courses, he or she must take 9 additional credits on the 200 -course level or above. The courses shall be chosen in consultation with a $J$ ewish Studies adviser. The related departments for each area are as follows:

1. History Department
2. Anthropology or Sociology Department
3. Philosophy or Religious Studies
4. Hebrew, Yiddish, Comparative Literature, or English. (Students concentrating in J ewish literatures must study the literature of two different languages.)
IV. Senior Seminar (3 cr.)

J ewish Studies 365. Senior Seminar. 3 hr.; 3 cr. Prereq.: 27 credits in the major; senior standing.
The Minor (21 cr.)
I. CoreCurriculum (9 cr.)

Students will choose two courses from
the Core Curriculum Part A, and one course from the Core Curriculum Part B.
II. Intermediate and Advanced Courses ( 12 cr .)
Students will choose four courses from the Area Studies course list, with at least two courses in one area.
III. Language Requirement

Students are required to demonstrate competence in Hebrew or Yiddish through level 3.

## Foreign Study

Students intending to major or minor in $J$ ewish Studies are encouraged to study in Israel. Students who wish to participate in a study abroad program as a part of the curriculum should contact the program office in J efferson Hall 311 for advice.

## COURSES

202. J ewish Ethics. 3 hr.; 3 cr. Prereq.: Sophomore standing. A study of ethical principles in the Bible, Talmud, and postTalmudic literature; rational prerequisites in ethical judgment; personal morality and social ethics; the ethics of justice and the ethics of love, with special attention to J ewish ethical teachings on racism, capital punishment, divorce, birth control, abortion, and euthanasia.
203. J ewish Mysticism and Hasidism. 3 hr.; 3 cr. Prereq.: J unior standing. A survey of J ewish mystical thought from the early Rabbinic period (Merkavah mysticism) through the classical period of the Zohar and Lurianic Kabbalah to Hasidism and neo-Hasidic movements in our day.
204. Senior Seminar. 3 hr .; 3 cr. Prereq.: 27 credits in the major; senior standing. Intensive study in a selected field of J ewish Studies. The subject to be studied will vary from semester to semester and will be announced in advance. As part of the seminar, students will undertake and complete an individual research problem in their field of special interest under the direction of an instructor in their area of $J$ ewish concentration.
[^13]
## Journalism

Director: Natalie Byfield
Advisory Committee: Bittman, Dickstein, Liebman, Patterson, Pine
Office: Kissena 315, 997-2860
This 21-credit journalism minor is a complement to existing offerings on the media in the Departments of CAS, English, and Sociology. Those attracted to journalism will find this minor enhances basic reporting and writing skills, while providing a comprehensive overview of the news media as an industry.

The journalism minor links the academic major with career interests by teaching students to report the news from the perspective of their major. Those majoring in science, for instance, might take the journalism minor to explore possibilities for science reporting, while economics majors will learn to write clearly for the general public about complicated monetary issues.

The five news courses in this minor are different from other courses at Queens College in two important ways: 1) they emphasize the news: understanding, reporting, editing, and broadcasting; 2) they are taught by individuals whose primary experience is in the news media. Such individuals will function as journal-ists-in-residence, bringing expertise and career contacts directly from the newsroom to the classroom.

## Internship and Mentor Opportunities

Those admitted into the minor will be eligible for internships which provide opportunities for students to learn first hand about the real world of journalism. Practicing journalists will also be invited to act as mentors for students interested in journalism careers.
A. Course Sequence

The requirements for the journalism minor are as follows:
J ournalism 100. News Media
J ournalism 101. News Reporting and Writing I
J ournalism 200. News Reporting and Writing II
J ournalism 201. News Editing
J ournalism 202. Broadcast J ournalism
B. Two el ectives ( 6 credits) selected from the following:
CAS 102. Introduction to Media
CAS 242. Television Production I
CAS 243. Television Production II
CAS 244. Media Analysis and Criticism
CAS 246. Freedom of Speech

CAS 345. Media Information Systems English 211. Writing Nonfictional Prose English 220. Introduction to Editing English 303. Essay Workshop
Sociology 218. Mass Communication and Popular Culture
The first course in the sequence, J ournalism 100, is a gateway course open to all students. It is designed to sharpen students' abilities to understand not only news events, but issues of ethics and coverage that shape the news environment. The remaining four core courses are designed for students with intensive interest in learning about the world of reporting and writing. Students admitted into these courses will cover stories in the field and write to deadline. They will meet with news professionals and visit news organizations. They will learn basic skills in copy editing and broadcast news writing.

## COURSES

100. News Media. 3 hr.; 3 cr. Prereq.: English 95. This course will provide an overview of the industry, including a discussion of ethics, the role of journalism in society, an exploration of the role of business in journalism, and an analysis of the differences among various branches of the media. Students will also be introduced to basic reporting skills.
101. News Reporting and Writing I. 3 hr.; 3 cr. Prereq.: B or better in J ournalism 100 or permission of Director. Prereq. or coreq.: English 110. The purpose of this course is to teach the fundamentals of news reporting and writing. Will feature visits to new organizations and guest speakers (reporters and news management), providing firsthand accounts of their experiences as professionals in the world of journalism.
102. News Reporting and Writing II. 3 hr.; 3 cr. Prereq.: J ournalism 101. Continuation of the devel opment of reporting and writing skills introduced in News Reporting and Writing I. Course includes deadline writing, field reporting, rewriting from wires, and guest lectures by seasoned professionals.
103. News Editing. 3 hr.; 3 cr. Prereq.: J ournalism 101. The course will cover three specific aspects of the editing process: copyediting skills, news judgment, and verification of information. On the skills level, students will be taught how to write headlines, to detect and correct errors, and to do simple line editing.
104. Broadcast J ournalism. 3 hr .; 3 cr . Prereq.: J ournalism 101. The course focuses on the anatomy of television and radio news stories; writing, reporting, and audio and video skills needed to put the story together; actual field coverage.
105. Newspaper Production. 3 hr.; 3 cr. Prereq.: J ournalism 100 and 101. This designed to provide journalism students with the opportunity to learn firsthand how to construct and produce a newspaper. The course is a collection of activities involving research, reporting, writing, and desktop publishing. Inherent in these activities will be opportunities to explore issues of ethics, the actual practice of journalism, as well as readings related to media concerns and theory.
106. Internship in J ournalism. 135 hr.; 3 cr . Prereq.: Upper junior or senior standing with a minimum 2.5 cumulative index; 3.0 in J ournalism courses; permission of the J ournalism Director. Supervision by a departmental coordinator of internships. Ordinarily, a J ournalism internship will involve 9 hours per week (or 15 hours per week for the Summer semester) of off-campus work in a news setting for which the J ournalism curriculum has prepared the student through its emphasis on writing, reporting, research, and critical thinking in the context of the world of J ournalism. $J$ ournalism internships provide exposure to news tasks in a variety of settings, which may or may not be specifically correlated to the student's major.

## L abor Studies

## Acting Director: Leonard Rodberg

Coordinating Committee: Blumberg, Franklin, Hanlon, Krasner, Mantsios, Rodberg, Wieman

Office: T-3, Room 14, 997-5134
The major in Labor Studies provides students with a curriculum that focuses on the world of work. The purpose of the program is to give students a rigorous framework for analysis of the labor force, workers' organizational affiliations, and the dynamics of labor-management relations. Drawing on the various social science disciplines, the Labor Studies major offers an interdisciplinary approach to the study of Iabor and related subjects. The curriculum al so combines a core sequence of courses with an opportunity to devel op a specialization within a particular discipline.

A degree in Labor Studies prepares students to pursue careers in labor relations, including employment with labor

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule
organizations and private industry, as well as with federal, state, and local government agencies. A Labor Studies major also provides excellent preparation for law school or graduate study.

Nonmajors may enroll in Labor Studies courses to supplement their own field of concentration, e.g., economics, sociology, political science, urban studies, history.

The Labor Studies major consists of 36 credits: 18 credits in a core sequence, 9 in a specialization, and 9 in approved electives. Courses in the core sequence provide a foundation for all Labor Studies majors. These courses are aimed at developing an understanding of the fol lowing: the history of the labor movement; the impact of technology on labor and industry; changes in the labor process; labor relations and their economic context; shifts in the composition of the labor force; the social and political role of labor unions; the legal framework of labor-management relations; theories of work, the workplace, and the labor movement

In addition to the required core sequence, students must complete 9 credits within a specialization. Presently there are two specialization tracks to choose from: one in economics, the other in sociology. Each track provides students with an opportunity to develop their analytical skills from the perspective of the academic discipline selected. The specialization tracks offer an introduction to the discipline, a background in quantitative analysis, and an opportunity to study an aspect of labor within a particular discipline.

Students complete their Labor Studies major by selecting three labor-related courses from a list of approved electives.

## The Major

Core Courses (required of all majors)
Labor Studies 101. Introduction to Labor Studies
Economics 101. Introductory E conomics I
Labor Studies 240. Labor Unions and Industrial Relations
History 274. American Labor History from World War I to the Present
Labor Studies 310. Labor Law: An Institutional Approach
Labor Studies 320. Perspectives on the Labor Movement

Track A (Students take either Track A or Track B)
Economics 102. Introductory E conomics II
E conomics 249. Statistics as Applied to Economics
and one of the following:
Economics 213. E conomics of the Labor Force
or
Economics 214. Economics of Organized Labor

Track B
Sociology 101. General Introduction to Sociol ogy
Sociology 205. Social Statistics I
and one of the following:
Sociology 228. Industrial Sociology or
Sociology 224. Organizational Sociology

## Electives

Students will complete 9 credits from the following courses:

History 273. American Labor History to World War I
History 275. Business in American Life
Psychology 226. Psychology in Business and Industry
Political Science 225. Politics and Administration of Industrial Regulation
Economics 240. Economics of Business Organization
and one of the following:
Sociology 219. Class, Power, and Inequality
Economics 219. Economics of Class, Race, and Sex
Urban Studies 101. Urban Issues: Poverty and Affluence
Political Science 222. Power in America.
Students may also fulfill the elective requirement by completing certain courses in the alternate track of core requirements, i.e., E conomics 213, 214, Sociology 224, 228, if not taken to fulfill core requirements.

## The Minor

Students who minor in Labor Studies will take a minimum of 18 credits in Labor Studies: Introduction to Labor Studies (LS 101), Labor Unions and Industrial Relations (LS 240), Theories of Labor and the Labor Movement (LS 320), and three other courses listed as either core or elective requirements for the Labor Studies major.

## LABOR STUDIES COURSES

101. Introduction to Labor Studies. 3 hr.; 3 cr. The course will introduce students to the field of Iabor studies. It will cover such topics as: the social organization of work, labor as a factor of production, changes in the composition of the labor force, labor segmentation, and the
impact of technology on work and workers.

## 240. Labor Unions and Industrial

Relations. 3 hr.; 3 cr. Prereq.: LS 101.
This course will examine labor-manage ment relations in the contemporary U.S. considering both the internal dynamics of management, and the structure, government, and goals of labor unions. Particular emphasis will be given to comparing and contrasting labor relations in unionized and non-unionized workplaces, and in different sectors of the economy (manufacturing, services, and government). Topics to be covered include: the devel opment of management's industrial relations policies, the impact of the changing international economy on labor, the dynamics of collective bargaining, decision-making processes within unions, and problems of union democracy.
310. Labor Law: An Institutional Approach. 3 hr.; 3 cr. Prereq.: LS 240. The course will examine primary (case) and secondary (commentary) materials on the legislative, administrative, and contextual aspects of labor law, particularly as they pertain to collective bargaining and union organization. The course will be divided into three parts: 1) U.S. Law and Labor Relations (including an examination of institutional and sociological aspects of law, a review of Constitutional and common Iaw basis for labor law, a survey of the history and current status of labor law and labor relations, and a comparative overview of labor law and labor relations); 2) The legislative, judicial, and administrative aspects of labor law, including issues concerning jurisdiction, procedure, and the interpretation of contracts; 3) Current problems in labor law, with an emphasis on practical application.
320. Perspectives on the Labor Movement. 3 hr.; 3 cr. Prereq.: LS 240. This course will examine theories of industria relations systems; the philosophy and political perspectives of labor unions; and the current discussion concerning the state and future of the labor movement. Issues examined will include the meaning of work, its changing nature, and the consequent implications for industrial relations and the trade unions.

## Latin A merican A rea Studies

Administrative CommitteeChair and Undergraduate Adviser: George Priestley

Office: Kissena Hall 310, 997-2895
This major is designed to provide a detailed knowledge of the devel opment, institutions, Ianguage, and customs of Latin America. It is intended for two categories of students. Those who intend after graduation to go into careers such as inter-American relations, commerce, banking, or journalism will ordinarily take the Latin American Area Studies concentration. It is strongly recommended that those who intend to go on to do graduate work should choose a minor, combining Latin American Area Studies with economics, Hispanic languages and literatures, history, anthropology, or political science. The Latin American Area Studies major is accepted as an academic major in partial fulfillment for the certificate to teach social studies (Grades 7-12). Prospective majors should consult with the Chair.

The courses listed below are offered as a means of acquainting the student with the physical environment of the area, its people, their languages and literature, contributions to civilization, educational and scientific institutions, arts and music, economic and political problems, history, and relations with one another and with other states. All courses are conducted in English, except those dealing with languages and literature.

## Area Courses

Anthropology 205, 206, 243, 397
Art 200, 244, 343
Economics 212, 383, 391, 392
History 105, 106, 243, 392, 393, 394
Linguistics 191
Political Science 236, 239, 243, 259, 291, 292
Sociology 239, 391, 392
Hispanic Languages 207, 235, 312, 370, 371, 372, 373

See appropriate department listing for description, credits, and scheduling information.

Visiting professors make it possible to offer other courses not listed here. Subjects in Special Problems, offered by the different departments, and courses in Special Studies and tutorials for 1, 2, or 3 credits under the Honors Program, allow additional flexibility in arranging
a varied program suitable to the needs and interests of the student.

## The Major

Students majoring in Latin American area studies al one are required to take 30 credits from the area and language courses listed. The 30 credits must include Spanish 312 or 370, Economics 212 and 383, and Latin American Area Studies 201 and 381.

Students majoring in Latin American areas studies, either alone or in combination with another department, are required to take Latin American Area Studies 381 in their senior year or, with permission, in their junior year.

## SEMINARS AND SPECIAL COURSES

201. Contemporary Society and Film in Latin America. 3 hr .; 3 cr. Prereq. or coreq.: English 120 and sophomore standing. A critical examination of both contemporary Latin American society and film. Organized in five thematic blocks, the course challenges the conventional wisdom about modern Latin America and critically assesses four types of film (commercial, educational, documentary, and propaganda) as texts about society. There are readings, written assignments, and class discussions. Fall, Spring
202. Latin American Seminar. 3 hr.; 3 cr. Prereq.: Permission of the Committee Chair. Designed primarily for seniors majoring in Latin American area studies, but nonmajors with a special interest in such studies may be admitted. Consists of a survey and synthesis of the principal problems of Latin America, stressing the broader aspects and relationships of the materials previously studied. The purpose of the course is to correlate and to bring into final perspective the materials previously studied in the Latin American concentration. It is under the general supervision of the administrative committee. Each student is required to prepare and present a research paper. Fall, Spring
203. Latin American Special Problems. Hr. to be arranged; 3 cr. Prereq.: Permission of the Committee Chair. Makes provision for intense study in a special field chosen by the student with approval of the Chair of Latin American Area Studies. Open only to upper juniors and seniors whose previous work indicates special ability to profit from directed, individual work done outside the class. Fall, Spring

# TheLibrary 

Chief Librarian: Sharon Bonk

Professors: Bonk, Kaufmann; Associate Professors: Brady, Chiang, DeLuise, Simor, Swensen, Taler; Assistant Professors: Macomber, Ponte, Sanudo, Wall; Instructors: Gomez, Li; Lecturers: Katz, Ronnermann, Silverman; Library Systems Head: Chitty; Department Secre tary: Friedman

Dept. Office: Rosenthal 328, 997-3760
A formal course in basic library research methods is offered by the library faculty. Upon request, course-related instruction in a variety of discipline areas, both graduate and undergraduate, is also available for class groups. These include, where relevant, instruction in online and print access to multiple data bases. Orientation tours are also offered on a regular schedule, day and evening, during the first month of the semester. These are open to all library users. More specialized orientation is also offered to all new faculty annually.

The Benjamin S. Rosenthal Library, which holds the principal collections, also houses the Art Library and the Art Center at Queens College. The Music Library is located in the Music Building. (F or additional information, seeFacilities, p. 8.)

See page 197, Special Sequences and Courses.

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
†Offered either Fall or Spring; see Class Schedule
$\dagger \dagger$ May be offered; see Class Schedule.

## Library \& Information Studies

Chair and Director: Marianne A. Cooper
Graduate Adviser: K aren P. Smith

Dept. Office: Rosenthal 254, 997-3790
Professor: Surprenant; Associate Professors: Blake, Cooper, Kibirige, Smith; Adjunct Professor: Cohen; Department Secretary: Mathios

Library and Information Studies offers a graduate program leading to the degree of Master of Library Science (M.L.S.), as well as a post-master's certificate. The purpose of the program is to prepare library/information professionals who will function in various library/information environments. Library/information science consists of a comprehensive, interdisciplinary body of knowledge concerning the creation, communication, location, evaluation, selection, acquisition, analysis, organization, storage, retrieval, preservation, management, dissemination, and use of information (data, concepts, ideas, images) and documents of all types (print and electronic records, sound recordings, videorecordings, films, and pictures) that may be used to store and convey this information. Its purpose is to serve the informational needs and interests (artistic, business, economic, educational, recreational, scientific, and technical) of individuals, groups, and institutions.

No undergraduate degree and/or major in library science is available currently.

For further details consult the Graduate School of Library and Information Studies.

## COURSES

The following graduate courses are open to qualified undergraduate students with permission of the School and the Office of Graduate Studies.
700. The Technology of Information. 2 hr. plus supervised lab.; 3 cr. This course will introduce the student to the conceptual and practical elements of visual and computer literacy for the library and information science profession. Particular attention will be paid to their place and role in libraries and information centers. A laboratory session following each class will give students the opportunity to apply some of the concepts learned in class and
to learn and strengthen basic skills. F all, Spring
701. Fundamentals of Library and

Information Science. 2 hr . plus conf. or supervised lab.; 3 cr. Overview of the curriculum, historical introduction to librarianship and information science as a profession; professional literature; role and structure of libraries and information agencies in the conservation and dissemination of knowledge to various clientele; nature of research in library and information science. Fall, Spring
702. Information Sources and Service: General. 2 hr. plus conf. or supervised lab.; 3 cr . Study and application of general reference, bibliographic, and other information sources (print and electronic); techniques and procedures for serving the needs of various clientele; criteria for evaluating these sources and services and for developing appropriate collections. Fall, Spring

## 703. Introduction to Technical Ser-

vices. 2 hr. plus supervised lab.; 3 cr . The focus will be on the principles of providing access to items using the current cataloging code and the provision of subject access to items through subject headings' lists and classification systems. Study and practical exercises in all areas of technical services. Fall, Spring

## Linguistics

Chair: Robert M. Vago
GraduateAdviser: Herbert W. Seliger
Professors: Cairns, Fiengo, Seliger Stevens, Vago; Associate Professors: Hall, Klein; Assistant Professor: Martohardjono; Department Secretary: Mahadeo

Dept. Office: Kissena 347, 997-2870

The main goal of the Linguistics Department is to contribute to the basic, liberal arts education of Queens College students; this holds for students who major in linguistics as well as for the numerous nonmajors who take linguistics courses. Courses are designed to demonstrate many of the subtle properties of various aspects of human language; we hope thereby to impart to the student a deeper appreciation and understanding of human nature.

## The Major

There are two major tracks, the General and Applied. Each major track requires 39 credits within the Linguistics Department. 24 credits are within the core courses taken by all majors, and 15 (including electives) are in the tracks. No course may be used for the linguistics major with a grade lower than C -, and no linguistics course may be used to satisfy a prerequisite with a grade lower than C. A student may repeat a course in the Linguistics Department no more than once, except with the permission of the department.

## Language Proficiency Test

The Linguistics Department will evaluate the written and spoken English of all prospective ESL teachers who pursue the undergraduate major in linguistics. Students will write a short narrative and have a taped interview with a faculty member. Only students deemed to be sufficiently proficient in English will be permitted to pursue the academic requirements for professional qualification for Teaching English to Speakers of Other Languages.

## Introductory Core Courses

Linguistics 101, 102, 110, 120.
200-Level Core Courses
Linguistics 205, 210, 220.
300-Level Core Course
Linguistics 306.
Applied Track
Linguistics 206, 240, 340.

## General Track

Either Linguistics 310 or Linguistics 320, 360.

## Electives

Applied Linguistics students must elect two and General Linguistics students three linguistics courses not otherwise required in the student's track. At least one of these must be a 300 -level course.

## Teaching English as a Second Language

The student who wants to teach English as a second language may prepare as a teacher of English to speakers of other languages either on the elementary school level or on the secondary school and adult level. The student primarily interested in teaching on the elementary school level will be expected to complete the usual major in Elementary Education. The student primarily interested in teaching on the secondary school and
adult level will be expected to minor in Secondary Education.

## Joint Major in Communication and Linguistics

This program is being revised. Please consult with advisers from the Linguistics Department concerning future plans for the program

## The Minor

Students interested in a minor in linguistics should consult a departmental adviser.

## Advisement

Students who want to major in linguistics should see the department secretary for assignment to a permanent adviser who will help them complete their concentration form and answer any questions they might have about linguistics.

## COURSES

101. Introduction to Language. 3 hr .; 3 cr. A survey of the scientific study of Ianguage: structure, language and society, language history, first and second language acquisition, and other related topics. Fall, Spring
102. Introduction to Linguistic Analysis. 3 hr .; 3 cr . This course is designed to train students to develop and evaluate hypotheses about linguistic data, in the areas of phonology (sound structure of language), syntax (sentence structure), and morphology (word structure). F all, Spring
103. Phonetics. 3 hr .; 3 cr . Theories of speech production. Phonetic properties of language. Practice in hearing, producing, and transcribing speech sounds. Fall
104. The Structure of English Words. 3 hr.; 3 cr . The structure of the E nglish vocabulary; how words are formed; rules for determining the meaning, spelling, and pronunciation of English words. There are several writing assignments in this course Fall, Spring
105. Syntax I. 3 hr.; 3 cr . The syntactic structure of human language, Part I. Fall
106. Special Problems. 191.1-191.3, 1-3 hr.; 1-3 cr. Topics to be announced. May be repeated once for credit provided the topic is different.
107. Languages of the World. 3 hr .; 3 cr . Prereq.: Linguistics 101 with C or better. A survey of selected aspects of several Ianguages, drawn from different families. There are several writing assignments in this course. Fall
108. Writing Systems. 3 hr.; 3 cr. Prereq.: Linguistics 101 with C or better. A survey of the histories and structures of writing
systems employed by human languages. There are several writing assignments in this course. Spring
109. Sociolinguistics. 3 hr.; 3 cr. Prereq.: Linguistics 101 or CAS 101 with C or better. Introduction to the study of the relationship between language and society. Socio-cultural factors which influence language form, use, and history. There are several writing assignments in this course. Fall
110. Bilingualism. 3 hr.; 3 cr. Prereq.: Linguistics 101 or CAS 101 with C or better. Psychological and social aspects of bilingualism. There are several writing assignments in this course. Spring
111. Language and Mind. 3 hr.; 3 cr . Prereq.: Linguistics 101 with C or better. Influential views in the acquisition of Ianguage, the relation between language and thought, and the relation between language and culture/world views. $\dagger$
112. Phonology. 3 hr .; 3 cr . Prereq.: Linguistics 101 and 110 with C or better in both. The sound pattern of language, with implications for applied linguistics. Spring
113. Syntax II. 3 hr.; 3 cr. Prereq.: Linguistics 101 and 120 with C or better in both. Syntactic structure of human language, Part II. Continuation of Linguistics 120. Spring
114. Introduction to Applied Linguis-
tics. 3 hr.; 3 cr. Prereq.: Linguistics 101 with C or better. The application of linguistic science, primarily to teaching in lan-guage-related areas. Includes a survey of research in linguistic, psychological, and sociolinguistic aspects of second language acquisition. There is a substantial writing commitment in this course. Spring
115. Special Problems. 291.1-291.3, 1-3 hr.; 1-3 cr. Prereq.: Linguistics 101 with C or better. Topics to be announced. May be repeated once for credit provided the topic is different.
116. Semantics and Pragmatics. 3 hr.; 3 cr. Prereq.: Linguistics 120 and 205 with C or better in both. A survey of properties of meaning in language (semantics) and communication strategies people use when they talk to each other (pragmatics). There is a substantial writing commitment in this course. Spring
117. Phonological Theory. 3 hr .; 3 cr . Prereq.: Linguistics 210 with C or better. Theory of phonological analysis, with implications for applications. There is a substantial writing commitment in this course. Fall
118. Syntactic Theory. 3 hr.; 3 cr. Prereq.: Linguistics 220 with C or better. The ory of syntactic analysis. There is a substantial writing assignment in this course. Fall
119. Historical Linguistics. 3 hr.; 3 cr Prereq.: Linguistics 210 or 220 with C or better. Principles of language change.

There are several writing assignments in this course.t†
340. Methods and Materials in Teaching English to Speakers of Other Languages in the Content Areas. 3 hr .; 3 cr . Prereq.: Linguistics 240 with $C$ or better and passing the Linguistics Department's Language Proficiency Test. The course will provide training in the teaching of speaking, reading, writing, and comprehension in English to speakers of other languages at all grade levels. The course will include materials and techniques for teaching English to speakers of other languages through mathematics, science, and social studies. Fall
360. Issues in Linguistic Research. 3 hr.; 3 cr. Prereq.: Linguistics 120 and 205 with C or better in both. This course focuses on contemporary issues in any of the major branches of linguistics. May be repeated for credit when topics vary sufficiently. There is a substantial writing commitment in this course. Spring
391. Special Problems. 391.1-391.3, 1-3 hr.; 1-3 cr. Prereq.: Linguistics 210 or 220 with C or better. May be repeated once for credit provided the topic is different.
392. Tutorial. 392.1-392.3, 1-3 hr.; 1-3 cr Prereq.: J unior or senior standing. Intensive study in a special field, chosen by the student, under the direction of a member of the faculty, and resulting in a written report. Fall, Spring

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
†Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.

## M athematics

Chair: J ack P. Diamond
Assistant Chair for Evening Studies: Nick Metas

Assistant to the Chair: Steven Kahan
GraduateAdviser: Nick Metas
Dept. Office: Kiely 237, 997-5800
Einstein Professor: Sullivan; Professors: Braun, Cowen, Dodziuk, Emerson, Goldberg, Hechler, Hershenov, Itzkowitz, Kahane, Kramer, Kulkarni, Lieberman, Mendelson, Ralescu, Sultan, Swick, Tischler, Weintraub, Weiss; Associate Professors: Diamond, Maller, Mansfield, Roskes, Rothenberg, Sisser, Steinberg; Assistant Professors: J iang, Metas; Lecturers: Chen, Don, Eisen, Goodman, Hoffman, K ahan, Perry, Schwartz, Sims; Laboratory Supervisor: End; Department Secretaries: Green, Mills

The Department of Mathematics offers a program for those students who have any of the following interests or objectives: the teaching of mathematics in secondary schools; natural science and, in particular, mathematical physics; mathematical statistics or actuarial mathematics; college teaching; applied mathematics.

See page 41 for information on basic skills requirements in mathematics.

## The Majors

Students majoring in mathematics may choose either the standard major, the applied mathematics option, the secondary education option, or the elementary education option. All students must have completed Mathematics 111 and 112 or the equivalent.

## The Standard Major

All students majoring in mathematics must take courses 201 and 202 (or 207), 310 (or 208 or 320 ), and either 130 or 137. In addition, they must take Physics 121 and 122, or Physics 103 and 104, or Physics 145 and 146, or Physics 116, 117, and 118, or Economics 225 and 226. They must also take six of the courses among those listed below in Groups A and B, at least four of which must be chosen from Group A. Furthermore, at least one of the Group A courses must be either Mathematics 317, 333, 613, or 617.
Group A
Mathematics 230, 317, 320, 333, 337,
$338,345,346,395,396$, and all 600-level mathematics courses, except Mathematics 601. Math 320 may not be counted as
a Group A course if it has been used to satisfy the requirement above.
Group B
Mathematics 220, 223, 224, 241, 242, 245, 247, 248, 249, 217 (only for evening students who have not taken Math 223), 328, 518, 524.

All majors must file an approved concentration form by the end of the upper sophomore semester. The six additional courses required for the major must be part of this concentration form.

With the permission of the Chair or the Assistant Chair for Evening Studies, courses in physics may be substituted for some of the courses in mathematics listed in Group A or B.

For majors centering on a specific career objective, it is recommended, but not required, that elective courses be chosen from those listed below:

High School Teaching: Mathematics 317 (or 617) and Mathematics 618 and 241, plus courses chosen from Mathematics 310,333 (or 613), 518, 524, 619, 621, 626, 636. Courses in computer science and physics are strongly recommended.

College Teaching: Mathematics 310, 320, 337, 338 (or 333 or 613), 609, 612, 614, 618, 619, 621, 624, 625, 626, 628, 631, 634, 636

Mathematical Physics: Mathematics 220, 223, 224, 328, 333 (or 613), 345, $346,614,624,628$, and a number of physics courses beyond Physics 146.

Computer Science: Mathematics 220,
223, 224, 230, 241, 242, 245, 247, 248, 249, 310, 328, 333 (or 613), 614, 621, 623, 624, 625, 626, 628, 633, 634, 636.

Statistics: Mathematics 241, 242 621, 624, 633, 635, and 614.

Actuarial Work: Mathematics 241, 242, 247, 255, 371, 372, 621, 623, 624, 625, 633; Accounting 101 and 102. (These courses will adequately prepare the student for the first three actuarial examinations.)

## The Applied Mathematics Option

All students electing the applied mathematics option must take:
Mathematics 201 and 202 (or 207);
Either Mathematics 130 or 137; Either Mathematics 241 or 611; Computer Science 101.

They must also take six courses from Group I, at least two of which must be numbered 300 or higher, and must follow one of the tracks in Group II below:

Group I
Mathematics 208, 220, 223, 224, 230,
242, 245, 247, 248, 249, 310, 328, 333,
613, 614, 619, 621, 623, 624, 625, 628,

633, 634, 635, 636.
Except for students in the Operations Research track, students cannot use all three of the courses 247, 248, 249 in fulfilling the Group I requirement

Group II Consult your adviser for an updated list. Biology track: Biology 101, 102, and Chemistry 115, 116 (or equivalent). Computer Science track: Any two courses chosen from Computer Science 103, 301, 341, 641, 645.

Economics track: E conomics 101, 102, 225, 226.

Physics track: Physics 145, 146 and two courses to be chosen from 213, 238, 311, 312, 611, 612, 615, and Mathematics 345, 346.

Psychol ogy track: Psychology 101, 107, 213, and two courses to be chosen from Psychol ogy 311-315. Students should include either Mathematics 242 or Mathematics 633 among the courses chosen from Group I.

Operations Research track: Three additional courses from Group I, to make a total of nine; the nine courses must include Mathematics 247 (or 248), 623, and 633.

A series of courses making up a meaningful program in an area in which mathematics has significant application This series must be approved by the student's faculty adviser.

E ach student taking the applied mathematics option must visit the Mathematics Department office by the end of the upper sophomore year in order to be assigned a faculty adviser, who will meet with the student at least once a year to coordinate the student's program. With the approval of this faculty adviser, a student may 1) substitute one course from the Mathematics Department (numbered above 300) for one of the courses in Group I, and 2) replace one of the required courses in Group I with an additional course from Group II (in the same track) or with one of the fol lowing additional courses:
Biology track: Biology 250, Physics 213
Economics track: Economics 382

## The Secondary Education Option

All students electing the secondary education option must take the following courses: Mathematics 130 or 137; Mathematics 201; Mathematics 509 or 626; Mathematics 241 or 611; Mathematics 518; Mathematics 220; Computer Science 101 and 103; Secondary Education 361 and 371. Five additional courses chosen from Lists $X$ and $Y$ below, of which at least three must be from List X :

List X
Mathematics 310, 317 (or 617), 333 (or 613), 503, 524, 609, 612, 618, 619, and 626 (if this course is not used to satisfy the requirement above). Mathematics 310 is recommended for those who expect to teach calculus. Also especially recommended are 317 (or 617), 333 (or 613), 618, and 619.

List Y
Mathematics 202, 223, 230, 242, 245,
247, 248, 320, 385, and all 600-level courses. M athematics 202 is usually required for entry into master's degree programs in mathematics. A year of college physics is recommended.

Each student taking the mathematics education option should consult the Secondary Education Department of the School of Education about requirements for professional education courses leading to teacher certification (Powdermaker 190, 997-5150). In addition, the student must visit Professor Elliott Mendelson of the Mathematics Department by the end of the upper sophomore year. Professor Mendelson will meet with the student at least once a year to coordinate the student's program.

## The Elementary Education Option

This option is available only to students enrolled in the Elementary and Early Childhood Education program (Powdermaker 169, 997-5300). All students electing this option must take: Mathematics 19, 101-103 (or 111-112), 130, 220, 241, 509, 518 (or 618), and Computer Science 95. One additional math course will be chosen with the advice and approval of the student's Mathematics department adviser. E ach student must obtain a Mathematics department adviser by the beginning of the junior year.

## Special Requirements

A student who has received two grades of D+ or lower in mathematics courses may not proceed with further courses in mathematics without written permission from the Chair or Assistant Chair for Evening Studies. A course in which a grade of $\mathrm{D}+$ or lower is obtained cannot be used as one of the six elective courses without written permission from the Chair or Assistant Chair for Evening Studies.

It is recommended but not required that students who expect to work for higher degrees in mathematics secure as early as possible a reading knowledge of at least two of the following languages: French, German, and Russian.

## The Minor

A minor in mathematics is offered to any student who completes at least 15 credits in a coherent program of mathematics courses. This shall include Mathematics 201 and at least four other courses numbered 130 or higher, with the exception of Mathematics 371, 372, and 385 . Unless permission of the department is obtained, Mathematics 19 cannot be included as part of the minor. (Elementary Education students should consult that department for their special requirements for a minor in mathematics.) The student's program must be approved by the Mathematics Department; a concentration form must be filed with and approved by the department by the end of the student's lower junior semester. An overall index of at least 2.0 in courses numbered 130 or higher is required, and no course in which a grade bel ow C - is obtained will be recognized as fulfilling the requirements for a minor.

## Actuarial Examinations

F or those intending to take the Society of Actuaries examinations, the following courses will be helpful:

For the exam in calculus and linear algebra: Mathematics $111,112,130,201$, 371.

For the exam in probability and statistics: Mathematics 241, 242, 372, 621, 633.

For the exam in operations research: Mathematics 247, 249, 623.

For the exam in numerical methods: Mathematics 624, 625.

For the exam on the mathematics of compound interest: Mathematics 76.

## Departmental Honors

Departmental honors are awarded each Spring semester. The Eva and J acob Paulson Memorial Award is presented to a graduating senior for outstanding work in mathematics. The Thomas A. Budne Memorial Award is given for special talent and creativity in Mathematics. The Doris and Paul Tang Memorial Award is presented for excellence in the study of probability and statistics. The following awards are presented to graduating seniors for excellence in mathematics: the Samuel J acobs Memorial Award, the Claire and Samuel J acobs Award, the Arthur Sard Memorial Award, and the Banesh H offman Memorial Award.

To be eligible for the awards, a student must have a high index in mathematics and must have taken courses
beyond the minimum requirement for a major.

## COURSES

All students planning to take a course in calculus should follow the results of the mathematics placement examination. Mathematics 12 and 14 do not prepare students for calculus; they are designed for nonmathematics and nonscience students who want to take a course in mathematics appreciation or in probability and statistics.

In order to register for Mathematics 10, $21,22,100,101,102,103,111,112,118$, or 201, a student must pass the appropriate prerequisite course with a grade of C - or better. This requirement will be enforced vigorously; it can be waived only upon approval of the department Chair.

Students who have received credit for a calculus course numbered 100 or higher cannot receive credit for a math course numbered 10 or lower.
4. Elementary Algebra. $4.24,4 \mathrm{hr}$.; 2 cr., 4.25, 5 hr.; 2 cr., $4.26,6$ hr.; 2 cr. Prereq.: Placement examination or permission of department. (Students will register in 4-, 5 , or 6-hour sections, depending on their need for additional review and drill.) Topics include integer arithmetic, first degree equations and inequalities, rational expressions and equations, exponent rules, factoring, graphing straight lines, systems of linear equations, radical expressions, quadratic equations, verbal problems, basic concepts of plane geometry. Fall, Spring
6. Intermediate Algebra. 6.13, 3 hr.; 1 cr., 6.14, 4 hr.; 1 cr. Prereq.: Mathematics 4 or knowledge of elementary algebra and geometry. Topics include negative and fractional exponents, scientific notation, radical expressions and equations, slope, parallel and perpendicular lines, equations of a line, systems of linear equations, verbal problems. Successful completion of this course satisfies the basic skills requirement in mathematics and prepares the student for Mathematics 10, 12, 14, 21, and 76. Fall, Spring
*10. Precalculus. 10.23, 3 hr.; 2 cr., 10.24, 4 hr.; 2 cr. Prereq.: Mathematics 6 or knowledge of intermediate algebra. This course provides a background in those topics that are needed to be successful in calculus. Topics include graphing techniques, systems of equations, functions, logarithms, and trigonometry. Mathematics 10 will prepare students for Mathematics 100, 101, or 111, depending on the individual's progress. Fall, Spring
*12. Ideas in Mathematics. 3 hr.; 3 cr. Prereq.: Mathematics 6 or two and one-half years of high school mathematics including intermediate algebra. A liberal arts mathe-
*Students who are required to satisfy the Queens College mathematics basic skills require ment cannot do so by receiving transfer credit for a course having Math 6 as a prerequisite at Queens. Math 6 must be taken or the QC placement test must be passed.
matics course for nonmathematics, nonscience majors. Will explore several areas of mathematics to give the student an appreciation of the significance of mathematics, both in terms of its applications and of its place in the history of civilization. Subject matter drawn from virtually the entire spectrum of modern mathematics, including such areas as calculus, probability, game theory, number theory, set theory, logic, non-E uclidean geometry, topology, and group theory. Not open to students who have received credit for Mathematics 201 (unless permission of the Chair is obtained). (This course may be counted toward the LASAR Scientific Methodology and Quantitative Reasoning requirement.) Fall, Spring
*14. Elementary Statistics. 3 hr.; 3 cr. Prereq.: Mathematics 6 or two and one-half years of high school mathematics including intermediate algebra. An introduction to mathematical probability and statistics for the general student. Not open to mathematics, physics, or chemistry majors, or to students receiving credit for Mathematics 241, 611, 621, or 633. (This course may be counted toward the LASAR Scientific Methodology and Quantitative Reasoning requirement.) Fall, Spring

## *19. Mathematics for Elementary

School Teachers. 3 hr.; 3 cr. Prereq.: Mathematics 6 or the equivalent. This course is designed to make prospective elementary school teachers aware of the beauty, meaning, and relevance of mathematics. Topics are taken from those areas of mathematics that are related to the elementary school curriculum, and emphasis is placed on clearing up common misunderstandings of mathematical concepts and results. (This course may be counted toward the LASAR Scientific Methodology and Quantitative Reasoning requirement.) F all, Spring

## *21. Calculus with Applications to the

 Social Sciences I. 3 hr.; 3 cr. Prereq.: Two and one-half years of high school mathematics including intermediate algebra, or Mathematics 6 . The first part of a twosemester sequence (Mathematics 21 and 22) intended to introduce the fundamental ideas and techniques of the calculus to nonscience students. Special emphasis is given to applications. Credit is given for each course satisfactorily completed; a student need not take the entire sequence. Topics include functions and graphs; derivatives and differentiation techniques; the marginal concept in economics; optimization methods; compound interest; exponential and logarithmic functions. Not open to students who are taking or who have passed Mathematics 100, 101, or 111. (This course may be counted toward the LASAR Scientific Methodology and Quantitative Reasoning requirement.) Fall, Spring22. Calculus with Applications to the Social Sciences II. 3 hr.; 3 cr. Prereq.: Mathematics 21. A continuation of Mathematics 21. Topics include integrals and integration techniques; applications of integrals to statistics via probability densities;
consumer's and producer's surplus; elementary differential equations; functions of several variables; optimization methods; Lagrange multipliers; multiple integrals. Spring
23. Mathematics of Finance. 3 hr .; 3 cr . Prereq.: Mathematics 6 or knowledge of intermediate algebra. Topics include simple interest, compound interest, mortgages, bonds, depreciation, annuities, and life insurance. This course may be counted toward the LASAR Scientific Methodology and Quantitative Reasoning requirement. Fall, Spring
24. Calculus and Analytic Geometry (with review of algebra and trigonometry). 5 hr. plus lab. instr.; 3 cr. Prereq.: Mathematics 6 or knowledge of intermedi ate algebra. Mathematics 100 covers the same calculus material as Mathematics 101 but at a slower pace. In addition, Mathematics 100 gives a brief review of intermediate algebra and trigonometry as it is needed in calculus. Not open to students who are taking or who have passed Mathematics 101 or 111.
25. Calculus and Analytic Geometry.

3 hr .; 3 cr. Prereq.: Three years of high school mathematics including intermediate algebra and trigonometry, or Mathematics 10. The first part of a three-semester sequence (M athematics 101, 102, 103), covering the same material as Mathematics 111 and 112. Credit is given for each course satisfactorily completed; a student need not take the entire sequence. Not open to students who are taking or who have passed Mathematics 100 or 111. (This course may be counted toward the LASAR Scientific Methodology and Quantitative Reasoning requirement.) F all, Spring
102. Calculus. 3 hr.; 3 cr. Prereq.: Mathematics 100 or 101. A continuation of Mathematics 101. Not open to students who are taking or who have passed Mathematics 111. Fall, Spring
103. Calculus. 3 hr.; 3 cr. Prereq.: Mathematics 102. Mathematics 111 does not satisfy the prerequisite. A continuation of Mathematics 102. Not open to students who are taking or who have passed Mathematics 112. Fall, Spring

## 111. Calculus and Analytic Geometry.

4 hr .; 4 cr. Prereq.: Three years of high school mathematics including intermediate algebra and trigonometry, or Mathematics 10. The first part of a two-semester sequence (Mathematics 111 and 112) intended for students who want to study mathematics, physics, chemistry, or engineering. Credit is given for each course satisfactorily completed; a student need not take the entire sequence. Students who want a less rapid introduction to calculus should take Mathematics 101 . Topics include sets, inequalities, straight lines, circles, functions, limits, continuity, the derivative, formulas of differentiation, implicit differentiation, vel ocity, acceleration, maxima and minima, Rolle's theorem, the mean value theorem, points of inflec-
tion, curve sketching, antiderivatives. Not open to students who are taking or who have passed Mathematics 100 or 101. (This course may be counted toward the LASAR Scientific Methodology and Quantitative Reasoning requirement.) Fall, Spring
112. Calculus. 4 hr.; 4 cr. Prereq.: Mathematics 111. Deals with several aspects of differential and integral calculus. Among the topics studied are the definite integral, applications of the definite integral, the dif ferentiation of logarithmic, exponential, and inverse trigonometric functions, integration, indeterminate forms, improper integrals, infinite series, and expansions of functions. Applications to problems of geometry and physics. Not open to students who are taking or who have passed Mathematics 102. Fall, Spring

117, 118. Honors Calculus I, II. 4 hr.; 4 cr. each semester. Prereq.: Permission of Chair. An intensive course that is the first year of a two-year sequence (Mathematics $117,118,207,208)$ that will cover elementary and advanced calculus. A rigorous treatment of calculus from a modern point of view is given. The best mathematics students are urged to take this course. Students taking this course can receive advanced placement credit for calculus courses taken in high school. Not open, without permission of the department Chair, to students who have passed Mathematics 100, 101, or 111. 117-Fall;
118-Spring
120. Discrete Mathematics for Computer Science. 3 hr .; 3 cr . Prereq.: Mathe matics 10 or the equivalent. This course lays the groundwork for further courses in discrete mathematics and theoretical computer science. Topics include: Sets, functions, relations, formal logic (propositional and predicate calculus); elementary number theory; elementary combinatorics and discrete probability; introductory abstract algebra, monoids and groups. Not open to students who have received credit for Mathematics 220. Fall, Spring
130. Linear Algebra with Applications I. $4 \mathrm{hr} . ; 4 \mathrm{cr}$. Prereq.: One semester of calculus. An introduction to linear algebra with emphasis on techniques and applications. Topics to be covered include solutions of systems of linear equations, vector spaces, bases and dimension, linear transformations, matrix algebra, determinants, eigenvalues, and inner products. Not open to students who are enrolled in or who have completed Mathematics 137. Fall, Spring
137. Honors Linear Algebra. 3 hr.; 3 cr. Prereq.: Permission of Chair. An intensive course in linear algebra for superior mathematics students. Not open to students who are enrolled in or who have completed Mathematics $130 . \dagger \dagger$

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125) Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
190. Studies in Mathematics. 190.1-190.6 1-6 hr.; 1-6 cr. Prereq.: Permission of Chair. Topic announced in advance. May be repeated for credit if topic is not the same. $\dagger \dagger$
201. Calculus. 4 hr.; 4 cr. Prereq.: Mathematics 103 or 112. A continuation of the work of Mathematics 103 or 112 . The topics include polar coordinates, vectors, solid analytic geometry, vector-valued functions, double and triple integrals, functions of several variables, partial derivatives. Wherever pos sible, applications are made to problems of geometry and physics. Not open to students who are taking or who have passed $M$ athe matics 22 (unless permission of the Chair is obtained). Fall, Spring
202. Advanced Calculus. 4 hr.; 4 cr. Prereq.: Mathematics 201 and, as prerequisite or corequisite, Mathematics 130 or 137 (or permission of Chair). Vector-valued functions, higher-order derivatives, maxima and minima of functions of several variables, integrals over paths and surfaces, vector analysis. Fall, Spring

## 207, 208. Honors Calculus III, IV. 4 lec.

 hr., 1 conf. hr., and independent work; 5 cr . each sem. Prereq.: Mathematics 118 or Mathematics 201 and permission of Chair. Continuation of Honors Calculus I and II (Mathematics 117, 118), including topics of advanced calculus. 207-Fall; 208-Spring217. E ngineering Mathematics. $3 \mathrm{hr} . ; 3$ cr. Prereq.: Mathematics 201 and a first course in physics. Covers ordinary differen tial equations, Laplace transforms, and Fourier series. Intended for students planning to continue in engineering. Students taking this course may not receive credit for Mathematics 223. Spring
218. Discrete Mathematics. 3 hr.; 3 cr. Prereq.: One semester of calculus or permission of the instructor. Topics taken from the subjects of logic and switching circuits, set theory, combinatorics, graph theory, and their applications. Fall
219. Differential Equations with Numerical Methods I. 3 hr.; 3 cr. Prereq.: Mathematics 201. First order linear, separable, and exact equations; second order linear equations; series solutions; existence and uniqueness theorem; numerical solutions; applications. Students receiving credit for this course may not receive credit for Mathematics 217. Fall, Spring
220. Differential Equations with $\mathbf{N u}$ merical Methods II. 3 hr.; 3 cr. Prereq.: Mathematics 223, and either Mathematics 130 or 135 or 137. Linear systems of equations; stability of linear systems, orbits, phase portraits, periodic solutions, stability boundary value problems; applications. Fall
221. Linear Algebra with Applications II. 3 hr.; 3 cr. Prereq.: M athematics 130 or 135. A second course in linear algebra. Topics include a continuation of matrices and linear transformations, canonical forms, invariants, equivalence relations, similarity of matrices, eigenvalues and eigenvectors, orthogonal transformations and rigid motions, quadratic forms, bilinear maps,
symmetric matrices, reduction of a real quadratic form and applications to conic sections and quadric surfaces. Not open except by permission of the Chair to students who are enrolled in or who have completed Mathematics 137. Fall
222. Introduction to Probability and Mathematical Statistics. 3 hr.; 3 cr. Prereq. or coreq.: Mathematics 22 or 103 or 112. An introduction to the basic concepts and techniques of probability and statistics with an emphasis on applications. Topics to be covered include the axioms of probability, combinatorial methods, conditional probability, discrete and continuous random variables and distributions, expectations, confidence interval estimations, and tests of hypotheses using the normal, t , and chi-square distributions. Students taking this course may not receive credit for Mathematics 14 , except by permission of the Chair. Not open to students who are taking or who have received credit for Mathematics 611. Fall, Spring
223. Methods of Mathematical Statistics. 3 hr.; 3 cr. Prereq.: M athematics 241. A study of those methods of mathematical statistics that are most frequently used in the natural and social sciences, as well as actuarial science. Topics include estimation testing of statistical hypotheses, nonparametric tests, analysis of variance, correlation and regression analysis, and other methods of statistical analysis. Fall
224. Mathematical Models. 3 hr.; 3 cr Prereq.: Mathematics 22 or 102 or 112, and permission of instructor. Construction, analysis, and assessment of mathematical models as they arise in the physical, biological, and social sciences. Specific topics to be announced in advance. May be repeated for credit with permission of the Chair Spring 1998
225. Linear Programming and Game

Theory. 3 hr.; 3 cr. Prereq.: M athematics 130 or 135 or 137 or the equivalent. Methods for handling optimization problems that arise in management, engineering, physical sciences, and social sciences. Topics include convex geometry, the Simplex Algorithm, duality theory, and the Von Neumann minimax theorem of game theory. Fall
248. Nonlinear Programming. 3 hr.; 3 cr. Prereq.: Mathematics 201 and either Mathematics 130 or 135 or 137. Iterative methods for solving nonlinear optimization problems; techniques for handling problems with and without constraints; termination criteria and convergence analysis. Spring
249. Extensions of Linear Programming. 3 hr .; 3 cr . Prereq.: Mathematics 247. Topics include goal programming, integer programming, network analysis, and dynamic programming. Additional topics may be chosen from fractional programming, quadratic programming, convex programming, separable programming, and heuristic programming. A large number of realistic applications will be given. Fall
255. Mathematical Applications of Computer Programming. 2 hr.; 2 cr. Prereq. or coreq.: Mathematics 103 or 112. Solution of problems arising in calculus, using BASIC or another suitable programming language. No prior computer experience or knowledge of a computer language is necessary. Not open to students who are taking or who have received credit for Mathematics 624 or Computer Science 361. Fall, Spring
290. Studies in Mathematics. 290.1290.6, 1-6 hr.; 1-6 cr. Prereq.: Permission of Chair. Topic announced in advance. May be repeated for credit if topic is not the same. $\dagger \dagger$
310. Elementary Real Analysis. 3 hr.; 3 cr. Prereq.: Mathematics 201. Rigorous introduction to functions of a real variable. Topics include real numbers and the completeness property; limits of sequences; elementary topological concepts; continuity and uniform continuity; sequences and series of functions, derivatives; Taylor's Theorem; the Riemann integral. Fall
317. Foundations of Analysis. 3 hr .; 3 cr . Prereq.: Mathematics 201. Language of logic and set theory; relations and functions; Peano systems; iterative processes the natural numbers; integers and integral domains; rational numbers and fields; completeness and the real numbers; alternative characterizations of the real numbers; Archimedean order. Undergraduate students may elect Mathematics 617 in place of Mathematics 317. Students may not take both courses. Spring
320. Introduction to Point Set Topology. 3 hr.; 3 cr. Prereq. or coreq.: Mathematics 201. Presents the basic concepts and some of the fundamental results of point set topology. Spring
328. Introduction to Partial Differential Equations. 3 hr.; 3 cr. Prereq.: Mathematics 217 or 223 . Topics covered include partial differential equations, Fourier series, and boundary value problems. Spring
333. Introduction to Algebraic Struc-
tures. 3 hr.; 3 cr. Prereq.: Mathematics
201. Theory of groups, including cyclic and permutation groups, homomorphisms, normal and factor groups. Theory of rings, integral domains, field of quotients, maximal and prime ideals, rings of polynomials, field extensions. Students may not take both Mathematics 333 and 613. F all
337. Honors Abstract Algebra I. 3 hr.; 3 cr. Prereq.: Permission of Chair. The first part of an intensive two-semester sequence for students intending to do advanced work related to mathematics. Definitions, examples, and basic properties of groups, rings, fields, and vector spaces. (Credit may be received for Mathematics 337 without completing Mathematics 338. Credit may not be received for both Mathematics 337 and either Mathematics 333 or 613 . It is suggested that students needing a slower presentation of abstract al gebra register for

## Mathematics 333 or 613 instead. $) \dagger \dagger$

338. Honors Abstract Algebra II. 3 hr.; 3 cr. Prereq.: Mathematics 337. Further study of the concepts introduced in Mathematics 337. Topics may include Sylow theory of finite groups, structure theory of finitely generated abelian groups, ideal theory and unique factorization domains, Galois theory of fields with applications to constructions by straightedge and compass and to solvability of polynomial equations. $\dagger \dagger$
339. Actuarial Mathematics I. 1 hr.; 1 cr. Prereq. or coreq.: Mathematics 201 and either 130 or 135 or 137 . This course is designed to prepare the student for the General Mathematics portion (Part I) of the actuarial examinations. Class meetings are arranged so that the course is completed by the time of the November Actuarial Examination. Fall
340. Actuarial Mathematics II. 1 hr.; 1 cr. Prereq. or coreq.: At least two of the following courses: Mathematics 242, 621, and 633. This course is designed to prepare the student for the Probability and Statistics portion (Part II) of the actuarial examinations. Class meetings are arranged so that the course is completed by the time of the May Actuarial Examination. Spring

## 385. Mathematical Foundations of the

 Secondary School Curriculum. 3 hr.; 3 cr. Prereq.: Mathematics 201 or permission of instructor. Designed to give prospective secondary school mathematics teachers an understanding of the mathematics they will be teaching. An examination will be made of the thought underlying the secondary curriculum, from a consideration of the nature of mathematics and mathematical thought to the construction of simple mathematical models drawn from secondary school topics. Fall 1996
## 390. Studies in Mathematics. 390.1-

$390.6,1-6 \mathrm{hr}$.; 1-6 cr. Prereq.: Permission of Chair. Topics announced in advance. May be repeated for credit if topic is not the same. $\dagger \dagger$
391, 392. Special Problems. 391.1-391.5, $1-5 \mathrm{hr} . ; 1-5 \mathrm{cr} ., 392.1-392.5,1-5 \mathrm{hr} . ; 1$ 1-5 cr. each sem. Prereq.: J unior or senior standing and permission of Chair. Each student works on a minor research problem under the supervision of a member of the department. Only students of exceptional mathematical ability and promise are admitted to the course. $\dagger \dagger$
395. Honors Seminar I. 395.3-395.6, 3-6 hr.; 3-6 cr. Prereq.: Permission of instructor. A specific area of current research interest will be studied. As the specific material covered may vary from year to year, this course may be taken for credit more than once if the subject matter changes. $\dagger \dagger$
396. Honors Seminar II. 396.3-396.6, 3-6 hr.; 3-6 cr. Prereq.: Mathematics 395. Continuation of Mathematics $395 . \dagger \dagger$
The following graduate courses are
open to qualified undergraduate students.
503. Mathematics from an Algorithmic Standpoint. 3 hr .; 3 cr . Prereq.: One year of calculus. An algorithmic approach to a variety of problems in high school and college mathematics. Experience in programming is not necessary. Topics may include problems from number theory, geometry, calculus and numerical analysis, combinatorics and probability, and games and puzzles. This course aims at a better understanding of mathematics by means of concrete, constructive examples of mathematical concepts and theorems. (This course may not be credited toward the degree of Master of Arts in Mathematics, except with the special permission of the Chair.) Spring
509. Set Theory and Logic. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: One year of calculus or permission of instructor. Propositional logic and truth tables. Basic intuitive ideas of set theory: cardinals, order types, and ordinals. May not be credited toward the Master of Arts degree in Mathematics.
518. College Geometry. 3 hr .; 3 cr . Prereq.: Mathematics 130 or 135 or 137. Advanced topics in plane geometry, transformation geometry. Not open to candidates for the Master of Arts degree in Mathematics. Fall
524. History of Mathematics. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq. or coreq.: Mathematics 201. Not open to candidates for the Master of Arts degree in Mathematics. Fall
525. History of Modern Mathematics. 3 hr.; 3 cr. Prereq.: Mathematics 524 or permission of instructor. Selected topics from the history of nineteenth- and twentiethcentury mathematics, e.g., topology, measure theory, paradoxes and mathematical logic, modern algebra, non-Euclidean geometries, foundations of analysis. May not be credited toward the Master of Arts degree in Mathematics.
550. Studies in Mathematics. 1-3 hr.; 1-3 cr. Prereq.: Permission of Chair. Topic will be announced in advance. May be repeated once for credit if topic is not the same. Not open to candidates for the Master of Arts degree in Mathematics. $\dagger \dagger$
555. Mathematics of Games and Puzzles. 3 hr.; 3 cr. Prereq.: Two years of calculus or permission of instructor. Elements of game theory, analysis of puzzles such as weighing problems, mazes, Instant Insanity, magic squares, paradoxes, etc. May not be credited toward the Master of Arts degree in Mathematics.
601. Discrete Mathematics for Computer Science. $4 \mathrm{hr} . ; 3 \mathrm{cr}$. An introduction to discrete mathematics for those incoming Computer Science Master's degree students who do not have an undergraduate background in discrete mathematics. Topics include elementary set theory, elements of abstract algebra, propositional calculus and Boolean algebra, proofs, mathematical
induction, combinatorics, graphs and discrete probability theory. Students may not receive credit for both Mathematics 601 and either Mathematics 120, 220 or Computer Science 220. Mathematics 601 cannot be counted toward the Bachelor's or Master's degree in Mathematics.
609. Introduction to Set Theory. 3 hr .; 3 cr. Prereq.: Mathematics 201 or permission of Chair. Axiomatic development of set theory: functions, ordinal and cardinal numbers, axiom of choice, Zorn's lemma, continuum hypothesis. Spring
611. Introduction to Mathematical Probability. 3 hr.; 3 cr. Prereq.: Mathematics 201. A first course in probability at an advanced level. Topics to be covered include axioms of probability, combinatorial analysis, conditional probability, continuous and discrete random variables, binomial, Poisson, normal, exponential and other distributions, mathematical expectation, generating functions, and Markov chains. Not open to students who havereceived credit for Mathematics 241 or 621 May not be credited toward the Master of Art degree in Mathematics. Spring
612. Projective Geometry. 3 hr.; 3 cr. Prereq.: Mathematics 130 or 135 or 137. Study of the projective plane. $\dagger \dagger$
613. Algebraic Structures. 3 hr .; 3 cr . Prereq.: Mathematics 130 or 135 or 137. Groups, rings, polynomials, fields, Galois theory. Students may not take both Mathematics 333 and 613. Spring
614. F unctions of Real Variables. 3 hr .; 3 cr. Prereq.: Course in Elementary Real Analysis or Point Set Topology (equivalent of Mathematics 310 or 320), or permission of instructor. Provides a foundation for further study in mathematical analysis. Topics include basic topology in metric spaces; continuity; uniform convergence and equicontinuity; introduction to Lebesgue theory of integration. Fall
616. Ordinary Differential Equations.

3 hr.; 3 cr. Prereq.: Mathematics 614 or permission of Chair. Existence and uniqueness of solutions, linear systems, Liapunov stability theory, eigenvalue and boundary value problems. Spring 1998
617. Number Systems. 3 hr.; 3 cr. Prereq.: Mathematics 201. Axiomatic development of the integers, rational numbers, real numbers, and complex numbers. Not open to students who have received credit for Mathematics 317. Fall
618. Foundations of Geometry. 3 hr.; 3 cr. Prereq.: Mathematics 103 or 112. Historical perspective. Axiomatics: models, consistency, and independence. Rigorous development of both Euclidean geometry and non-E uclidean geometry of Bolyai and Lobachevski. Spring
619. Theory of Numbers. 3 hr.; 3 cr. Pre req.: Mathematics 130 or 137 . The elementary theory of integers, with applications to many numerical problems. Spring
621. Probability. 3 hr.; 3 cr. Prereq. Undergraduate calculus and an introductory course in probability and statistics, or permission of Chair. Binomial, Poisson, normal, and other distributions. Random variables. Laws of large numbers. Generating functions. Markov chains. N ot open to students who are taking or who have received credit for Mathematics 611. F all
623. Operations Research (Probability Methods). 3 hr.; 3 cr. Prereq.: Course in probability theory (such as Mathematics 241). An introduction to probabilistic methods of operations research. Topics include the general problem of decision-making under uncertainty, project scheduling, probabilistic dynamic programming, inventory models, queuing theory, simulation models, and M onte Carlo methods. The stress is on applications. Spring
624. Numerical Analysis I. 3 hr.; 3 cr . Prereq.: Mathematics 130 or 135 or 137 and either Mathematics 255 or knowledge of a programming language; coreq.: Mathematics 201. Numerical solutions of nonlinear equations by iteration. Interpolation and polynomial approximation. Numerical differentiation and integration. Fall
625. Numerical Analysis II. 3 hr.; 3 cr. Prereq.: Mathematics 624 or its equivalent including knowledge of a programming language. Numerical solution of systems of linear equations. I terative techniques in linear algebra. Numerical solution of systems of nonlinear equations. Orthogonal polynomials. Least square approximation. Gaussian quadrature. Numerical solution of differential equations. Spring
626. Mathematics and Logic. 3 hr.; 3 cr. Prereq.or coreq.: Mathematics 201 or permission of Chair. Propositional calculus, quantification theory, recursive functions, Gödel's incompleteness theorem. F all
628. Functions of a Complex Variable. 3 hr.; 3 cr. Prereq.: Mathematics 202 or permission of Chair. Topics covered include analytic functions, Cauchy's Integral Theorem, Taylor's Theorem and Laurent series, the calculus of residues, Riemann surfaces, singularities, meromorphic functions. Spring
630. Differential Topology. 3 hr .; 3 cr . Prereq.: Mathematics 202. Differentiable manifolds and properties invariant under differentiable homeomorphisms; differential structures; maps, immersions, imbeddings, diffeomorphisms; implicit function theorem; partitions of unity; manifolds with boundary; smoothing of manifolds. Spring 1997
631. Differential Geometry. 3 hr .; 3 cr . Prereq.: Mathematics 202. The theory of curves and surfaces and an introduction to Riemannian geometry. Fall 1998
632. Differential Forms. 3 hr.; 3 cr. Prereq.: Mathematics 202. A study in a coordi-nate-free fashion of exterior differential forms; the types of integrands that appear in the advanced calculus. Fall 1997
633. Statistical Inference. 3 hr .; 3 cr . Prereq.: A semester of intermediate calculus (the equivalent of Mathematics 201) and either an undergraduate probability course that includes mathematical derivations or Mathematics 611 or 621. Basic concepts and procedures of statistical inference. Spring
634. Theory of Graphs. 3 hr.; 3 cr. Prereq.: Mathematics 201. An introduction to the theory of directed and undirected graphs. The F our-Color Theorem. Application to other fields. Fall
635. Stochastic Processes. 3 hr .; 3 cr . Prereq.: Mathematics 611 or 621. A study of families of random variables. $\dagger \dagger$
636. Combinatorial Theory. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Mathematics 130 or 135 or 137. This course will be concerned with techniques of enumeration. Spring
650. Studies in Mathematics. 1-3 hr.; 13 cr . Prereq.: Permission of Chair. Topic announced in advance. May be repeated for credit if topic is not the same. $\dagger \dagger$

Courses in Reserve
135. Linear Algebra and Geometry I.
345. Theoretical Mechanics.
346. Theoretical Mechanics.

## TheA aron C opland School of $M$ usic

Director: Hubert S. Howe, J r.
Associate Director: Drora Pershing
Assistant Director: Henry Burnett
Assistant to the Director: J onathan Irving

Graduate Adviser: Charles Burkhart
Music Office: Music Building 203, 997-3800; Fax 997-3849

Distinguished Professor: Musgrave; Professors: Berkowitz, Brings, Burkhart, Eisman, Erickson, Hallmark, Heath, Howe, Mandel baum, Orenstein, Peress, Ritt, Roseman, Saylor, Straus, Weinberg, White; Adjunct Professors: Baron, Dreyfus, Glazer, Glickman, Kaplan, Mensch, Rosenbaum; Associate Professors: Aiello, Burnett, Hanna, J olley (visiting), Phillips (visiting), Sang; Adjunct Associate Professors: Emmons, Geber,
Kane, Lincer, Mensch, Moses, Natochenny, Olian, Pardee, Saradjian, Stein-M allow, Vinci, Von Wurtzler; Assistant Professors: Gagné, Smaldone, Stone; Adjunct Assistant Professors: Bottazzi, Broiles, Granger, J oyce, K osloff, Lindheimer, Matthews, Ostwald, Pirone, Purvis, Stallman, Underwood; Instructor: Hahn; Lecturer: Pershing; Adjunct Lecturers: Cortese, Daghlian, Goland-
sky, Gollin, Karpilovsky, Lipsey,
Nitzberg, O'Brien, Olsen, Price,
Richards, Schatz, Sikes, Taublieb,
Verdery; Graduate Fellows: Goldberg,
Slottow; Senior College Lab Technician:
J awdoszyn; College Lab Technicians:
Barnes, Saderman; Department Secre
tary: Dimino

## Performance Faculty

Violin: Burton Kaplan, Margaret Pardee, Daniel Phillips
Viola: Toby Appel, Karen Dreyfus, William Lincer
Cello: David Geber, Vagram Saradjian, Barbara Stein-Mallow
DoubleBass: Homer Mensch
Flute: Samuel Baron, Trudy Kane, Robert Stallman, Keith Underwood, J an Vinci
Oboe: Ronald Roseman
Clarinet: Edward Gilmore, David Glazer, Laura Medlin, J ohn Moses, Ayako Neidich
Bassoon: J ean Cortese, Loren Glickman
French Horn: Peter Gordon, David J olley, William Purvis

Trumpet: Phil Granger, Murray Karpilovsky, Edward Treutel
Trombone: Erwin Price, J ack Schatz
Saxophone: J immy Heath, Cynthia Sikes
Percussion: Michael Lipsey
Harp: Susan J olles, Aristid Von Wurtzler
Piano: William Daghlian, Edna Golandsky, Lev Natochenny, Morey Ritt, Gerald Robbins, Donald Pirone
Harpsichord: Raymond Erickson, Paul Maynard
Organ: Donald J oyce, Paul Maynard
Voice: Shirlee Emmons, Marcie Lindheimer, J ane Olian, Robert C. White
Classical Guitar: William Matthews, Patrick O'Brien, Ben Verdery Lute: Patrick O'Brien

The Aaron Copland School of Music offers a liberal arts music major and a major in performance, an additional sequence in music education, and a cultural music major; music minors in music literature or theory; and a concentration in composition. The curriculum is planned to develop the interdependent skills of performing, listening to, and understanding music, and thus to provide the thorough training so necessary for graduate study and an eventual career in the profession.

The School gives all students of the College a finer appreciation of music by broadening their experience in listening and participating. Courses in appreciation and the rudiments of music are available for the general student without previous training in music; other courses and performing ensembles are open to qualified nonmajors.

The School presents public concerts and recitals by ensembles, students, and faculty, artists-in-residence (the Lyric Piano Quartet is currently in residence), and guest artists; lectures by faculty members or guests; and occasionally workshops by performance faculty or guest artists. College ensembles include a symphony orchestra, wind ensemble, opera workshop, various chamber groups and ensembles, including early and contemporary music groups, and several choirs. There is in addition a College-community choir, the Queens College Choral Society. Opera productions and musicals are produced in cooperation with the Department of Drama, Theatre, and Dance. Most of these events are free and all are open to the public.

The Aaron Copland School occupied new quarters in 1991. The music building includes a recital hall with tracker organ, a smaller recital hall, classrooms
surrounding a central enclosed atrium, practice rooms and rehearsal studios, a library planned for the better accommodation and use of the music library's extensive holdings and collections, expanded electronic music studio, music education facilities, and a recording studio. Classrooms and rehearsal studios are equipped with grand pianos, practice rooms, and faculty offices with studio upright pianos.

## The Majors

Prospective music majors are advised to consult the Music Students' Handbook, available in the Music Office. There are specific programs for students who intend to major in music according to one of the following major fields.

## 1. The Standard Music Major

Students preparing for a career as a performer, conductor, composer, arranger, musicologist, or teacher in a conservatory, university, or other institution not requiring State certification will take the following courses: Music 101, 247, 248, 249, 171, 173; 172, 174; 271, 273; 272, 274; 373, 374, 270, 276, 277, 377, 378. They are advised to elect additional courses in music literature and history, composition, and conducting, according to their needs.

## Academic Requirements

B. A. Music Majors: All Collegewide B.A. requirements, including Basic Skills and foreign language requirements, ${ }^{1}$ and area requirements. The Social Science requirement must include one course ( 3 cr .) in the history of Western civilization from the Middle Ages to the present from among the following: History 100-104, 211-218, 220, 225, 234236, 301-302. In addition, one course from the Humanities II category in Art, or Drama, Theatre, and Dance.

## 2. The Performance Major

Bachelor of Music program is planned for the advanced student in instrumental or vocal performance and is comparable to conservatory training. Admission is by competitive audition in the major instrument. Students accepted into the program receive private instruction in the major instrument and take the music curriculum described above, but need take only one course from Music 270 (Conducting), 276 (Instrumentation), and 370 (Composition); they take Music 282 (Instrument Repertory) and 255 (Chamber Music), if applicable to their instrument. In addition, piano majors take Music 283 (Keyboard Accompaniment) and two semesters of

Music 286 (Practical Accompanying), or one semester each of Music 286 and 284 (Continuo Playing). Voice majors take also Music 213 (Art Song) and Music 280 and 281 (Diction in Vocal Music), and two semesters each of two languages, French, German, or Italian.

## Academic Requirements

B. Mus. Students: College-wide basic skills requirements in English, mathematics, and physical education; for instrumental majors, two semesters of a foreign language, which may be fulfilled by two years of high school study.* The language requirement for $B$. Mus. voice majors remains as above. In addition, for all B. Mus. students:

- one course ( 3 cr .) from Humanities I; - one course ( 3 cr .) from Humanities II
in Art, or Drama, Theatre, and Dance;
- one course ( 3 cr .) in the history of

Western civilization (see approved list under the Standard Music Major above);

- one course ( 3 cr .) selected from

Humanities I, or the list of courses in the history of Western civilization, or the list of courses in Natural Sciences/Mathematics

## 3. The Music Major with the Music Education Sequence

Students who intend to teach music in public schools or other institutions requiring State certification must take all of the courses listed in section 1 above, plus Secondary Education 201, $221,222,367$, and 377 and Music 166, 268 or 269, and 370. They are required to select a concentration in either instrumental or choral music education. The required instrumental sequence includes Music 376, 161-162, 163 or 164, 167, and 168. Guitarists and pianists wishing to enter the instrumental sequence must meet special requirements and should consult the Music Student Handbook, available from the department office. The required choral sequence includes Music 265, required for those whose keyboard skills are found upon examination to be less than adequate, and Music 266. Those who want to obtain the broadest possible professional preparation may elect to take both sequences.

Standards for admission to student teaching:
a) A minimum grade-point average of 2.7 in music major courses exclusive of electives; performance and ensemble courses (171-174, 271-274, 373-374, 101, 247-249, 270, 276, 277, 377, 378).
*All music majors who have not already met the foreign language requirements are strongly advised to do so in either German, French, or Italian.
b) A 3.0 average in music education courses - Music 265, 266, 268, 269, 161166; a grade of B in Secondary Education 367.
c) Satisfactory completion of all grade of Inc. in music and music education courses by completion of Secondary Education 367.

Please note: Bachelor of Music students may not enroll in the education sequence as undergraduates. Those wishing to obtain State teacher certification must complete their undergraduate degree and may then apply for the Advanced Certificate Program in Music Education (see the current Graduate Bulletin).

At the time this Bulletin went to press, the music education faculty was revising the curriculum for the B. A. in Music Education. Students should check with the department for the latest information concerning course offerings and requirements for the degree

## 4. The Cultural Music Major

Students interested in music from a cultural standpoint, but who do not intend to be professional musicians or teachers, will take Music 101, 247, 248, 249, 171, 173 ; 172, 174; 271, 273; and 12 additional elective credits in music history and literature, for a total of 36 credits in music. In addition, these students are advised to take Classics 140; Philosophy 101, 110; at least one course selected from History 211, 218, 222, 301, 302; three credits in the History of Art; and at least one course selected from Comparative Literature 101, 203, 204, 211, 212, 213, 214. Cultural majors must have an approved concentration on file at least three semesters before graduation. The concentration must be approved by an adviser.

Music majors must have an approved concentration on file with the School in order to be permitted to register for Music 274. (See also under no. 5 on page 171, Music Listening Examination.)

## The Minor

The Music School offers several minors structured to fit the student's individual goals and interests. These focus on theory, or literature. Interested students should take the qualifying examination. A detailed description of the minor programs and the name of the faculty adviser are available in the Music Office.

## 4½ Year B.A.-M.A. Degree

Advanced students with superior grades interested in the $4 \not 1 / 2$ year B.A.-M.A. com-
bined program should consult the graduate adviser; a qualified student may apply for this program in the junior year and, if accepted, would start graduate courses at the beginning of senior year.

## Undergraduate Composition Concentration

Music 329 (Composer's Workshop) and Music 330 (Undergraduate Tutorial in Composition) are the basis for the undergraduate composition concentration These courses are designed to serve undergraduate students who have already demonstrated a commitment to and a skill in musical composition. Students may take Music 329 without 330, but may not take 330 without 329.

Duly enrolled Queens College music majors may be admitted to the composition concentration by permission of the School of Music on the basis of compositions submitted for approval. A committee of faculty members who are active composers shall determine the admissibility of each applicant after examining the submitted compositions. Admissibility does not assume advanced standing in the theory sequence. Interested students may apply by submitting compositions at any time.

## Requirements

1. After admission to this course sequence, all requirements of the straight or education music major in either the B.A. or the Mus. B. program shall apply except as specifically noted below.
2. Once admitted to the composition concentration, students will take Music 329 (Composer's Workshop) every semester.
3. In order to complete the sequence each student will, on at least one occasion, prepare a composition for performance at a regularly scheduled student composer's concert
4. Students in the composition concentration may take Music 374 concurrently with Music 373. It is recommended that they take Music 374 with an instructor other than their composition teacher.
5. Students who complete at least one semester of Music 330 are exempted from Music 378 (the regular undergraduate composition course).
6. Students must receive grades of B or better in both Music 329 and 330 to remain in the composition concentration.
7. Students in the undergraduate composition concentration may apply for admission to Music 729 (the first graduate course in compositional techniques) as soon as they have both completed at least two semesters of Music 330 and achieved senior standing. Admission to

Music 729 is at the pleasure of the Office of Graduate Studies and subject to review by the graduate adviser. U pon acceptance into Music 729, students will follow the graduate course sequence in composition.

## Important Information for All Music Majors

1. Theory Qualifying Examination: All prospective music majors will be given an examination before registering The examination consists of short tests in rudiments, ear training and sight singing, keyboard ability, and harmony and counterpoint for advanced placement. It is intended to ascertain how much skill, if any, students may have already acquired from previous training and to place those who qualify in the course and section best suited to their needs. An audition on instrument or voice will be given in conjunction with the qualifying examination. Students who intend to major in music and who are placed in a section of Music 71 or 73 as a result of the examination are advised to elect Music 1 concurrently.

The examination is given in May, August, and J anuary during registration. Contact the Music Office for details on the place and date, and how to register.
2. Scholastic Requirements: Students enrolled in Music 71, 74, 171, 172, 173, 174, 247, 248, 271, 273, 274, and 373 are required to obtain a grade of C - or higher before proceeding to the next course in sequence. Students enrolled in Music 73 must receive a grade of B- or higher before proceeding to 173. Each of these courses may be repeated once only, subject to exception made by the Music School.
3. PerformanceActivities: All music majors are required to perform each semester in at least one large ensemble. Depending upon their major instrument and proficiency, students will be assigned (following audition) to participate in one of the following: Orchestra Wind Ensemble, Choir, or Glee Club. Students who audition and qualify for the Vocal Ensemble may use it to meet this requirement, with the approval of the conductor of the choir. Membership in these groups will form a part of the student's permanent departmental record. This experience is an essential part of the music major's training and background
4. Progress Evaluation: Freshman, sophomore, and junior conferences will be held to evaluate students' progress in performance on their major instrument. A senior conference is included in the Senior Comprehensive Exam (6 below).
5. Music Listening Examination: A comprehensive listening examination on music literature, based on a selected list of works, is divided into four parts. These parts are to be taken in order, successively at the end of each year of study. Copies of the literature list are available in the Music School Office. Passing of the freshman and sophomore listening examinations is prerequisite for registration in Music 373 or any subsequent music course.
6. Senior Comprehensive Examination: To be a candidate for graduation, one must receive passing grades in all parts of the Senior Comprehensive Examination. This examination will include performance on the student's major instrument. In order to be eligible to take the examination, one must have completed all required music courses or be currently enrolled in the last semester of these courses. A minimum of three parts of the music listening examination must be completed before a student may take the Senior Comprehensive Examination.

## COURSES

## Courses without Prerequisite

1. Introduction to Music. 3 hr .; 3 cr . A basic course in appreciation, designed to develop an understanding of music. Following an introduction to the basic principles of musical organization and expression, selected masterpieces of Western music are studied with regard to content, form, and style. Music 1 is prerequisite for all elective courses in Music Literature (Music 12 and Music 111 through 220).
2. Music of Black People in Africa and America. 3 hr .; 3 cr . Survey of principal genres of black and black-derived tribal, folk, popular, and art music in African and Afro-American traditions. Emphasis on musical aesthetics, forms, instruments, the function of music in its cultural context. $\dagger \dagger$
3. Studies in the Literature of Music. 3 hr.; 3 cr . Topics will vary.
4. Rudiments of Music I. 2 hr.; 2 cr . A preparatory course in rudiments designed for laypeople. Covers notation, rhythm, scales and keys, formation of intervals and triads, and ear training. Fall, Spring

Elective Courses in Music Literature with Prerequisite

For announcements of current offerings, consult the Music School or see the listing at registration.
11. Topical Course in Music Literature. 11.2, 2 hr.; 2 cr., 11.3, 3 hr.; 3 cr. $\dagger \dagger$
12. Studies in the Literature of Music. 12.2, 2 hr.; 2 cr., 12.3, 3 hr.; 3 cr. Prereq.:

Music 1 or 101. Topic announced in advance. May be repeated for credit if topic is different.
111. Music of Diverse Genres and Style

Periods. 3 hr.; 3 cr. Prereq.: Music 1. An elective continuation of Music 1 to expand contact with the repertory and understanding of musical forms and procedures. $\dagger \dagger$
204. The Symphony up to and Including Beethoven. 3 hr.; 3 cr. Prereq.: Music 1 or 101. The origins and development of the symphony with emphasis on the symphonies of Haydn, M ozart, and Beethoven. $\dagger \dagger$
205. The Symphony from Schubert to the Present. 3 hr.; 3 cr. Prereq.: Music 1 or 101.
206. The Concerto. 3 hr.; 3 cr. Prereq.: Music 1 or 101. From the Baroque era to the present. $\dagger \dagger$
207. Chamber Music. 3 hr.; 3 cr. Prereq. Music 1 or 101. Comprehensive study of outstanding examples of duo sonata, trio, quartet, quintet, sextet, and larger chamber music groups from the time of Bach. $\dagger \dagger$
208. The String Quartet in History and Performance. 2 hr.; 2 cr. Prereq.: Music 1 or 101. A lecture-recital course surveying the history and repertory of the string quartet from Haydn and his predecessors to the present. $\dagger \dagger$
209. The String Quartets of Beethoven. 3 hr.; 3 cr. Prereq.: Music 1 or 101. Lecturerecital course presenting all the quartets of Beethoven. $\dagger \dagger$
210. The Violin: Its History and Literature. 3 hr .; 3 cr . Prereq.: Music 1 or 101. Lecture-recital course focusing on selected works from Bach to the present. $\dagger \dagger$
211. Piano Literature of the Romantic

Period (1800-1900). 2 hr.; 2 cr. Prereq.: Music 1 or 101. Lecture-recital course: great composers from Beethoven through Brahms and Liszt. $\dagger \dagger$
213. The Art Song. 3 hr.; 3 cr. Prereq.: Music 1 or 101. Detailed study of songs and songwriters from the Troubadours and Minnesingers to the present. Songs of the major composers of various countries. Frequent live performances. $\dagger \dagger$
214. Masterpieces of Choral Music. 3 hr.; 3 cr. Prereq.: Music 1 or 101. Choral music from the Middle Ages to the present, including works by Machaut, J osquin des Prez, Palestrina, Schütz, Bach, Handel, M ozart, Beethoven, Verdi, and Stravinsky.t†
215. Introduction to Opera. 3 hr .; 3 cr . Prereq.: Music 1 or 101. An examination of the major components of opera: plot, libretto, character, voice-types, musical forms, compositional techniques, orchestration, and production design. Examples include works from 1600 to the present by major composers representing various national styles. Extensive use is made of videotaped and live performances. $\dagger \dagger$
216. Twentieth-Century Opera. 2 hr.; 2 cr. Prereq.: Music 1 or 101. The leading composers of opera from 1890 to the present. $\dagger \dagger$
221. Twentieth-Century Music I (1900-
1950). 3 hr.; 3 cr. Prereq.: Music 1 or 101. Study of significant works of the first half of the twentieth century. $\dagger \dagger$
222. Twentieth-Century Music II (1945 to the Present). 3 hr.; 3 cr. Prereq.: Music 1 or 101. The study of significant works composed since the end of World War II. $\dagger \dagger$
223. Electronic Music. 3 hr.; 3 cr. Prereq.: Music 1 or 101. A survey of electronic music illustrated through selected examples of a variety of styles and procedures. $\dagger \dagger$
225. Bach. 3 hr.; 3 cr. Prereq.: Music 1 or 101. Bach's work in its relation to his life and times. Emphasis on the analysis of his style and its evolution. $\dagger \dagger$
226. Mozart. 3 hr.; 3 cr. Prereq.: Music 1 or 101. Mozart's work in its relation to his life and times. Emphasis on the analysis of his style and its evolution. $\dagger \dagger$
227. Beethoven. 3 hr.; 3 cr. Prereq.: Music 1 or 101. An intensive study of Beethoven's life and work; an analysis of his style in its various phases, his creative process as revealed in his sketchbooks, and his impact on the Romantic period. $\dagger \dagger$
228. The Music Dramas of Richard Wagner. 3 hr.; 3 cr. Prereq.: Music 1 or $101 . \dagger \dagger$
232. J ewish Music. 3 hr.; 3 cr. Prereq.: Music 1 or 101. The devel opment of J ewish music. Emphasis on Biblical cantillation and the liturgy of the synagogue. Other topics include Yiddish art songs and folk songs, Hebrew folk music, Hebraic elements in Western art music, contemporary trends.
234. Music of Asia. 3 hr.; 3 cr. Prereq.: Music 1 or 101. Survey of musical cultures of Asia; examination of the elaborate melodic and rhythmic system, raga and tala of India, the classical "orchestral" gamelan music of Indonesia, the symbolic and philosophical implications of music in China, the classical chamber and theatre music of J apan.
236. Music in American Civilization. 3 hr.; 3 cr . Prereq.: Music 1 or 101. The character and types of music used or created in North America from about 1600 up to the present. Historical, social, and cultural backgrounds as well as foreign influences are studied.
237. American Folk Music: Its History and Literature. 3 hr .; 3 cr . Prereq.: Music 1 or 101. The two mainstreams of American folk music, the Anglo-American and the Afro-American, are examined from a scholarly point of view. Reference is made

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). tOffered either Fall or Spring; see Class Schedule t†May be offered; see Class Schedule
to the great collections and field recordings. Student performance of examples from the established literature of vocal and instrumental folk music is encouraged. $\dagger \dagger$
238. The American Musical Theatre. 3 hr.; 3 cr. Prereq.: Music 1 or 101. Survey of major American theatrical stage works, with an emphasis on the Broadway musical. $\dagger \dagger$
239. J azz: Its History and Literature. 3 hr.; 3 cr. Prereq.: Music 1 or 101. The socio logical and folkloristic roots of jazz; its history and widespread influence on twentieth-century music. $\dagger \dagger$
240. J azz History II: The Great Improvisers. 3 hr.; 3 cr. Prereq.: Music 1 or 101. The music and lives of the major contributors of improvised jazz music from 1917 to the present. $\dagger \dagger$
241. Contemporary Popular Music. 3 hr.; 3 cr. Prereq.: Music 1 or 101. A survey of popular music in the United States from the beginning of the twentieth century to the present

## Primarily for Music Majors

101. Introduction to Music Literature. 3 hr .; 3 cr . Coreq.: Music 173 or permission of School of Music. (This course is designed for music majors.) Representative genres and forms in Western music from the Middle Ages to the present, directed toward the understanding of musical organization, styles and concepts, and the development of critical aural perception and analysis. Outside listening requirements and the study of musical scores are required regularly. Fall, Spring
Note: Students must have passed English 110 or its equivalent for admission to Music 247, 248, or 249.
102. Music History I: Music from Antiquity to 1600. 3 hr.; 3 cr . Prereq.: Minimum grade of C- required in Music 101; prereq. or coreq.: Music 174. Fall, Spring
103. Music History II: Music of the Seventeenth and Eighteenth Centuries. 3 hr.; 3 cr . Prereq.: Minimum grade of C - in Music 247 or permission of School of Music; prereq. or coreq.: Music 273. Fall Spring
104. Music History III: Music of the Nineteenth and Twentieth Centuries. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Minimum grade of Cin Music 248 or permission of School of Music; prereq. or coreq.: Music 274. Fall, Spring

## Courses in Music Theory

and Musicianship
May be repeated once only subject to exemption made by the School of Music
71-75. Basic Musicianship. 2 hr.; 1 cr. each course. Prereq.: Permission of School of Music; Theory Qualifying Examination. Designed to develop basic skills in music. Music majors who are placed in a section of Music 71 or 73 as a result of the Theory

Qualifying Examination are advised also to elect Music 1.

## 71. Basic Musicianship: Sight Singing

 and Ear Training. An intensive course in sight singing and melodic dictation. Satisfactory work in Music 71 (minimum grade of $\mathrm{C}-$ ) or the equivalent will constitute the prerequisite for Music 171. Fall, Spring73. Basic Musicianship: Theory. An intensive course in music reading and introductory aspects of music theory. A minimum grade of $B$ - will be part of the prerequisite for Music 173. Fall, Spring
74. Basic Musicianship: Keyboard

Techniques. An intensive course in musicianship at the keyboard. Satisfactory completion (minimum grade of $\mathrm{C}-$ ) will constitute the keyboard prerequisite for Music 173. Fall, Spring
75. Piano Skills. 2 hr.; 1 cr. Prereq.: Permission of School of Music; Theory Qualifying Examination; coreq.: Music 173 and/or 174. Primarily for music majors with little previous training in piano playing. May be required of students whose keyboard skills are deficient. May be repeated for credit with permission of the School of Music.

## 171. Sight Singing and Dictation I. 2

 classroom hr., 1 lab. hr.; 2 cr. Prereq.: Admission is by a passing score on a School of Music qualifying examination. Satisfactory work in Music 71 (minimum grade of $\mathrm{C}-$ ) or the equivalent will constitute the prerequisite for Music 171. Corequisite with Music 173. Fall, Spring172. Sight Singing and Dictation II. 2 classroom hr., 1 lab. hr.; 2 cr. Prereq.: Minimum grade of C - and passing work in both sight singing and dictation in Music 171. Normally taken in the same semester as Music 174. Fall, Spring
173. Harmony, Counterpoint, and Keyboard Skills I. 3 hr.; 3 cr. Prereq.: A passing score in all phases of a School of Music qualifying examination. Students who do not qualify in all parts of this exam will be placed in appropriate sections of elementary courses, and must receive the following minimum grades in those courses in order to be permitted to continue to 173 and 171: 71, C-; 73, B-; 74, C-. Corequisite with Music 171. Fall, Spring
174. Harmony, Counterpoint, and Keyboard Skills II. 3 hr.; 3 cr. Prereq.: Minimum grade of C - in Music 173 and passing work in both written work and keyboard skills. Fall, Spring
175. Theory Survey. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Permission of School of Music. Review of elementary species counterpoint, harmony, and keyboard harmony. Primarily for transfer students and freshmen entering with advanced standing. Fall
176. Conducting I. 3 hr.; 2 cr. Prereq.: Music 273 or permission of School of Music. Baton technique, score reading, and
rehearsal techniques applied to choral and instrumental music. Fall, Spring
177. Sight Singing and Dictation III. 2 classroom hr., 1 lab. hr.; 2 cr. Prereq.: Minimum grade of C - and passing work in both sight singing and dictation in Music 172. Normally taken in the same semester as Music 273. Fall, Spring
178. Sight Singing and Dictation IV. 2 classroom hr., 1 lab. hr.; 2 cr. Prereq.: Minimum grade of C - and passing work in both sight singing and dictation in Music 271. Normally taken in the same semester as Music 274. Fall, Spring
179. Harmony, Counterpoint, and Keyboard Skills III. 3 hr.; 3 cr. Prereq.: Minimum grade of C - in Music 174 and passing work in both written work and keyboard skills. Fall, Spring
180. Harmony, Counterpoint, and Key board Skills IV. 3 hr.; 3 cr. Prereq.: Minimum grade of C-in Music 273 and passing work in both written work and keyboard skills. Introduces the study of chromaticism. Fall, Spring
181. Principles of Instrumentation. 3 hr.; 3 cr. Prereq.: Music 274 or permission of School of Music. Fall, Spring
277, 377. Analysis I and II. 2 hr.; 2 cr. each sem. Prereq.: For Music 277, Music 274; for Music 377, Music 277. Detailed analysis of selected examples of music literature from various stylistic eras, moving from the simpler to the more complex types of composition, the second semester being devoted principally to the larger genres such as sonata and the fugue Fall, Spring
182. Composer's Workshop. 2 hr. every other week; 1 cr. Prereq.: Permission of School of Music or admission to the Concentration Program in Composition. A course for students active in musical composition. There will be performances and critiques of student works and examination of other works of importance to contemporary composers. This course is also open to advanced performers seeking experience in the coached performance of new music.
183. Undergraduate Composition Tutorial. $1 / 2 \mathrm{hr}$. of private instruction; 2 cr . Prereq.: Admission to the Concentration Program in Composition; coreq.: Music 329 must be taken concurrently every time a student takes Music 330. May be repeated for credit as many times as student remains eligible. The course includes weekly private lessons given by a faculty composer. Students may select their instructors from among faculty members who are active composers, subject to approval by the School of Music. Students seeking guidance in this regard should see the program coordinator
184. Conducting II. 3 hr.; 2 cr. Prereq.: Music 270. Includes consideration of reper toire, problems of interpretation, organization of choral and instrumental groups Required for music education majors.
185. Intensive Sight Singing and Dictation I. 2 hr.; 2 cr. Prereq.: Permission of School of Music. An accelerated and intensive course in sight singing, dictation, and score reading for highly qualified students. Fall
186. Intensive Sight Singing and Dicta-
tion II. 2 hr.; 2 cr. Prereq.: Music 371 or permission of School of Music. A continuation of Music 371. Completes curricular requirements in sight singing and dictation. Spring
187. Harmony, Counterpoint, and Keyboard Skills V. 3 hr.; 3 cr. Prereq.: Minimum grade of C-in Music 274 and passing work in both written work and keyboard skills. Music majors must have an approved concentration on file and must have passed the freshman and sophomore listening examinations to be permitted to register for Music 373. A continuation of Music 274. May include advanced chromaticism, medieval music, renaissance polyphony, invention and fugue, and further work in tonal composition. Fall, Spring
188. Musical Techniques of the Twentieth Century (1900-1945). 3 hr.; 3 cr Prereq.: Minimum grade of C- in Music 373. Fall, Spring
189. Musical Techniques of the Twentieth Century (1945 to the Present). 3 hr.; 3 cr. Prereq.: Music 374. Compositional techniques in the post-war era are studied through the works of leading composers. Topics include serialism, aleatory music, electronic music, and other recent developments. Designed for students who plan to study theory and/or composition on an advanced level. $\dagger \dagger$
190. Scoring for Orchestra and Band. 2 hr.; 2 cr. Prereq.: Music 276 or permission of School of Music. Required only of instrumental music education majors; recommended for students interested in advanced work in theory, composition, and conducting. $\dagger$
191. Composition I. 3 hr.; 3 cr. Prereq.: Music 374 or permission of School of Music. Fall, Spring
192. Composition II. 3 hr.; 3 cr. Prereq.: Music 378. May be taken more than once for credit. $\dagger \dagger$
193. Topical Course in Music Theory and Musicianship. 380.2, 2 hr.; 2 cr.; 380.3, 3 hr.; 3 cr. $\dagger \dagger$

## Courses in Music Education

260. E lementary Classroom Instruments. 3 hr.; 2 cr. Prereq.: Permission of School of Music. Designed for early childhood and elementary education majors; practical experience with instruments used in classroom music. $\dagger \dagger$
261. Music for Children (Elementary Education). 3 hr.; 3 cr. Prereq.: Education 344 or permission of School of Music. A requirement for students majoring in ele
mentary education. Students who receive credit for Music 261 may not also receive credit for Music 262. Fall, Spring
262. Music for Children (Early Childhood Education). 3 hr.; 3 cr. Prereq.: Education 344 or permission of School of Music. A requirement for students majoring in early childhood education. Students who receive credit for Music 262 may not also receive credit for Music 261. Fall, Spring
263. Music Literature for Children. 3 hr.; 2 cr. Prereq.: Music 261 or 262 Designed for students majoring in early childhood or elementary education. A study of music literature and methods that provides an enrichment of the basic classroom music program. $\dagger \dagger$
264. Applied Keyboard Skills. 2 hr.; 1 cr. Prereq.: Music 373. The use of the piano for classroom and rehearsal purposes. $\dagger \dagger$
265. Vocal Pedagogy. 3 hr.; 2 cr. Prereq. Music 166 or permission of instructor. The physiology of the vocal mechanism and techniques for teaching voice production. The development of individual skill in singing is stressed. Spring
266. Introduction to Music Education. 3 hr . plus fieldwork; 3 cr . Open to departmental majors only. Prereq.: Sophomore standing and Music 174 (Theory II) or above. An introduction to the profession with particular emphasis on the essentials of music pedagogy as applied to school music classes. Each student will participate in a structured field experience under Music Education faculty supervision.
267. The School Choral Program. 3 hr.; 3 cr . Prereq.: Completion of Music 166, 270, and 267. Objectives, methods, and materials for school choruses, glee clubs, ensembles, and vocal classes.
268. The School Instrumental Program. 3 hr.; 3 cr. Prereq.: Completion of at least 3 of the 5 required group instruction courses in the instruments, i.e., Music 161, 162, 163, 167, and 168; Music 270; and Music 267. Objectives, methods, and materials for school bands, orchestras, ensembles, and instrumental classes.
269. Special Topics in Music Education. 3 hr.; 3 cr. Prereq.: Music 268, 269, or permission of department. The topic changes each time this course is given. For an announcement of the current topic, consult the Music Office or the Class Schedule.

Group Instruction in Instruments and Voice

Note: These courses are designed for the entire student body as well as for the music major. With the exception of Music 165, priority is given to music education majors. Others admitted on the basis of available space.

161 through 168. Group Instruction in Instruments and Voice. 3 hr.; 1 cr. Prereq.: Music 60 or equivalent.

161, 162. Group Instruction in Upper and Lower Strings. Fall, Spring

163, 164. Group Instruction in Single Reed and Double Reed Woodwinds. $\dagger \dagger$
165. Group Instruction in Piano. Fall, Spring
166. Group Instruction in Voice. $\dagger \dagger$
167. Group Instruction in Brass. $\dagger \dagger$
168. Group Instruction in Percussion. $\dagger \dagger$

## Performance Activities

Note: These courses are designed for the entire student body as well as for the music major, and may be taken with or without credit. A student in the Bachelor of Arts program may accumulate a maximum of 12 credits for participating in performance groups; a student in the Bachelor of Music program may accumulate a maximum of 18 credits.
58. Glee Club. 58.0, 3 hr.; 0 cr., 58.1, 3 hr.; 1 cr. A 4-part chorus for all who enjoy singing. No previous musical training required. Fall, Spring
59. Concert Band. 59.0, 2 hr.; 0 cr., 59.1, 2 hr.; 1 cr. Prereq.: Permission of instructor. $\dagger \dagger$
156. Queens College Choral Society.
(See also page 12.) 156.0, 3 hr.; 0 cr., 156.1 3 hr.; 1 cr. A mixed College-community chorus devoted to the study and performance of large choral masterpieces such as Messiah, Creation, and Elijah. Fall, Spring
158. Queens College Chorus. 158.0, 3 hr.; 0 cr., 158.1, 3 hr.; 1 cr. Prereq.: Permission of instructor. A singing group designed for those with relatively little previous experience. A wide variety of musical works is selected. Admission is by audition.††
253. Symphonic Wind Ensemble. 253.0, 3 hr.; 0 cr., 253.1, 3 hr.; 1 cr. Prereq.: Permission of instructor. An all-campus performance organization for wind and percussion players. The Ensemble is designed for the study and performance of the symphonic band repertoire from a variety of periods. Members of the Orchestra's wind and percussion sections who are not scheduled to perform in every orchestral concert are required to attend Wind Ensemble rehearsals.
256. Opera Studio. 256.0, 2 hr.; 0 cr., 256.2, 2 hr.; 2 cr., $256.3,3$ hr.; 3 cr., 256.4, 4 hr.; 4 cr., 256.5, 5 hr.; 5 cr., 256.6, 6 hr.; 6 cr. Prereq.: Admission to course and number of credits and hours by permission of instructor. A participation course. Students are coached individually and introduced to a wide variety of operatic literature, including sol os and ensembles. Fall, Spring
258. Concert Choir. 258.0, 3 hr.; 0 cr., 258.1, 3 hr.; 1 cr. Prereq.: Admission is by audition. A mixed chorus devoted to the study and performance of music from the Renaissance to the present. F all, Spring
259. Orchestra. 259.0, 5 hr.; 0 cr., 259.1, 5 hr.; 1 cr., 259.2, 5 hr.; 2 cr. (with instructor's permission only). Prereq.: Audition and permission of instructor. Fall, Spring
291. J azz Band and Ensembles. 291.0, 3 hr.; 0 cr., 291.1, 3 hr.; 1 cr. Prereq.: Permission of instructor. Groups of various sizes devoted to the study and performance of appropriate literature, both published and special arrangements, including original student work. Fall, Spring
356. Vocal Ensemble. 356.0, 2 hr.; 0 cr., 356.1, 2 hr.; 1 cr. Prereq.: Permission of instructor. A small, select chamber choir that performs music from the Middle Ages to the present day. The Renaissance Band (Music 357) often joins in performances of Medieval, Renaissance, and Baroque works. The Vocal Ensemble gives public performances in the New Y ork City area each semester. Fall, Spring
357. Renaissance Band. 357.0, 2 hr.; 0 cr., 357.1, 2 hr.; 1 cr. Prereq.: Permission of instructor. Specializes in the performance of instrumental music of the Middle Ages, Renaissance, and early Baroque on modern copies of old instruments. Fall, Spring

## Instruction in Musical Performance

Note: Music 151 to 452 are only for students in the Mus. B. program. Each course is a continuation of the preceding one. All are offered each semester.
151. Major Study in Performance I. Private studio instruction 1 hr . weekly; 3 cr. Prereq.: Permission of School of Music through audition of the student. Study in musical performance with regard to both technique and interpretation of appropriate music literature.
152. Major Study in Performance II. One hr. weekly; 3 cr. Prereq.: Music 151.
251. Major Study in Performance III. One hr. weekly; 3 cr. Prereq.: Music 152.
252. Major Study in Performance IV. One hr. weekly; 3 cr. Prereq.: Music 251.
351. Major Study in Performance V. One hr. weekly; 3 cr. Prereq.: Music 252.
352. Major Study in Performance VI. One hr. weekly; 3 cr. Prereq.: Music 351.
451. Major Study in Performance VII. One hr. weekly; 3 cr. Prereq.: Music 352.

## 452. Major Study in Performance VIII.

 One hr. weekly; 3 cr. Prereq.: Music 451.255. Chamber Music. 255.0, 1 hr.; 0 cr. 255.1, 1 hr.; 1 cr., 255.2, 2 hr.; 2 cr. Prereq. Permission of School of Music. At least 4 semesters of chamber music are required of Bachel or of Music students. May be repeated for credit. Fall, Spring
256. E nsemble of Related Instruments. 257.0, 1 hr.; 0 cr., 257.1, 1 hr.; 1 cr.; 257.2, $2 \mathrm{hr} . ; 2 \mathrm{cr}$. Prereq.: Permission of instructor. Presently available ensembles include those for brass, percussion, and guitar. May be required instead of or in addition
to Music 255, for Bachelor of Music students playing appropriate instruments. May be taken more than once.
257. Diction in Vocal Music I. 2 hr.; 1 cr. The study of the proper pronunciation for the singing of English and Italian; the International Phonetic Alphabet. Primarily designed for Bachelor of Music voice majors. Open to other students on a spaceavailable basis. $\dagger \dagger$
258. Diction in Vocal Music II. 2 hr.; 1 cr . The study of proper pronunciation in the singing of French and German. Other foreign languages may al so be included. Primarily designed for Bachel or of Music voice majors. Open to other students on space-available basis. $\dagger \dagger$
259. Survey of Repertory for Major Instruments and Voice. 2 hr .; 1 cr. Prereq.: Music $273 . \dagger \dagger$
260. The Art of Keyboard Accompaniment. 2 hr.; 2 cr. Prereq.: Permission of instructor. Introduction to techniques and art of accompaniment through intensive study of selected examples of vocal and instrumental literature. Emphasis on the skills of sight-reading. Should be taken before the beginning of the senior year. $\dagger \dagger$
261. Introduction to Continuo Playing. 2 hr.; 2 cr. Prereq.: Music 273 and permission of instructor. Introduction to the techniques of realizing a figured bass at the harpsichord. Intended for advanced players of other keyboard instruments. May be taken by Bachelor of Music piano majors to satisfy one semester of Music 286.

## 285. Topical Course in Performance.

 285.2, 2 hr.; 2 cr., 285.3, 3 hr.; 3 cr. Prereq.: Permission of instructor. $\dagger \dagger$286. Practical Accompanying. 286.22, 2 hr.; 2 cr., 286.23, 3 hr.; 2 cr. Prereq.: Music 283 and permission of accompaniment coordinator. Practical experience in serving as accompanist for an ensemble (e.g., concert choir), a performance course (e.g., string repertory), or student recitals. Students will be assigned responsibilities by the accompaniment coordinator. May be repeated for credit. Must be taken for two semesters by all Bachelor of Music students majoring in piano. Music 284 may be substituted for one of the required semesters.

Studies in Jazz (see also Music 291)
292. Improvisation. 3 hr .; 3 cr . Prereq.: Music 274. A study of the theory, practice, and styles of jazz improvisation designed to devel op the techniques and skills of the performer. $\dagger \dagger$
293. Arranging. 3 hr.; 3 cr. Prereq.: Music 274. Planned to develop knowledge and skill in arranging and orchestrating for the jazz band, the theatre orchestra, the television orchestra, and other performing groups. A study of recording techniques with special electronic equipment. $\dagger \dagger$
294. Analysis of J azz. 3 hr.; 3 cr. Prereq.:

Music 274. Detailed analysis of selected jazz idioms and other related popular forms. Consideration of such aspects as melody, harmony, rhythm, forms, orchestration, style.
295. J azz Composition. 3 hr.; 3 cr. Prereq.: Music 274 . The development of skills and techniques in the use of various jazz idioms and their application to individual creative expression. $\dagger \dagger$
296. Composing for the Musical Theatre. 3 hr .; 3 cr . Prereq.: Music 274. The study of composition as applied to the musical theatre. The aesthetics and idioms of recent trends. $\dagger \dagger$

## Special Problems

150. Independent Study in Instrument or Voice. 2 cr. Prereq.: Audition. May be repeated for credit, up to a maximum of 8 credits. Grade of B-in Music 150 is required to repeat. For students who wish to study instrumental or vocal performance for college credit. Grade to be determined by a Queens College music faculty jury. Fall, Spring
151. Independent Study of J apanese Instruments. 2 cr. Prereq.: Audition and interview. May be repeated for credit, up to a maximum of 8 credits. a. Koto; b. Shakuhachi; c. Shamisen.
152. Music Bibliography. 2 hr.; 2 cr. Prereq.: Senior standing and permission of School.††

391, 392. Special Problems. 391.1-391.3, 1-3 hr.; 1-3 cr., 392.1-392.3, 1-3 hr.; 1-3 cr. Prereq.: Senior standing; scholastic record that indicates capacity for independent work; permission of School of Music. Interested students should apply before the end of the sixth week of the preceding semester. Intensive study and a definite project in a field chosen by the student under the direction of a member of the School of Music. May be taken more than once provided the topic changes. Fall, Spring

Courses in Reserve
61. Rudiments of Music II.
217. Music of the Middle Ages (ca. 6001450).
218. Music of the Renaissance (14501600).
219. Music of the Baroque (1600-1750).
220. Music of the Rococo, Classicism, and Romanticism (1750-1900).
231. Russian and Soviet Music from Glinka to the Present.
233. Music in Non-E uropean Cultures.
235. Latin American Music.
359. Queens College Orchestral Society.

## Philosophy

Chair: Steven V. Hicks
Assistant Chair: Harvey Burstein
GraduateAdviser: Alberto Cordero
Dept. Office: Powdermaker 260, 9975270
Professors: Cordero, Gildin, J ordan, Lange, Leites, Orenstein; Adjunct Professor: Schwarcz; Associate Professors: Hicks, Purnell; Adjunct Associate Professor: Lermond; Assistant Professors: Grover, O'Connor, Rosenberg; Lecturer: Burstein; Department Secretaries: Doherty, Gerken

## The Content and

Point of Philosophy
To study philosophy is to strive after defensible views on the basic issues of knowledge and value. Philosophy challenges one to develop consistent and reasonable positions, mindful of the work of great philosophers, on such matters as the nature and scope of human knowledge, the grounds for moral and political principles, the character of religious belief, and the methods employed by both practical and theoretical sciences. This study encourages responsible, independent thought and action; it widens one's experience by disclosing surprising alternatives to settled opinions and habitual beliefs; it champions the view that free, critical inquiry, among persons of candor and good will, is a necessary condition of a genuinely full and worthwhile life.
A major or minor in philosophy represents the finest tradition of liberal arts studies and will be of value in any vocation that prizes this tradition - for example, law, teaching, publishing, journalism, the ministry; the special sciences such as psychology, economics, history, physics, and mathematics; and such arts as language, literature, drama, and music. Students interested in these or similar fields are invited to consider a minor in philosophy, or a second major in philosophy, as a natural complement to their main specialization. From the wide variety of philosophy offerings each semester, students may select courses of particular relevance to their other work.

## Types of Philosophy Courses

Philosophy 101, while not a prerequisite to the other courses, is the basic introduction to the subject. It is designed to give beginners a grasp of the various chief issues that philosophy investigates. Philosophy 120, also at the introductory
level, applies philosophical methods of investigation to problems arising from current developments in politics, medicine, urban affairs, popular culture, technology, law, and the like.

Courses 103, 108, and 109 deal in general with methods of reasoning that is, with the standards of valid argument and inference that apply in different areas of knowledge. Philosophy 103 is an elementary introduction to modern approaches to the subject; it stresses practical applications. Philosophy 108 treats the subject from the perspective of its classical heritage stemming from the logic of Aristotle; and Philosophy 109 is the course in modern formal logic, focusing on symbolic techniques for analyzing arguments and for building logical systems.

Courses 101 through 118 and 212 through 226 are field courses in the several divisions of philosophy. Each of them goes into a cluster of vital issues that arise in connection with a specific field of study represented elsewhere in the College. Look among these for courses that closely support and amplify your other work.

Courses 140 through 148 are historical. Each of them takes up selected writings of the major figures in an important period of philosophy, not simply with an eye to their historical interest, but as containing formidable arguments that philosophers of various persuasions still explore and debate today. These courses also locate the intellectual origins of notable artistic, scientific, and social devel opments. Modern times have presented very few totally novel philosophical issues; most have roots deep in the past, and in getting a fix on these, one gets one's bearings on the issues in their modern shapes.

Courses 260 through 272 are advanced. Each of them investigates in depth either a particular system of philosophy or a group of closely related classical or contemporary problems of special significance.

Courses 383 through 394 are seminars and tutorials that provide directed research for advanced students.

Note: Detailed course descriptions, with instructors' names, are obtainable from the Philosophy Department several weeks prior to each registration period.

## The Major

The major in philosophy normally consists of 36 credits in philosophy, plus recommended courses in related fields. As a part of the 36 credits, the following courses are required: Philosophy 109, 140,141 or 142,143 , and 383.

Under Philosophy 383 the student prepares a senior thesis, which will be graded by a supervisor chosen in consultation with the Chair.

The entire plan of the major is subject to the approval of the department concentration adviser and should be worked out in conference with the adviser and with the advice and help of the various members of the department.

## The Minor

The minor in philosophy consists of 18 credits. No more than two courses from Philosophy 101, 103, and 120 may be counted. As part of the 18 credits, two courses must be taken from the history of philosophy series, Philosophy 140 through 148. Specific courses for the minor should be selected in consultation with the department's concentration adviser.

## Combined B.A.-M.A. Program

This program allows the student to finish all work for both the B.A. and M.A. degrees in four years. For information and applications, contact the department's Graduate Adviser.

## COURSES

101. Introduction to Philosophy. 3 hr .; 3 cr . Basic problems such as knowledge, reality, meaning, value, the nature of persons and their political and cultural environment are introduced through selected readings of great phil osophers. Designed for beginners in philosophy. Fall, Spring
102. The Uses of Reason. 3 hr .; 3 cr .

Introduces the student to the principles of effective reasoning used in critical and constructive thought and argument. Examples are chosen from a wide variety of professional and scientific fields, ranging from journalism and literary criticism to anthropology and physics. Fall, Spring
104. Introduction to Ethics. 3 hr .; 3 cr . An investigation of rival theories concerning moral goodness, rightness, happiness, freedom, and responsibility. Selected readings from classical and contemporary sources. Fall, Spring
105. Film/Philosophy/Politics. 3 or 4 hr . 3 cr . Philosophical and cinematic analysis of significant films. Special stress given to ideological and mythic functions, narrative and visual styles, and the interaction of political, aesthetic, and semiological elements. Various specific topics such as American Depression-era films; imagination and insurrection; revolutionary cinema; films of the fifties; the politics of everyday life; film aesthetics. Consult the

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). corequisite for all courses (see pp. 40, 125).
†Offered either Fall or Spring; see Class Schedule $\dagger$ Offered either Fall or Spring; see Cl
department for current offerings. May be repeated for credit provided the topic is different. Fall, Spring
106. I deas in Literature. 3 hr.; 3 cr. A consideration of both the relation of philosophical writings to the critical study of works of literature and the use of philosophical concepts of literature. Readings will be selected from a wide range of periods and styles. Fall, Spring
109. Modern Logic. 3 hr.; 3 cr. An introduction to logic and logical techniques. The powerful method of symbolism is extensive ly employed. Fall, Spring
111. Introduction to Aesthetics. 3 hr.; 3 cr. Survey of some fundamental issues in philosophical aesthetics from the Greeks to the present. Possible topics: theories of the beautiful; the standard of taste, art, and emotion; representation and form; aesthetic descriptions and judgments; art and society. $\dagger \dagger$

## 116. Introduction to Philosophy of

Religion. 3 hr.; 3 cr . A philosophical examination of basic concepts in religion such as God, religious meaning, faith, and religious experience. Readings will be selected from classical and contemporary sources. Fall, Spring
118. Introduction to Oriental Philosophy. 3 hr .; 3 cr . An examination of major trends in the philosophical and religious traditions of India, China, and J apan, including such topics as the U panishads, Vedanta, Mahayana and Theravada Buddhism, and Zen. Fall

## 120. Contemporary Issues in Philo-

 sophical Perspective. 3 hr.; 3 cr. Philosophical analysis of issues of current importance and interest. Possible topics: Man and Nature; Philosophy and the Environmental Crisis; the Nature of the Person; Law, Ethics, and Medicine; Film and Politics. If offered in multiple sections, each section may be concerned with different materials. Consult the department for current offerings. May be repeated for credit provided the topic is not the same. F all, Spring121. Law, Ethics, and Medicine. 3 hr .; 3 cr . An examination of problems currently arising at the juncture of law, ethics, and medicine, for example: abortion, euthanasia, experimentation on "human subjects," mental health services in schools, and problems regarding law and psychiatry (prison psychiatry and the insanity defense, among others).
122. Philosophy and the Challenge of the F uture. 3 hr.; 3 cr . Analysis of philosophical problems raised by radical change in society and the sciences. Issues concerning such topics as personal identity, the nature of the human, and moral agency are examined with reference to recent devel opments in culture and technology.
123. Freedom and Responsibility. 3 hr .; 3 cr . An examination of issues concerning human freedom and responsibility in their
political, legal, and religious dimensions the problems of moral decision in general and in situations of crisis; attention to writings of such figures as Plato, Berkeley Bettelheim, and Bonhoeffer.
124. Philosophy and the Holocaust. 3 hr.; 3 cr . An investigation of radical evil as exhibited in the Holocaust and of the philosophical issues encountered in attempts to understand or explain it. Relevance of the Holocaust to views of human nature, moral choice, and resistance.

## 140. History of Ancient Philosophy. 3

 hr.; 3 cr . A study of the major thinkers of the ancient period as well as the general philosophical trends in which their views arose. Special attention is given to such thinkers as the pre-Socratics, Plato, Aristotle, and Lucretius. Fall141. History of Medieval Philosophy. 3 hr.; 3 cr . A study of the transmission of the classical philosophical heritage to the Latin, Islamic, and J ewish cultures during the Middle Ages. Selected readings from Augustine, Anselm, Eriugena, Abelard, Avicenna, Averroës, Maimonides, Aquinas, Scotus, and Ockham. F all

## 142. History of Renaissance Philoso

 phy. 3 hr.; 3 cr. A study of the major philosophical movements in Western Europe from 1350-1600. Topics to be investigated include Humanism, Renaissance Platonism and Aristotelianism, the philosophical implications of the Protestant Reformation, the new philosophies of nature, and the rise of modern science. Spring
## 143. History of Modern Philosophy I:

 Descartes to Hume. 3 hr.; 3 cr . An analysis of European philosophy in the seventeenth and eighteenth centuries. Selected readings from Descartes, Hobbes, Spinoza, Leibniz, Locke, Berkeley, and Hume.144. History of Modern Philosophy II: Kant to Nietzsche. 3 hr.; 3 cr. A critical survey of nineteenth-century philosophy and its immediate background in Kant; examination of German idealists, their opponents, and successors. Selected readings from Hegel, Schopenhauer, Marx, Mill, Kierkegaard, and Nietzsche. Spring
145. History of Contemporary Philosophy I: Phenomenology and Existentialism. 3 hr .; 3 cr . A study of the background, central problems, and representative figures of phenomenology, existentialism, and structuralism. Selected readings from Husserl, Heidegger, Merleau-Ponty, Sartre, and Derrida. $\dagger \dagger$
146. History of Contemporary Philosophy II: The Analytic Tradition. 3 hr.; 3 cr. Logical empiricism and contemporary varieties of analytic philosophy are examined through a study of such writers as G. E. Moore, B. Russell, L. Wittgenstein, R. Carnap, G. Ryle, and P. Strawson. $\dagger \dagger$
147. History of American Philosophy. 3 hr.; 3 cr. A survey of major American thinkers from colonial times to the present.

Figures such as Emerson, Thoreau, Peirce, J ames, and Dewey will be considered.
150. Philosophy and Feminism. 3 hr.; 3 cr. An examination of feminist perspectives on topics such as: knowledge, metaphysics, aesthetics, ethics, political philosophy, and the nature and history of philosophy. Attention to the nature of gender and to the question of its role in the framing of philosophical issues, methods, and paradigms of investigation.
212. Philosophy of Knowledge. 3 hr.; 3 cr. A consideration of philosophical problems relating to the foundation, nature, and justification of knowledge. Fall
213. Metaphysics. 3 hr .; 3 cr . An analytical and critical examination of the nature, scope, and method of metaphysics, and of the fundamental distinctions and categories employed in the study of existence and existents. $\dagger \dagger$
219. Philosophical Perspectives on the History of Science. 3 hr.; 3 cr . An examination of selected turning points in the history of science and their philosophical significance. $\dagger \dagger$
221. Philosophy of History. 3 hr.; 3 cr. Consideration of both speculative and critical philosophies of history with emphasis on the relation of history to the sciences, historical explanation, and the principle of historical selection. Selected readings from Vico, Hegel, Marx, Collingwood, Beard, Sartre, Foucault. $\dagger \dagger$
222. Political Philosophy. 3 hr.; 3 cr. An analysis of the major political philosophers from Plato to the early twentieth century. Spring
223. Philosophy of Law. 3 hr.; 3 cr. An introduction to those basic concepts of Iaw and jurisprudence that have been influential in the formation of legal systems. Emphasis will be given to contemporary theory and criticism. $\dagger \dagger$
224. Philosophy of Mind. 3 hr.; 3 cr. Selected problems in philosophical psychology: concepts of mind; existential psychology; the mind-body problem; the nature of imagination; belief, emotion, intention, and introspection. $\dagger$
225. Philosophy of the Natural Sciences. 3 hr .; 3 cr . An analysis of the meaning, structure, and implications of modern natural sciences, and an examination of some fundamental philosophical problems concerning scientific inquiry and scientific knowledge. $\dagger$
226. Philosophy of the Social Sciences $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: J unior standing or permission of instructor. A philosophical critique of the fundamental assumptions, methodologies, and controversies in current social science. Possible topics: behaviorism and its alternatives; mainstream economics versus Marxism and quantitative sociology; functionalism and alternative conceptions in sociology and anthropology. $\dagger$
250. Plato and the Bible. 3 hr.; 3 cr. A comparative examination of philosophical themes in the Bible and in Greek philosophy, focusing upon conceptions of God, creation, human nature, physical and moral evil, the meaning of history, and the nature of society. Does not satisfy history of philosophy requirements for philosophy majors and minors.
251. Aristotle and Maimonides. 3 hr.; 3 cr. An inquiry into the impact of Aristotle's philosophy upon medieval J ewish thought and experience as represented by Maimonides. Primary attention to the relation between religion and philosophy and to problems of knowledge, mind, ethics, and society. Does not satisfy history of philosophy requirements for philosophy majors and minors.
252. Existentialism and Modern J ewish Philosophy. 3 hr.; 3 cr. An examination of the philosophies of Mendelssohn, Hermann Cohen, Martin Buber, and Franz Rosenzweig as responses to challenges presented by Kant, Hegel, Nietzsche, Sartre and Camus. Emphasis on themes of religion and ethics, the individual and the state, freedom and responsibility, alienation and the meaning of J ewish existence. Does not satisfy history of philosophy requirements for philosophy majors and minors
260. Readings in Contemporary Ethical Theory. 3 hr.; 3 cr. An advanced course in ethics involving an intense study of a limited number of texts. Emphasis is given to contemporary philosophers, but a continuous effort is made to place these thinkers in the larger context of Western philosophy. $\dagger \dagger$
261. Advanced Problems in Philosophy of Religion. 3 hr.; 3 cr. An examination of some of the major problems in contemporary religious thought. Possible topics: the existence of God, the nature of faith; mysticism; the problem of evil; philo-sophical aspects of eschatology; the impact of science on religion. $\dagger \dagger$
262. Recent Continental Philosophy. 3 hr.; 3 cr . Possible topics: the philosophy of language, the human body, theories of consciousness, Husserl's logical studies. Consult department for current offering and suggested prerequisites. $\dagger \dagger$
264. The Philosophy of Plato. 3 hr .; 3 cr A critical examination of the major dialogues of Plato. Though the main emphasis will be placed on the content of the dialogues, they are examined in the light of their setting - the Athenian world of Plato's day - and their relevance to the probems of that world. $\dagger \dagger$
265. Philosophy of Language. $3 \mathrm{hr} . ; 3 \mathrm{cr}$ A consideration of philosophical problems relating to language. Problems concerning meaning and reference, signs and symbols, verifiability and literal and non-literal meaning are treated mainly in terms of contemporary thinkers. $\dagger \dagger$
267. Contemporary Metaphysics. 3 hr.; 3 cr . Selected advanced problems from twentieth-century sources. Possible topics: theories of being and reality; the status of individuals; identity and reference; universals; relations; qualities; matter; space and time. $\dagger \dagger$
270. Major Philosophical Thinkers. 3 hr.; 3 cr . An extensive study of one great philosophical author or movement. The subject of the course will vary with the instructor and year. Current information may be obtained from the department. May be repeated for credit provided the topic is different.
271. Nietzsche: Nihilism and Beyond. 3 hr.; 3 cr . An examination of the philosophy of Nietzsche with particular reference to these key themes: the critique of Western civilization, the loss of absolutes, the will to power, the role of creativity, the transvaluation of values, the encounter with "Nothingness," the "new" human, the critique of traditional morality and religion.
272. Problems in Philosophy. 3 hr.; 3 cr. A detailed examination of a significant philosophical problem. The content of this course varies with the instructor and year. Current information may be obtained from the department. May be repeated for credit provided the topic is different. $\dagger \dagger$
383. Research Paper. 3 hr.; 3 cr. Prereq. Senior standing and an approved under graduate major in philosophy. Intensive research leading to the writing of a paper on a topic approved by the department; the final examination will consist of an oral defense of the paper. Fall, Spring

393, 394. Honors Seminar. 3 hr.; 3 cr. Prereq.: Permission of department. Gives students of advanced standing an opportunity to engage in the detailed examination of the work of a major thinker or group of thinkers. The topic of the seminar varies from semester to semester and is chosen in consideration of the student's needs and interests. The following list is representative of the seminar: Aristotle, Augustine, Aquinas, Scotus, Spinoza, K ant, Hegel, the British Empiricists, the Continental Rationalists, the American Pragmatists, the Logical Positivists, the Existentialists. The seminar involves individual work in close cooperation with a member of the department and occasional meetings. $\dagger \dagger$

The following graduate courses are open to qualified undergraduates with permission of the department.
620. Advanced Logic. 2 hr. plus conf.; 3 cr. Prereq.: An introductory course in symbolic logic or its equivalent. The methodology and foundations of deductive systems: propositional and predicate calculi, axiomatics, theory of types, modal logics, multivalued logics, logic of relations, etc. $\dagger \dagger$
621. Logic and Language. 2 hr . plus conf.; 3 cr . Logical and philosophical questions concerning the structure and function of language. $\dagger \dagger$
651. Philosophy of Law. 2 hr. plus conf.; 3 cr . An analysis or philosophical problems relevant to legal concepts and theories. Relation of ethics to legal concepts of rights and duties. The nature of law, the logic of evidence, and procedural principles.
652. Philosophy of History. 2 hr. plus conf.; 3 cr . Selected topics in the philosophy of history. Typical questions are monistic and pluralistic, materialistic and idealistic concepts of history; historicism; problems of methods and the role of ideas, explanation, interpretation, evidence, and value judgments; analysis of such basic concepts as causation, progress, and Zeitgeist. $\dagger \dagger$
653. Philosophy of the State. 2 hr . plus conf.; 3 cr . A critical study of major philosophic theories of the State, with attention to the distinction between factual and valuational elements, and the analysis of the methods and language of political science. $\dagger \dagger$
654. Philosophy of Religion. 2 hr. plus conf.; 3 cr . A study of selected topics in the philosophy of religion: the ideas of God, immortality, good and evil, and the nature of man in some of the major philosophies of religion, the social role and context of religion. $\dagger \dagger$

Courses in Reserve
108. Classical and Traditional Logic.
214. Philosophy of Man.
263. Marx and the Marxists.
266. Problems in Logical Theory.

## Physics

Chair: Kenneth R. Rafanelli
Master's Adviser: J. Marion Dickey
Ph.D. Adviser: Azriel Genack
Pre-E ngineering Adviser: Lawrence Ferrari, SB B320, 997-3388

Physics Major Adviser: Alexander Lisyansky
Dept. Office: SB B334, 997-3350

Distinguished Professor: Genack; Professors: Cadieu, Dickey, Ferrari, Fischer, Lisyansky, Rafanelli, Sessoms; Adjunct Professors: Heald, Strongin; Associate Professors: Klarfeld, Miksic, Schwarz; Adjunct Lecturer: Kunzler; College Laboratory Technicians: Bunch, German, Kuhner, Ozimkowski; Department Secretary: Wasserman

## The Major

The Physics Department offers a single track for the major, which gives a sound background in the broad spectrum of physics. Classical as well as modern physics is included in a curriculum that contains several laboratory courses. Students are encouraged to take advanced mathematics courses beyond those required for the major in physics.

After completing Physics 145 and 146, all physics majors take Physics 233,234 , $237,242,311,312,355,360,377$ or 378 , and 625 . In addition, two other physics electives should be chosen from any of the following courses: $225,221,366$, or, by special permission, 601, 635, 701, 711, 715 , and 725 . The math requirements are the calculus sequence through Math 201. A student who has started as a nonphysics major and taken 121 and 122, 103 and 104 , or 116,117 , and 118 , is requested to see the Chair before starting intermediate courses in physics.

## The Minor

The minor program is designed to give an understanding of both modern and classical physics to interested students. The sequence consists of the following set of courses: Physics 121, 122 (or 145, 146), 207, 237, 242 or 311, and one other physics elective.

## B.A.-M.A. Program

Truly outstanding majors are able to participate in the B.A.-M.A. program upon recommendation of the Department Chair.

## Physics Education

In conjunction with the Department of Secondary Education, the Department of Physics offers a physics education major. The education courses are specified by the Secondary Education Department and the physics requirements are similar to those for the minor, with the addition of General Astronomy 1.

## Honors and Awards

The Department of Physics offers the Paul Klapper Physics Prize, the Physics Prize, and the Ferdinand J. Shore Physics Award to outstanding students graduating with honors in physics. In addition, departmental honors are awarded each Spring semester to students who have excelled in either experimental or theoretical physics. The awards are based on faculty recommendations to the Chair.

## Pre-Engineering Program

The Pre-Engineering Program is organized by the Physics Department, which gives advice to Pre-E ngineering students. For details, refer to E ngineering Combined Plans/Pre-Engineering on page 44.

## COURSES

1. Conceptual Physics. 2 lec., 2 rec., 2 lab. hr.; 4 cr. Prereq.: 11th-year mathematics or equivalent, or Mathematics 6. This course is designed for non-science majors. Topics include mechanics, heat, electricity and magnetism, and modern physics. The course emphasizes a conceptual understanding of the material rather than computational problem solving, although some computation will be required. The objective is to develop an analytical way of thinking. N ot open to students who have received credit for Physics 103, 121, or 145.
2. Introduction to the Physics of Musical Sounds. 3 hr .; 3 cr . A course for liberal arts students who have an interest in music and sound. Physical phenomena that relate to music and sound will be presented. Topics include origins and nature of sound waves, speech and hearing, musical instruments, electronic music, auditorium acoustics, recording, reproduction and transmission of sound, and selected special topics. Laboratory and demonstration devices are available for illustration of pertinent concepts. Fall, Spring
3. Physics for Computer Science I. 3 lec., 1 rec., 2 lab. hr; 5 cr. Coreq.: Mathematics 102 or 112. Basic concepts of classical physics: Newtonian mechanics, thermodynamics, and electromagnetic theory. Fall, Spring
4. Physics for Computer Science II. 3 lec., I rec., 2 lab. hr. (every other week); 4 cr. Prereq.: Either Physics 103, 118, 122, or 146. Introduction to the principles and
methods of quantum physics with application to atoms and solids in general and semiconductors in particular. Analysis of the characteristics of semiconductor devices in computer logic circuitry.
5. General Physics. 2 lec., 2 rec. hr.; 3 cr. Prereq. or coreq.: Mathematics 101 or 111. The first part of a three-semester sequence (Physics 116, 117, 118) for preengineers and science majors, covering the same material as Physics 145 and 146. Not open to students who have passed Physics 121 or $145 . \dagger \dagger$
6. General Physics. 2 lec., 2 rec., 3 lab. hr.; 4 cr. Prereq.: Physics 116; coreq.: Mathematics 102 or 112. A continuation of Physics 116. N ot open to students who have passed Physics 121 or $145 . \dagger \dagger$
7. General Physics. 2 lec., 2 rec., 3 lab. hr.; 4 cr. Prereq.: Physics 117; coreq.: Mathematics 103 or 112. Physics 121 or 145 does not satisfy the prerequisites. A continuation of Physics 117. Not open to students who have passed Physics 122 or $146 . \dagger \dagger$
*121. General Physics I. 4 lec. and rec., 2 lab. hr.; 4 cr. Prereq.: Trigonometry and algebra equivalent to Mathematics 10. A non-calculus-based course primarily for majors in life sciences, pre-health professions, and liberal arts. Mechanics, thermodynamics, kinetic theory, and sound. No previous knowledge of physics is required.
*122. General Physics II. 4 lec. and rec., 2 lab. hr.; 4 cr. Prereq.: Physics 121. Electricity and magnetism, geometrical and physical optics, and an introduction to modern physics.
*145. College Physics I. 4 lec. and rec., 2 lab. hr.; 4 cr. Prereq.: M athematics 101 or 111. A calculus-based course intended for students who plan to study the physical sciences or engineering. Fundamental principles and laws of mechanics, thermodynamics, kinetic-molecular theory, and sound.
*146. College Physics II. 4 lec. and rec., 2 lab. hr.; 4 cr. Prereq.: Physics 121 or 145 and either Mathematics 102 or 112. Electricity, magnetism, and optics.
8. Introduction to Modern Physics for Engineers. 3 hr.; 3 cr. Prereq.: Physics 118,122 , or 146. An introductory course in the ideas and experiments leading to the Relativity and Quantum theories and to our present models of atoms, nuclei, molecules, and the solid state. $\dagger \dagger$
9. Wave Motion. 3 hr.; 3 cr. Prereq.: Physics 118, 122, or 146 . Selected topics drawn from the principal areas of physics are used to introduce the fundamentals of wave motion. $\dagger \dagger$

## 225. An Introduction to Solid State

Electronics. 3 rec., 3 lab. hr.; 4 cr. Prereq.: Physics 118,122 , or 146 . An introduction to the physical properties of

## thermionic and solid state electronic

 devices. Fall, Spring
## 230. Mechanics for Engineers. 3 hr.: 3

 cr. Prereq.: Physics 118, 122, or 146; coreq.: Mathematics 201. The fundamental principles of statics and dynamics and their application to the problems involving particles and systems of particles including rigid bodies. Spring
## 233, 234. Intermediate Methods of

 Mathematical Physics. 3 hr.; 3 cr. each sem. Prereq.: Physics 118, 122, or 146; coreq.: Mathematics 201. Provides the undergraduate with specific mathematical methods used in advanced elective courses in physics. 233-Spring; 234-F all237. Mechanics I. 4 hr.; 4 cr. Prereq.: Physics 122, 146, or 118, Mathematics 201; coreq.: Physics 233 or 234. A development of Newtonian mechanics using vector algebra. Fall
238. Thermodynamics. 3 hr.; 3 cr. Prereq.: Physics 122, 146, or 188; coreq.: Mathematics 102. The theory of heat and the thermal properties of materials. Recommended to majors in chemistry in preparation for the study of physical chemistry. Spring
311, 312. Electromagnetism. 3 hr.; 3 cr. each sem. Prereq.: F or Physics 311, Physics 118, 122, or 146 and 233; prereq. for Physics 312, Physics 234 and 311. Twosemester course. Physics 311: Introduction to electric and magnetic fields and A. C. and D. C. circuit theory; Physics 312 covers additional A. C. theory, Maxwell's equations, and propagation and radiation of electromagnetic waves. 311-F all; 312Spring
239. Applied Optics. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Physics 221, 312, a one-semester laboratory course at the 200 level or above. The principles underlying the operation and application of optical instruments: spectrometers, telescopes, lasers, etc. $\dagger \dagger$
240. Classical Physics Laboratory I. 4 hr.; 2 cr. Prereq. or coreq.: Physics 311, 237. A basic course in laboratory techniques, intended to teach the basic tools of experimental methods in physics. Experiments drawn from electricity and magnetism, mechanics, heat, and optics. Required of all physics majors. Fall
241. Introduction to Atomic and Nuclear Physics. 4 hr.; 4 cr. Prereq.: Physics 234 and 237; coreq.: Physics 312. An introduction to quantum and nuclear physics and the principles of special relativity. The objective is to explain the experimental basis for the transition from classical to modern physics. $\dagger$
242. Classical Physics Laboratory II. 4 hr.; 2 cr. Prereq.: Physics 355. A sequel to Physics 355, but optional for physics majors. $\dagger \dagger$
377, 378. Modern Physics Laboratory I,
II. 4 hr.; 2 cr. each sem. Prereq.: Physics

355 or permission of instructor. Experi-
ments are drawn from atomic, nuclear, solid state physics, modern optics, and electronics. Either Physics 377 or 378 is required of physics majors. Spring
381, 382. Seminar. 381.1, 3 hr. lab.; 1 cr.; 381.2, 2 hr. lec.; 2 cr.; 381.3, 2 hr. lec., 3 hr. lab.; 3 cr; 382.1, 3 hr. lab.; 1 cr.; 382.2, 2 hr. lec.; 2 cr.; 382.3, 2 hr. lec., 3 hr. lab.; 3 cr. Prereq.: Permission of department. Selected topics of current interest. $\dagger \dagger$
383. Special Topics. 3 hr.; 3 cr. Prereq.: Permission of department.
391, 392, 393. Special Problems. 391, 3 hr.; 1 cr.; 392, 6 hr.; 2 cr.; 393, 9 hr.; 3 cr. Prereq.: Permission of department. Open to a limited number of physics majors. Each student accepted works on a minor research problem under the supervision of a member of the staff. $\dagger \dagger$

The following graduate courses are open to qualified undergraduate students with permission of department.
601. Introduction to Mathematical

Physics. 3 hr.; 3 cr. Prereq.: A course in mechanics and an approved mathematics background. Selected topics in mechanics, thermodynamics, electrostatics, magnetostatics, the electromagnetic field, and the restricted theory of relativity. The mathematical methods developed include such topics as linear and partial differential equations, the calculus of variations, normal and curvilinear coordinates, expansion of a function as a series of orthogonal functions, vector, tensor, and matrix analysis. $\dagger \dagger$
611. Analytical Mechanics. 3 hr .; 3 cr . Prereq.: An undergraduate course in mechanics and an approved mathematics background. A course in particle mechanics emphasizing symmetry and conservation laws, group theory and the relation to quantum mechanics. $\dagger \dagger$
612. Fluid Dynamics. 3 hr.; 3 cr. Prereq.: Physics 233, 234, or Mathematics 310, 223 (or 328), and Physics 122 or 146, or permission of department. A macroscopic description of the physical properties of fluids. Topics include fluid equations for inviscid compressible and incompressible flow; wave propagation; shock waves and related discontinuities; stability and turbulence; and selected topics. $\dagger \dagger$
615. Electromagnetic Theory. 3 hr.; 3 cr. Prereq.: An undergraduate course in electromagnetism and an approved mathematics background. Electrostatic and magnetostatic boundary value problems; systematic derivation of differential form of Maxwell's equations in vector notation. Plane electromagnetic waves. Wave guides and cavity resonators. Spherical electromagnetic waves. Huyghens' principle. $\dagger \dagger$

## 625. Introduction to Quantum

Mechanics. 3 hr.; 3 cr. Prereq.: A course in modern physics and an approved mathematics background. Planck, Einstein, Compton, and the light quantum. The Bohr atom, Bohr-Sommerfeld quantum condi-
tions, and interpretations by de Broglie waves. Solutions of problems, including the free particle, particle in box, the harmonic oscillator, and the hydrogen atom. Waves and the uncertainty principle. The Schrödinger equation and the solution of the above problems. Transmission through a potential barrier. Spin, identity of particles, exclusion principle, statistics, exchange phenomena. Fall

## 635. Introduction to Modern Physics I

 3 hr.; 3 cr. Prereq.: A course in modern physics; coreq.: Physics 625. An introduction to molecular and solid state phenomena. Molecular structure and spectra of diatomic molecules, quantum theory of chemical bonding and dipole moments, crystal structure, lattice dynamics, free electron theory of metals, band model of metals, insulators, and semiconductors. $\dagger \dagger$
## 636. Introduction to Modern Physics

II. 3 hr.; 3 cr. Prereq.: A course in modern physics; coreq.: Physics 625. The experimental facts and elements of the quantum theories pertaining to natural and artificial radioactivity; interaction of charged particles and gamma rays with matter, nuclear structure; emission of alpha, beta, and gamma rays; nuclear reactions and models; the nuclear force; neutron processes; muons; pions; strange particles. $\dagger \dagger$
641. Statistical Physics. 3 hr.; 3 cr. Prereq.: Undergraduate courses in advanced mechanics and advanced thermodynamics. Maxwellian distribution of velocities, molecular motion and temperature; elementary theory of the transport of momentum (viscosity), energy (heat), and matter (diffusion). Entropy and probability; Maxwell Boltzmann statistics; equipartition of energy and classical theory of heat capacity of gases and solids; Bose-Einstein and FermiDirac statistics; quantum theory of paramagnetism. $\dagger \dagger$
645. Solid State Physics. 3 hr.; 3 cr. Prereq.: Physics 625. Crystal structure and symmetry; crystal diffraction; crystal binding; phonons and lattice vibrations; thermal properties of insulators; free electron theory of metals; energy bands; Fermi surfaces; semiconductors; selected topics in superconductivity, dielectric properties, ferro-electricity, magnetism. $\dagger \dagger$
651. Foundations of Physics. 3 hr.; 3 cr . Prereq.: Physics 625. The course presents the fundamental physical principles and concepts in a manner intended to show the interrelatedness of the various basic courses given in the undergraduate curriculum: classical and quantum mechanics, electromagnetic theory, phenomenological and statistical thermodynamics, and the principle of special relativity. The treatment provides historical and philosophical perspective. Some of the specific topics discussed are the nature of space and time, concepts of force, mass, and inertia, action-

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). †Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule
at-a-distance and field theories, indeterminateness, the role of probability, and the unidirectional character of time, the foundations of special and general relativity, symmetry principles and conservation theorems, the dimensionless numbers and cosmological considerations. The unsettled character of all the topics discussed is emphasized. $\dagger \dagger$

## Courses in Astronomy

1. General Astronomy. 3 hr.; 3 cr. Prereq.: Not open to students who have passed Astronomy 2. Introductory course. Includes discussions of positions, motions, composition, and evolution of the planets, stars, and clouds of interstellar matter and the manner in which this information is obtained. Fall, Spring

## 2. General Astronomy with Laborato-

ry. 3 lec. 3 lab. hr.; 4 cr. Prereq.: N ot open to students who have passed Astronomy 1. ntroductory course. Includes discussions of positions, motions, composition, and evoIution of the planets, stars, and clouds of interstellar matter, and the manner in which this information is obtained. The laboratory includes analysis and interpretation of astronomical data and observations. Fall, Spring

## Courses in Drafting

Drafting 3. Computer Aided Drafting.
4 hr.; 2 cr. An introduction to technical drawing utilizing conventional drafting instruments and computer-aided-drawing techniques (CAD). Basic geometric constructions, technical sketching, and analysis of shapes. Instrument and computer scale drawing in orthographic projection. Basic dimensioning and tolerencing, auxiliary views of inclined surfaces, and isometric and prospective projection drawing.
Drafting 4. Descriptive Geometry. 4 hr.; 2 cr.

## Courses in Reserve

8. E nergy and Electric Power in the Environment.

## 9. Physical Science for Non-Science

 Students.10. Introduction to the Physical Sciences.

## 11. Physics and the Visual Arts.

14. Conceptual Content of the Physical Sciences.
15. Medical Physics.
16. Mechanics II.
17. Electronics.
18. Atomic Physics and Quantum Mechanics.
19. Introduction to Astrophysics.

661, 662. Computer Simulation of Physical Models.

## Political Science

## Chair: Patricia Rachal

Graduate Adviser: I rving Leonard Markovitz

Dept. Office: Powdermaker 360, 9975470
Professors: Altenstetter, Gerassi, Hacker, Markovitz, Ofuatey-K odjoe, Psomiades, Schneider, Zwiebach; Associate Professors: Bowman, Krasner, Priestley, Rachal; Assistant Professor: Sun; Lecturers: Agbeyegbe, Milchman; Department Secretary: Braun; Professors Emeriti: Bailey, Morton, Tung

Courses in the Department of Political Science are designed to give the student, whether major or nonmajor, a basic understanding of the human relationships of power and conflict and the systems and processes of the state and the government as institutions within society. The department's offerings are divided into the following categories: A) American Politics, B) Comparative Politics, C) International Politics, D) Political Theory and Methodology.

Political science provides the background desired for graduate work; for careers in government service, education, journalism, law, or international agencies; and for staff work with research agencies, political parties, interest groups, business enterprises, trade associations, and labor organizations. Political science is also a liberal art and an appropriate major for students whose career interests are indefinite.

## The Majors

Requirements for the major are in the following two categories:
A) 30 credits in political science, including three of the following courses: Political Science 100, 101, 103, 104, and 105; and a seminar plus 18 elective credits in political science courses. The introductory course in each category is, on principle, a prerequisite for the intermediate courses and seminars in each category. Exemptions from this rule may be given by the adviser with the concurrence of the instructor.
B) A minimum of 9 hours must be taken in one or in several of the following departments: Anthropology, Economics, History, Philosophy, Psychology,

Sociology, and Urban Studies, with the permission of the department. By the upper sophomore year, political science majors should have worked out a comprehensive course of study in political science with their faculty adviser before registering for more political science courses. Transfer students who plan to major in political science should take a minimum of 18 credits in the department regardless of the number of political science credits earned at other institutions.

Students should consult the department's Student Handbook for a detailed description of courses offered each semester.

## Joint Major in Political Science and

 CommunicationsThis program in public affairs includes 36 hours in the two departments concerned: 18 hours each in Political Science and Communication Arts and Sciences. The political science requirements include three of the following: Political Science 100, 101, 103, 104, and 105; and a seminar for a total of 12 credits; plus 6 hours of electives in political science. The two departments are revising this program. Please consult with advisers in each department for the status of the program.
Department adviser: Prof. Psomiades

## The Minor

The minor in political science consists of 18 credits, including two of the first five courses (introductory courses), and at least three upper-level courses. No seminar is required, but if taken it will be credited toward the minor. Only 6 transfer credits will be credited toward the minor. Changes in courses may be made at any time.

## COURSES

## I. Introductory

The courses listed below are introductions to the major fields of political science and are offered each semester. Majors should complete these courses by the end of their sophomore year.
100. American Politics and Government. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. An analytical study of American national government with special attention to its structure and operation functions of the President, Congress, the $J$ udiciary; activities of the federal government in promoting the welfare of the people. Fall, Spring

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
tOffered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
101. Introduction to Political Science. 3 hr .; 3 cr . An analytical study of the basic concepts of political science including power, conflict, coercion; the state and the government. Will also include a basic introduction to methodology and research techniques. Fall, Spring
103. Comparative Politics. 3 hr .; 3 cr . A comparative analysis of political institutions, processes, and cultures. The political systems of selected countries will be illustrative case studies of the comparative approach. Fall, Spring
104. International Politics. 3 hr .; 3 cr . An examination of the nature of international society (nationalism, state sovereignty, balance of power) and the sources of conflict and tension among nation states After a consideration of the elements of power (geopolitical, economic, ideological, demographic, and technological), deals with the role of international organization and law, collective security and regionalism as "controls" on the use of power. Attention to the implications of the transitional aspects of world politics (e.g., the rise of new nations, population expansion). Fall, Spring
105. Political Theory. 3 hr .; 3 cr . Introduction to the nature, types, and problems of political theory. Core of readings consists of selections from classic works of political theory and philosophy. Fall, Spring
209. Special Topics in Political Science. 3 hr.; 3 cr . Topics to be announced Fall, Spring

## I. Intermediate

## A. American Politics

210. American State and Local Government. 3 hr .; 3 cr . Emphasis on development of executive power, legislative process, role of political parties and interest groups, changing character of urban government. Fall
211. Urban Politics. 3 hr.; 3 cr. A survey of the phenomena of the modern-day metropol is with emphasis on urban needs, government organization and administration, politics; political processes, and the interrelationships between the city and the suburbs. Spring
212. The American Presidency. 3 hr .; 3 cr. An analytical study of the office and powers of the President as chief of state, head of its executive branch, commander-in-chief of its armed forces, director of its foreign policy, and his role as legislator, party leader, and spokesman of the nation The concept of the presidency and the achievements of the presidents will be particularly examined. Fall
213. The Legislative Process in America. 3 hr .; 3 cr . An examination of the structures and functions of legislative bodies with particular emphasis on the United States. Fall
214. The J udicial Process. 3 hr .; 3 cr . An
examination of courts as political and governmental institutions. Rules of law, procedure, court decisions, and concept of jurisprudence discussed only when directly relevant. Emphasis on judicial recruitment, politics of judicial settlements, legal values and judicial decisions, political and social attributes and attitudes in judicial decision-making, and the impact of judicial decisions. Fall
215. Constitutional Law I: The American Federal Scheme. 3 hr.; 3 cr. An examination of basic issues of federalism, national and state power, and the separation and distribution of national power involved in the American scheme of checks and balances. Fall
216. Constitutional Law II: The Rights of the Citizen. 3 hr .; 3 cr . An exploration of the safeguards to the liberty and property of the citizen involved in the American concept of inalienable rights. Spring

## 217. Decision-Making in the White

House. 3 hr.; 3 cr. This course examines presidential decision-making and how it has varied among recent presidents.

## 218. Political Parties and Electoral

Problems. 3 hr .; 3 cr . An analysis of the place of public opinion in politics; techniques of political propaganda; functions of pressure groups; current political issues in relation to public opinion. Spring
219. Politics of Bureaucracy. 3 hr .; 3 cr . An analysis of the organization and functioning of public and private bureaucracies, including a general survey of the theory and practice of administration. Case studies will compare the functioning of actual agencies with administrative theory.
220. Politics and the Media. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. A study of the relationship between the media and political consciousness (the way we think and feel about politics), focusing on the news: its content, the way people perceive and use that content, and the way politically active people attempt to influence that content.

## 221. Public Policy in the Political Pro-

 cess. 3 hr.; 3 cr. Study of one or more public issues. Will focus on both the process of decision-making and evaluation of policy. May be repeated if different fields of public policy are being covered. Fall, Spring222. Power in America. 3 hr.; 3 cr. An examination of the structure of power of American society and its relation to political ideas and processes. Fall, Spring

## 223/Urban Studies 223. Introduction to

 Public Administration. 3 hr .; 3 cr . Analysis of the theoretical basis for administration, philosophies of administration. Description of the tools of administration and the relationship of administrative organization to other institutions in modern society. Spring224. The Public Service. 3 hr .; 3 cr . The problems of recruiting, organizing, and providing administrative leadership for the
persons required to administer modern government and to plan and carry out an ever-widening range of public programs and services. Will also stress the public service as a career. F all
225. Democracy and Economic Power. 3 hr .; 3 cr . This course deals with the interaction between the political and economic institutions of capitalist democracies. Topics covered include the relationship between capitalism and democracy, and between democracy and inequality, as well as the politics of economic policy in advanced capitalist societies.
226. Revolution, Politics, and Film. 3 hr.; 3 cr . This course combines the traditional tools of political science and history with the additional perspective of film to help us understand some of the major revolutions of the 20th century. Among the revolutions studied will be the Russian, German, Cuban, Chilean, and Algerian.
227. American Politics and Film. 3 hr.; 3 cr . This course will focus on selected American films, from the 1920s to the present, to examine the social and cultural ideas and attitudes that underlie American political and economic structures. It will also examine the influence of the media on the American political world.
228. Colloquium in American Politics. 3 hr .; 3 cr . Topics to be announced. No student is permitted to enroll in more than one colloquium in each semester. Spring

## B. Comparative Politics

231. Political Culture and Political Socialization. 3 hr .; 3 cr . The effect on political systems and behavior of such phenomena as fundamental moral concerns and value systems, class structures, and folk practices; development of the individual's orientation to political action and institutions.
232. Comparative Political Economy. 3 hr.; 3 cr . Effects of economic structures and practices on the political and social systems.
233. Politics and Government of Europe. 3 hr .; 3 cr . Analysis of contemporary European political institutions and processes. Selected countries to be announced.
234. Politics and Government of Russia and E astern E urope. 3 hr .; 3 cr . Analysis of collapse of the Soviet Union and dynamics of political processes in Russia and Eastern Europe.

## 236. The Politics of Developing

Nations. 3 hr.; 3 cr. Politics and government in the underdeveloped areas of Africa, Asia, Latin America, and the Middle East. Stress on the interaction of political, social, and economic forces. Attention to foreign policy problems. Fall

## 237. Politics and Government of

Africa. 3 hr.; 3 cr . Primary focus on the dynamics of societies in transition in "Sub-

Saharan" Africa from colonial dependency to independence, and from traditional tribal units to modern nations. Spring
238. Politics and Government of East Asia. 3 hr.; 3 cr . A survey of the political development and government institutions of the states in the Far East, chiefly China and J apan; analytical study of their historical background and foreign relations.
239. Politics and Government of Latin America. 3 hr .; 3 cr . A study of the political reality of Latin American countries through their constitutional organization and the actions and attitudes of power blocks within society. The role of political parties, dictatorship and caudillismo constitutional government, and democracy. Fall
240. Politics and Government of the Middle East. 3 hr .; 3 cr . A survey of Middle Eastern governments, political processes, and political group behavior.
241. Formation of the Modern Greek State. 3 hr.; 3 cr. Prereq.: Political Science 101 or 103, or History 239 or 240 recommended. Political and institutional development in Greece from the Revolution of 1821 to the Lausanne settlement of 1923. Topics to be included are: political culture, nation building, and political socialization, including clientelist politics, interest groups, and the formation and development of Greek political parties. The external factor in Greek domestic and foreign policy; nationalism; and the dominance of foreign policy over domestic politics.

## 243. Politics and Government in Cen-

 tral America. 3 hr .; 3 cr . An examination of the social, economic, and cultural forces that shape the political processes of Central American societies, including the application of political theories of Central American and foreign writers.244. Comparative Analysis of Revolutions. 3 hr .; 3 cr . The purpose of this course is to identify, describe, and analyze models of revolution. The object will be to show where and why revolutions are likely, the conditions under which they have succeeded in the past, and the forces that play determinant roles.
245. Politics of Terrorism. 3 hr.; 3 cr. A study of terrorism as practiced by governments, political parties, and small groups or individuals, including rationales, methods, justifications, and effects of terrorism by different agencies. Terrorism on an international scale will be studied in the context of global political and economic rivalries.
246. Colloquium in Comparative Politics. 3 hr.; 3 cr. Prereq.: Permission of instructor. Topics to be announced. No student is permitted to enroll in more than one colloquium each semester. Fall, Spring

## C. International Politics

250. International Law. 3 hr.; 3 cr . An examination of the traditional and prevail-
ing rules of international law and governing relations among states and other international persons; special emphasis on recognition, succession, international treaties, and state jurisdiction over land, water, and aerial space. Spring
251. International Organization. 3 hr .; 3 cr . After a brief treatment of the historical background of international organization and attempts to maintain peace, attention is given to the organizational, structural, and functional aspects of the United Nations and its related agencies. An evaluation of the contributions of these organizations to the maintenance of peace and to world economic, social, and political devel opment is made. Fall
252. Problems in International Law and Administration. 3 hr .; 3 cr . An analytical study of selected topics in international law and administration, such as means and procedures for the settlement of international disputes, responsibility of states and other issues in diplomatic practices, administrative problems of the United Nations and other international organs in the performance of their functions, as well as the changing conception and controversial principles of the law of war and neutrality.
253. Comparative Foreign Policy. 3 hr.; 3 cr . An analysis of patterns in the orientation of various nation-states toward their world environment, and of structures and processes by which various nation-states formulate foreign policies. Spring
254. Africa in World Politics. 3 hr.; 3 cr. The international relations of the African countries and the devel opment of African foreign policies. Pan-Africanism, the cold war in Africa, neutralism, regional and international agencies. Fall
255. E urope in World Politics. 3 hr.; 3 cr . The role of the European states in world politics. Cohesion and conflict within the regions: the politics of European integration, Atlantic cooperation, and East-West relations.
256. East Asia in World Politics. 3 hr.; 3 cr. Historical examination of the policies of the major powers toward China, J apan, and K orea; their common interests and contradictions; conflicts between nationalism and imperialism in East Asia and adjacent areas; special emphasis on the complicated relationships between the United States and the governments in this region. Fall
257. Latin America in World Politics. 3 hr .; 3 cr . The relations of the Latin American countries with the United States, the European powers, and with each other. Pan-Americanism and the participation of Latin America in international organizations. Inter-American public international law. Spring
258. The Middle East in World Politics.

3 hr .; 3 cr . The expansion of the European State system into the Middle E ast and the
regional adjustments. The changing patterns of regional and international politics in the Middle E ast, contrasting the League of Nations and the United Nations systems. Spring

## 261. Russia and Eastern E urope in

 World Politics. 3 hr.; 3 cr. Examination of the political, material, and ideological forces that shape the foreign policies of Russia and the E astern European states262. The United States in World Politics. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Examination of the historical, material, and ideological forces that shape current American foreign policy operations, followed by an analysis of policy formulation and stress on the executive, the legislative, and public opinion. Military, economic, and intelligence policies also examined. Attention is given to basic foreign policy problems in the context of East-West competition. Spring
263. Colloquium in International Politics. 3 hr .; 3 cr . Topics to be announced.

## D. Political Theory and Methodology

271. Classical and Medieval Political Theory. 3 hr .; 3 cr . An investigation of the foundations of the Western political tradition and the formulation of political theories in a pre-nation-state social order. Fall
272. Renaissance and Modern Political Theory. 3 hr .; 3 cr . An examination of the political problems that grew out of the conception of the nation-state, such as sovereignty, constitutionalism, democracy, political liberty, and social change. Spring
273. American Political Thought. 3 hr.; 3 cr . Discussion of the political concepts that have influenced the devel opment of an American democratic tradition; concepts will be related to specific political institutions and processes. $\dagger \dagger$
274. Twentieth-Century Political Philosophy. 3 hr .; 3 cr . Examination of the theoretical and methodological problems underlying twentieth-century political thought. Utilization of psychological findings, devel opment of scientific procedure, problems of concept-formation. Attention is given to fundamental ideological issues in twentieth-century politics. Spring
275. Applied Political Research. 3 hr.; 3 cr. This course will provide students with the basic skills needed to carry out political science research, including the formulation of research problems, the collection of evidence, and elementary statistical analysis.

## 277. Black Political and Social

Thought I: Protest Thought. 3 hr.; 3 cr. An introduction to the organized and systematic patterns of thought put forth by black publicists concerning the human conditions of blacks in white-dominated society, and the black ideological response to such a political, economic, and cultural situation. The emphasis will be on AfroAmerican thought, with references to African and Caribbean thought. Some of the thinkers whose works will be examined
are Blyden, Washington, Diagne, DuBois, Garvey, Nkrumah, Padmore, King, Malcolm X, and Fanon. Spring

## 278. Black Political and Social

Thought II: Contemporary Ideologies. 3 hr.; 3 cr . Basic themes in contemporary black political and social literature concerning the appropriate forms of political and social organization for black society. The emphasis will be on African political thought. Some of the themes to be explored are the implications of "Blackness" (negritude, African personality, etc.) for political organization (Ujamaa, African Socialism, Consciencism, etc.) and the role of blacks in the world revolution (Pan-Africanism Third Worldism, etc.). Fall
279. Colloquium in Political Theory. 3 hr., 3 cr . No student may take more than one colloquium a semester. Topics to be announced. $\dagger \dagger$
291. Special Problems. 291.1, 1 hr.; 1 cr., 291.2, 2 hr.; 2 cr., 291.3, 3 hr.; 3 cr. Prereq. Open to majors who receive permission of the department to register. A student or group of students will undertake and complete an individual research project in the field of their special interest under the direction of an instructor and with the approval of the Department Chair. Fall, Spring
292. Internship in Politics. 292.4, 2 hr./wk. plus 120 semester hours of internwork; 4 cr.; 292.5, 2 hr./wk. plus 150 semester hours of intern work. Prereq.: Permission of instructor. A work-study program, offered by the department, giving first-hand experience in the day-to-day operations of City government. Internships available with City Councilmen, administrative offices of the Mayor, Assemblymen, District Congressional offices, and other political offices. Application for the program is made through the Student Coordinator, a minimum of one month prior to registration. Applications available through the Political Science Department. Fall, Spring
293. Field Work in Political Science. 3 hr.; 3 cr. Individual or group field projects or internships with prior approval of the department. Fall, Spring

## III. SEMINARS

381. Seminar in American Politics. 3 hr.; 3 cr. Prereq.: Permission of instructor. Topics to be announced. No student may enroll in more than one seminar a semester. Fall, Spring

## 382. Seminar in Public Law and

Administration. 3 hr.; 3 cr. Permission of instructor. Topics to be announced. No student may enroll in more than one seminar a semester. Fall
383. Seminar in Comparative Politics. 3 hr.; 3 cr. Prereq.: Permission of instructor. Topics to be announced. No student may enroll in more than one seminar a semester. Fall, Spring
384. Seminar in International Politics 3 hr .; 3 cr. Prereq.: Permission of instructor. Topics to be announced. No student may enroll in more than one seminar a semester. Fall, Spring
385. Seminar in International Law and Diplomacy. 3 hr.; 3 cr. Prereq.: Permis sion of instructor. Open to seniors majoring in political science who have satisfactorily completed at least two courses in international law, international relations, international or regional organizations, or other related subjects. An intensive study of special subjects in the fields of international Iaw and diplomacy. Both theory and practice will be examined. E ach student is required to prepare a research paper and present it to the class for critical discussion under the guidance and supervision of the instructor. Fall
386. Seminar in Political Theory. 3 hr.; 3 cr . Prereq.: Permission of instructor. Topics to be announced. No student may enroll in more than one seminar a semester. Fall, Spring
387. Seminar in Political Analysis and Research Methods. 3 hr.; 3 cr. Prereq.: Permission of instructor. No student may enroll in more than one seminar a semester.

The following graduate courses are open to qualified undergraduate students with permission of department.
610. Western Political Thought. 2 hr plus conf.; 3 cr . The basic ideas and systems of Western political thought from Plato through Marx.
630. Contemporary Comparative Government. 2 hr. plus conf.; 3 cr. Government structures, ideological foundations, and functioning of political institutions in selected European states.
640. Public Administration. 2 hr. plus conf.; 3 cr . Problems of organization and process; the administrator as manager; decision-making and information flow. Administrative powers; procedural safeguards; authority, status, and leadership. Internal politics and bureaucracy. Spring

## 651. Government of the City of New

 York. 2 hr. plus conf.; 3 cr. The government of the City of New York and its role in the metropolitan area; its relationship to the state and to the federal government. Impact of economic and social forces on the political process660. International Politics. 2 hr . plus conf.; 3 cr . Basic factors in international politics. The struggle for power and order in world politics.

## Courses in Reserve

225. Politics and Administration of Industrial Regulation.
226. Political Parties \& Party Systems.
227. Comparative Administrative Sys-
tems.
228. Puerto Rican Political and Social Movements.
229. International Regional Organization.
230. Trans-National Forces in International Politics.
231. The Study of Politics.

## Psychology

Chair: Wilma A. Winnick
Deputy Chair: Robert N. Lanson
Assistant Chair for Evening Studies: Nancy S. Hemmes

Graduate Adviser: Philip A. Ramsey
Dept. Office: SB E 318, 997-3200
Professors: Baker, Bodnar, Borod, Brown, Caputo, Ehrlichman, Essman, Frumkes, Halperin, Hemmes, J ohnson, Poulson, Ramsey, Schuckman, Winnick;
Associate Professors: Berman, Cole, Fleischer, Lanson, M oreau, Shapiro, Witkin; Assistant Professor: Hollander; College Laboratory Technicians: Gottesman, Ramroop, Sham, Zhu; HE Assistant: Vollono; Department Administration: Cinquemani, Field, Lewis, Schimatz

Courses in psychology are designed to introduce the student to the field of general psychology. The major provides the basic training necessary for further study and employment in the field; the nonmajor will find psychology courses valuable correlates to the study of other areas. Employment for a B.A. in psychology is available in such settings as residential and treatment programs for handicapped individuals, and in drug rehabilitation facilities. A master's degree is a minimum requirement for many professional positions. The doctorate is required for teaching and research positions in psychology, in clinical, counseling, or industrial practice, and for New Y ork State certification.

## The Major

A major in psychology constitutes 33 credits. Requests for transfer credit for psychology courses taken at community colleges prior to a student's admission to Queens will be evaluated on the same
criteria as work completed at four-year institutions. The Psychology Department requires that half of the courses in the major and the required Advanced Experimental research courses must be taken at Queens College.

Required courses for psychology majors are Psychol ogy 101, 107, 213, and one advanced research course to be chosen from Psychology 311-320.

Psychol ogy 12 is not credited toward the major in psychology, although it is credited toward the B.A. degree.

Students are strongly advised to schedule Psychology 213 well in advance of their senior year so as to be eligible for advanced research courses or independent research seminars. Students planning to take Psychology 246 should try to schedule Psychology 226 during the previous semester. Psychology 325 or 326 , if scheduled should be taken in the senior year, subsequent to Psychology 226.

Majors are strongly advised to provide themselves with a diversified academic background by taking courses in a wide range of departments. In addition, the psychology faculty specifically and strongly urges the major to take:

1. a minimum of one semester of col-lege-level mathematics, preferably Mathematics 101 (or its equivalent);
2. a minimum of one year of natural science, of which one semester should be biology;
3. a minimum of one year of social science, of which one semester should be either sociology or anthropology;
4. a minimum of one semester of philosophy.

All students who are either planning to major in psychology or considering such a major should inform themselves of the department's advisory and preregistration system. All day-session matriculated majors are automatically included in the system and will be assigned an adviser. The department's Undergraduate Handbook and Academic Advisement Manual, which presents detailed materials concerning course selection, graduate school preparation, and career specialization, is available in the Psychol ogy Office. Advisement is available by appointment to evening students from the evening program coordinator. Peer Advisers are also available. Consult their schedule, posted in the Psychology Office. Since certain courses may not be given during every semester, the student should plan with flexibility.

## Senior Research Thesis

The Psychol ogy Department offers outstanding students the opportunity to
conduct a senior research thesis. Qualified students who successfully complete an empirical study (including a formal research report) will be eligible to be awarded their degree with Distinction in Empirical Research.

Students who have completed Psychology 213 and have a Psychology grade-point average of 3.7 (or the strong recommendations of two Psychology Department faculty members) are eligible to apply for permission to conduct a senior research study. The department will provide a list of faculty members who may be able to serve as research advisers. The thesis will be based on empirical research under the supervision of a departmental faculty member. A research proposal must be approved by the Chair prior to undertaking the study. The final thesis must be approved by a faculty review committee, which may grant the Distinction in Empirical Research.

It is anticipated that students choosing this option will spend at least two semesters conducting the research and preparing the thesis. Credit may be earned by enrolling in Psychology 391 (or 392) for 1 to 3 credits during the first and second semesters, respectively.

## ESL Students

Those students for whom English is a second or third language may have to take ESL qualifying examinations; in order to determine whether such tests are necessary and to receive permission to take psychology courses, all such students should see the ESL adviser for psychology, Professor Orbach.

## The Minor

In order to complete a minor in psychology, the student must take a minimum of 18 credits, with the exclusion of Psychology 12. (Psychology 12 is not credited toward either the major or minor in psychology, although it is credited toward the B.A. degree.)

## Prerequisites

All psychology courses other than Psychology 107 require either Psychol ogy 101 or 102 as a prerequisite.

## COURSES

12. Psychology of Life Management. 3 hr.; 3 cr . This course distills from each area of psychol ogy those ideas important to the control and management of one's everyday affairs. It offers critical insights into selfunderstanding, personal growth, career planning, parenting, and coping with the general problems of living. In addition to
lectures, there will be a series of demonstrations, exercises, and self-administered tests aimed at illustrating issues covered in the course. Psychology 12 may not be included as part of the 33 credits required for the psychology major. Not open to students who have taken Psychology 101.
13. General Psychology. 4 hr.; 4 cr. An introduction to the chief facts, principles, methods, and theories of psychology. Topics discussed include the history of psychology, sensory and perceptual processes, motivation and emotion, behavior development, learning and cognition, psychometrics, personality, psychopathology, and social behavior. Not open to students who have taken Psychology 102. This course requires a research experience of up to 5 hours. This experience can consist of participation in research studies or short written reports of published psychological research. (This course may be counted toward the LASAR Physical and Biological Sciences, Group B requirement.)
14. Statistical Methods. Lec./demo./ lab., 4 hr.; 3 cr. Prereq.: Demonstration of current mathematical competency equivalent to $21 / 2$ years of high school mathematics as defined by performance on the Queens College Mathematics Placement Exam. This mathematics prerequisite may also be fulfilled by evidence of satisfactory completion of one or more of the following courses: Math 6, 100, 101, 111 (or their equivalents). Data reduction, analysis, and reporting of frequency distributions, curve fitting, correlation, estimation, and hypothesis testing on evidence from one, two, and three or more samples. (This course may be counted toward the LASAR Scientific Methodology and Quantitative Reasoning requirement.)
15. Experimental Psychology. 2 rec., 4 lab. hr.; 4 cr. Prereq.: Psychology 101 and 107. Recommended: Grade of C or better in Psychology 107. A laboratory course designed to acquaint the student with the application of the experimental method to psychological problems. Experiments will be conducted in a variety of areas chosen to give the student an appreciation of the range of current psychological research. Particular emphasis will be given in the areas of experimental methodology, psychophysics, and learning. MAT charge, \$10.
16. Psychology of Aging. 3 hr .; 3 cr . Prereq.: Psychology 224 or 229. Not open to students who have taken Psychology 281/282 (Problems in Psychology). A review of the theories, research methods, and empirical findings relative to the aging process, beginning in young adulthood, through the middle years, into old age. Topics covered will include physical, cognitive, emotional, and social development, as well as death and dying.

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). †Offered either Fall or Spring; see Class Schedule. $\dagger \dagger$ May be offered; see Class Schedule.
221. Psychopathology (Abnormal Psychology). 3 hr.; 3 cr. Prereq.: Psychology 101 or 102. A critical survey and analysis of the field of psychopathology - symptoms causes, and treatments - with special emphasis upon the interrelation of physiol ogical, psychological, and sociological factors.
223. Psychometrics. 2 lec., 2 lab. hr.; 3 cr. Prereq.: Psychology 101 or 102, and 107. Application and evaluation of psychometric method for estimating the validity and reliability of psychological measures and for establishing norms. Areas sampled include creativity and special abilities, attitudes and values, intelligence and achievement, vocational interests, and personality traits. $\dagger \dagger$
224. Child Psychology. 3 hr.; 3 cr. Prereq.: Psychology 101 or 102. Not open to students who have taken Psychology 229. A review of the theories, research methods, and empirical findings in the area of behavioral development, focusing on the human infant and child.
226. Psychology in Business and Industry. 2 rec., 2 lab. hr.; 3 cr. Prereq.: Psychology 101 or 102. The psychological principles that can be applied to employee employer relationships are considered. Such problems as personnel selection, promotion, motivation, training, measurement of job satisfaction, increasing worker efficiency, and merit ratings are reviewed from the standpoint of the psychologist in industry. How the satisfaction of the work er can be furthered while serving the prof-it-seeking motive of business is the basic problem of the course
232. The Psychology of Personality. 3 hr.; 3 cr. Prereq.: Psychology 101 or 102. An introduction to the contemporary study of personality processes and individual differences. The course examines research growing out of various perspectives on personality, including psychoanalytic, trait, biological, humanistic, learning, and cognitive approaches.
245. Consumer Psychology. 2 rec., 2 lab. hr.; 3 cr. Prereq.: Psychology 226 and permission of instructor. The psychological principles related to the individual's role as a purchaser of goods and services and how he reacts to efforts to influence his purchasing behavior. Advertising, selling, and market and motivational research are considered. The value of the scientific approach to these problems is demonstrated and findings in the field are reviewed. Fall
246. Organizational Psychology. 2 rec., 2 lab. hr.; 3 cr. Prereq.: Psychology 226, a course in statistics, and permission of the instructor. In this experiential learning course, students simulate standardized roles prevalent in business. Group processes, leadership, conflict, and personal characteristics relevant to career devel opment are analyzed and studied. This course serves those students who have completed Psychology 226 and have a further interest
in industrial/organizational psychology as a profession or who may hope to enter the field of personnel management or industrial relations. When supplemented with Psychology 325 (Field Work in Personnel Psychology), it enables many students to better confront the problem of entering the business world in a psychology-related occupation. Spring
250. Innovations in the Teaching of Psychology. 4 hr.; 3 cr. Prereq.: Psychology 101 or 102 and permission of department. Designed to give students in psychol ogy active participation in the teaching of the discipline. They will assist a faculty member in teaching a course through innovative techniques approved by the department. May be taken more than once provided there is no duplication.

281, 282. Problems in Psychology. 3 hr.; 3 cr. Prereq.: Psychology 101 or 102 and permission of department. An exploration of topics, to be announced, that are not covered by the regular course offerings. May be taken more than once provided there is no duplication of topics. $\dagger$

Psychology 311-320 Series. Advanced Experimental and Research Psychology. 2 rec., 4 lab. hr.; 4 cr. Prereq.: Psychology 213 . One of these courses fulfills the requirement for an advanced research course in psychology.
311. Learning. Prereq.: Psychology 213. A laboratory course emphasizing application of experimental technique to the study of learning in animal and human subjects. Topics covered will include classical conditioning, instrumental (operant) learning, verbal learning, and a critical analysis of current controversial issues in learning. MAT charge, $\$ 10 . \dagger \dagger$

## 312. Sensory and Perceptual Pro-

 cesses. Prereq.: Psychology 213. A laboratory course emphasizing application of experimental technique to the study of perceptual processes. Included are an examination of the sensory basis of perception, psychophysics, scaling methods, and discussion of current theoretical issues in perception. MAT charge, $\$ 10 . \dagger \dagger$313. Cognitive Psychology. Prereq.: Psychology 213. A laboratory course emphasizing the application of experimental techniques to the study of cognition in human subjects. Among the topics covered are attention, recognition of patterns (such as speech and visual forms), imagery, storage and retrieval of information from short-term and long-term memory, and the organization of thought and language. A central theme of the course is a focus on structure and organization in these various cognitive processes. MAT charge, $\$ 10 . \dagger \dagger$
314. Behavior Modification. Prereq.: Psychology 213 and 221 or permission of instructor. Consideration of principles of learning as they apply to the acquisition maintenance, and modification of human behavior, as exemplified by the work of Bandura, Eysenck, Skinner, and Wolpe.

An application of reinforcement theories to behavior in educational, therapeutic, and cultural environments will be included. MAT charge, \$10.††
318. Advanced Developmental Psychology. Prereq.: Psychology 213, 224, or 229. A laboratory course in devel opmental psychology, focusing on the application of experimental methodology to the study of psychological development in children. Selected topics: cognition, sex-role stereotyping, psychomotor function, semantic processing.
320. Advanced Experimental and Research Psychology: Selected Topics. Prereq.: Psychology 213. Advanced study on topics to be announced, which are not covered by the regular course offerings. May be taken more than once provided there is no duplication of topics.
325. Field Work in Personnel Psychology. 325.1, 40 hr .; 1 cr .; 325.2, 80 hr .; 2 cr . Prereq.: Psychology 226 and permission of instructor. Psychology 325 is not a prerequisite for 326. Students are assigned for 40 or 80 hours a semester to a business or organization applying some aspect of personnel psychology. Included are personnel departments, psychological consultants, governmental agencies. Activities such as personnel testing, employment interviewing, personnel research, and employee relations functions are observed and, when feasible, participated in by the student. $\dagger \dagger$
326. Field Work in Consumer Psychology. 326.1, 40 hr.; 1 cr.; 326.2, 80 hr.; 2 cr. Prereq.: Psychology 226 and permission of instructor. Psychology 325 is not a prerequisite for 326. Students are assigned for 40 or 80 hours a semester to a business or organization applying some aspect of consumer psychology. Included are market research consultants, advertising agency research departments, manufacturers' marketing departments, and communications media research sections. Activities such as questionnaire coding and development, statistical analysis of consumer data, advertising effectiveness research, and consumer sampling and interviewing problems are observed and, when feasible, participated in by the student. $\dagger \dagger$
331. Psychology of Human Motivation. 3 hr.; 3 cr. Prereq.: Psychol ogy 101 or 102. Recommended for juniors and seniors only. A systematic survey of the problems involved in an understanding of human motivation. Among the problems discussed are the biological and cultural bases of human needs; their devel opment, hierarchy, and patterning; consequences of frustrations, conflicts, repressions, and other ambiguities of needs; the role of needs in the structure of personality; the relevance of personal motivation to an understanding of interpersonal relations and other social phenomena. Experimental findings, anthropological and psychoanalytical data, and other theoretical approaches to these problems are discussed and evaluated.
333. Personality Assessment. 3 rec., 2 lab. hr.; 3 cr. Prereq.: Psychology 107 and 223. An evaluation of various approaches to the assessment of personality. Reliability and validity, test construction, and response styles are considered. The following are discussed: interest inventories, multitrait personality batteries, projective techniques, and measures of achievement motivation and cognitive style. MAT charge, \$10.††
334. The Development of Perception and Cognition. 3 hr.; 3 cr. Prereq.: Psychology 224 or 229. Recommended for juniors and seniors only. A critical analysis of the physiological and psychological mechanisms underlying the development of sensory, perceptual, and cognitive functions from the time of conception to adulthood. The role of biological and experiential factors in determining the nature and level of perceptual-cognitive organization is emphasized. Current theories of development (e.g., Piaget, information processes) are reviewed and their social and educational implications discussed.
336. Humanistic Psychology. 3 hr.; 3 cr. Prereq.: Psychology 221 and 232. Recommended for juniors and seniors only. A critical review of the basic concepts and principles of humanistic psychology. The course will consider the implications that existentialism and phenomenology have for contemporary psychology's view of man and will include the work of both traditional existentialist philosophers and modern personality theorists.
338. Social Behavior. 3 hr.; 3 cr. Prereq.: Psychology 101 or 102 and upper junior standing, or permission of the department. A critical analysis of basic psychological principles involved in the behavior of individuals in social situations, with emphasis on social perception and interaction and the psychology of attitudes and of communication. Designed for students concentrating in psychology. Fall, Spring

## 341. Introduction to Psychoanalytic

 Theory. 3 hr.; 3 cr. Prereq.: Psychology 221 and 232. Recommended for juniors and seniors only. A survey of the development of classical (Freudian) psychoanalytic theory and technique. Also considered are the cultural and scientific influences on Freud's thinking, how current research findings support (and fail to support) dassical theory, and Freud's influence on contemporary psychoanalytic theory and practice.343. Behavioral Neuroscience. (formerly Physiological Psychology) 3 hr.; 3 cr. Prereq.: Psychology 101 or 102 and either Psychol ogy 213 or Biology 102. May not be taken if Psychol ogy 344 has been completed. A survey of the physiological basis of behavior with special emphasis on neural and endocrine processes as related to such areas as learning, motivation, emotion, perception, and memory. Fall, Spring
344. Advanced Topics in Behavioral Neuroscience. 3 hr.; 3 cr. Prereq.: Psychol
ogy 343 or permission of instructor. Topics vary from semester to semester and may include the neural bases of learning and memory, sleep and consciousness, motivation and emotion, sensation and perception, and cognition. May be taken more than once, as approved by the department.
345. Introduction to Clinical Psychology. 3 hr.; 3 cr. Prereq.: Psychology 221. Recommended for seniors only. A general introduction to the field of clinical psychology. The etiology, differential diagnosis, and methods of psychological treatment of various kinds of personality and conduct problems, emotional and social maladjustments, and problems of exceptional mentalities are considered. This course is especially recommended to students planning to do graduate work in clinical psychology. Fall, Spring
346. History and Systems of Psychology. 3 hr.; 3 cr. Prereq.: Psychology 101 or 102. Recommended for juniors and seniors only. A historical introduction to modern psychology and a critical survey of its chief systems - structuralism, functionalism, psychoanalysis, behaviorism, Gestalt, and others. (This course may be counted toward the LASAR Social Sciences requirement.) Fall, Spring
347. Psychological Disorders of Childhood and Adolescence. 3 hr .; 3 cr . Prereq.: Psychology 221, and 224 or 229. A survey of the major psychopathological disorders in childhood and adolescence; particular emphasis on etiological, biological, and social factors. These disorders include mental retardation, learning disabilities, conduct disorders, and neuroses and psychoses. Fall, Spring
348. Principles of Drug Action. 3 hr .; 3 cr. Prereq.: Psychology 101 or 102, or a college course in biology or chemistry. Relevant for psychology and biology students. Considers mechanisms of drug action and applications of biologically active agents as a basis for conceptual evaluation of behavioral functions. Fall, Spring
349. Psychology of Sex Roles. 3 hr.; 3 cr. Prereq.: Psychology 224 or 229. Recommended for juniors and seniors only. A survey and critical analysis of research and theory regarding similarities and differences in behavior between males and females, both human and animal. Included are considerations of biological, social, psychological, and cultural determinants of gender role development. $\dagger \dagger$
350. Sexual Behavior. Prereq.: Psycholo gy 224 or 229. Recommended for juniors and seniors only. A survey of research and theory about sexual behavior in humans and animals. Among the topics covered are neural and hormonal correlates of sexual behavior, the role of early experience and learning, survey and laboratory studies of human sexuality, cross-cultural studies of sexual practices, and sexual dysfunctions and their treatment. $\dagger \dagger$
351. Practicum in Academic Advise-
ment of the Psychology Major. 1 hr.; 1 cr. Prereq.: A minimum of four courses in psychology at Queens College, junior standing, and Student Personnel 200 (Introduction to Counseling and Advisement). This course, which is open to psychology majors only, may be taken concurrently with Student Personnel 300 (Practicum in Counseling and Advisement) or as a third-semester peer adviser. For the first half of the semester students will be required to meet with the faculty adviser one hour weekly to discuss issues such as the Psychology Department's requirements and
facilities, careers in psychology, and graduate training. In the second half of the semester students will spend two hours per week interviewing psychology student clients.
352. Advanced Practicum in Academic Advisement of the Psychology Major. 1 hr.; 1 cr. Prereq.: Psychology 355. During the second semester students will continue interviewing clients two hours per week and will participate in various projects related to advising psychology students, such as polling faculty about research opportunities, collecting information about volunteer opportunities, and contacting graduate programs for information.
353. Developmental Disabilities. 3 hr.; 3 cr. Prereq.: Psychology 224 or 229. Developmental disabilities, such as autism, mental retardation, deafness, and blindness, will be described in relation to the etiology of these conditions. Emphasis will be placed on environmental procedures designed to help integrate the person with developmental disabilities into the mainstream of society. The impact of the person with developmental disabilities on the family, as well as the roles family members can play in helping that family member achieve his or her potential will be discussed.
354. Contemporary Psychotherapies. 3 hr.; 3 cr. Prereq.: Psychology 221; junior standing and any of the following: Psychology 232, 317, 341, or 347. A review of the current status of psychotherapy by a comparison of the views of personality and psychopathology implied by the
psychoanalytic and behavioral models. A diverse sample of current psychotherapies will be studied and compared. These may include rational-emotive therapy, J apanese therapies and meditative therapies, Milton Erickson's approach to short-term treatment (including use of hypnotherapy), several forms of family therapy, behavioral medicine and biofeedback, and some novel approaches such as ethnotherapy. $\dagger \dagger$
355. Sex Roles and Psychopathology. 3 hr.; 3 cr. Prereq.: Psychology 221. This course involves a critical examination of the relationship of gender to personality development and mental disorders. Theories and research concerning gender differences in personality and psychopathology (e.g., depression, eating disorders, substance abuse) are presented.
356. Practicum in Psychopathology. 2 hr. plus 5 hr . field work to be arranged; 3 cr. Prereq.: Psychology 221, 232, senior standing, and permission of instructor. Provides for supervised clinical observation of patients at selected psychiatric hospitals and clinics. Students observe patients, audit staff conferences, and may assist in research conducted by hospital staff or College faculty. The academic component of this course includes an in-depth study by each student of one of the major approaches to psychopathology (such as psychoanalysis or behavior therapy) and the application of that approach to a set of case protocols. Fall, Spring
391, 392. Special Problems. 391.1, 3 hr. per week; 1 cr.; 391.2, 6 hr. per week; 2 cr.; 391.3, 9 hr. per week; 3 cr.; $392.1,3$ hr. per week; 1 cr.; 392.2, 6 hr. per week; 2 cr.; 392.3, 9 hr. per week; 3 cr. Prereq.: Written proposal submitted to and approved by the department. Open only to specially qualified seniors of exceptional promise and ability who are majoring in psychology. Fall, Spring

## Courses in Reserve

102. Introduction to Psychology as a Natural Science.
103. Theory and Analysis of Psychological Measurements.
104. Psychology and the Law.
105. Developmental Psychology.
106. Mathematical Models in Psychology.
107. Phenomenological Psychology.
108. Comparative Psychology.
109. Human Relations: Small Group Interactions.

## Puerto Rican Studies

Program Director and Undergraduate Adviser: J esse M. Vázquez

Instructors: Cintrón-Gonzalez, Llorens, López-Pumarejo, Moncada, Romero, Vázquez

Office: Kissena 355, 997-2830

Puerto Rican Studies at Queens College offers a variety of pertinent and challenging courses in the social science spectrum. Emphasizing interdisciplinary approaches to learning, these courses focus on the Puerto Rican expe-
rience as it has devel oped in the U nited States as well as on the island of Puerto Rico. Special attention is paid to the historical and cultural developments that have shaped the Puerto Rican and Latino experience in the United States.

Courses dealing with the psychological, political, and cultural aspects of the Puerto Rican and Latino experience broaden the perspectives of the student who plans to teach or enter the "helping" (social work, psychology, counseling, and legal) professions in New York, which has a population of over two million Puerto Ricans and other Latinos. Puerto Rican Studies is a participant in the Bilingual/Multicultural Specialization. These courses explore ethnic identity and provide a knowledge of the Puerto Rican and Latino experience.

## The Minor

The minor in Puerto Rican Studies consists of 24 credits. The minor concentration is composed of a required core (Group I), elective courses (Group II), and a special studies course (Group III). The student is required to select 9 credits from Group I, 12 credits from Group II, and 3 credits from Group III. In addition, the student must complete a minimum of three semesters in Spanish (through 113) or its equivalent.

## Required Core Sequence

Group I (9 credits)
History 243. The History of Puerto Rico
Puerto Rican Studies 203. Puerto Rican and Hispanic Ethnic I dentity
Spanish 210. Survey of the Literature of Puerto Rico

## or

Special Studies 94. Art of Puerto Rico and the Hispanic Caribbean

## Elective Core Sequence

Group II (12 credits)
Puerto Rican Studies 201. The Puerto Rican and Hispanic Child in the Urban Setting
Political Science 242. Puerto Rican Political and Social Movements
Puerto Rican Studies 220. Development of Puerto Rican Literature in the United States
History 119. The Spanish Caribbean in the Twentieth Century
Puerto Rican Studies 204. Caribbean Religions
Puerto Rican Studies 208. The Puerto Rican and the Latin American Woman
Sociology 261. Puerto Rican and Latin American Immigration
Ethnic Studies 310. Six Ethnic Groups
in New York City

## Special Studies

Group III (3 credits)
Puerto Rican Studies 202. Field Experience in the Bilingual Hispanic Setting Puerto Rican Studies 380. Tutorial in

Puerto Rican Studies

## Bilingual/Multicultural Education Specialization

Students interested in a specialization in bilingual/multicultural education should contact Professor Rafael Olivares in the Department of Elementary and Early Childhood Education. Because specific ethnic and cultural perspectives are an essential part of the preparation of all prospective teachers, we strongly recommend one or more of the following courses that focus on culture, community, and history of Puerto Ricans and other Latinos in the U. S.: PRST 202, PRST 203, and History 119. For acceptable alternative or additional course options, as well as transfer equivalencies, all students should consult with the Director of Puerto Rican Studies.

## COURSES

All of the following courses are offered through Puerto Rican Studies, Interdisciplinary and Special Studies, and other academic departments. The courses designated as Special Studies 94 and 97 are currently being offered through Interdisciplinary and Special Studies. Once approved, these courses will be offered through the Puerto Rican Studies or other academic department, and will be included in the minor concentration.

PRST 201. The Puerto Rican and Hispanic Child in the Urban Setting. 3 hr .; 3 cr . This course will deal primarily with Puerto Rican and other Latino children in the urban community. Special attention will be given to the socio-psychological dilemma of the child growing up between two cultures. Our approach is interdisciplinary in that we will focus upon psychological, anthropol ogical, and sociol ogical events that deeply affect the development and experience of Hispanic children in the urban metropolis.

PRST 202. Field Experience in a Bilingual Hispanic Setting. $2 \mathrm{hr} ., 3 \mathrm{hr}$. fieldwork; 3 cr. Prereq.: Spanish 113 or permission of instructor. This course gives the student an opportunity to participate in an assigned and supervised field experience in a bilingual school program or social

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
†Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
service agency serving the Latino community. The student will be required to gather information, observe, and participate in one of the many agencies that seek to serve the Puerto Rican and Latino community. The student will examine the role of Ianguage and culture in the delivery of social and educational services.

## PRST 203. Puerto Rican and Hispanic

Ethnic Identity. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Explores
Puerto Rican and Latino identity as a source of individual self-concept and group cohesion. Focuses on assimilation, acculturation, accommodation, autonomy, and the continuation and survival of culture and community in urban American society

PRST 204. Caribbean Religions. 3 hr.; 3 cr. This course is designed to examine the various religious expressions in Cuba, Haiti, Santo Domingo, and Puerto Rico, with a focus on a comparative analysis of Santeria, Espiritismo, Christianity, and Voodoo (African origins and Christian rituals).

## PRST 208. The Puerto Rican and the

 Latin American Woman. 3 hr .; 3 cr . This course will study the roles, status, thoughts, and actions of the Latin American woman, from Pre-Columbian times to the twentieth century. It will focus on women's struggle to understand and reshape their role in a rapidly changing society, and will analyze the traditional sex roles prescribed by society, religion, and women's image in historical and contemporary society.
## PRST 220. Development of Puerto

Rican Literature in the United States. 3 hr.; 3 cr. Prereq.: English 110 and Spanish 112. A survey of the contemporary Puerto Rican literary form that emerged as a unique expression of the experience of the writers in the United States. We will trace this development from the writers in exile to the first- and second-generation New Y ork Puerto Rican writers of poetry, drama, novels, and the essay.

## Political Science 242. Puerto Rican

Political and Social Movements. 3 hr.; 3 cr . A survey of political and social organizations and movements in Puerto Rico and the United States. This course seeks to analyze the sociopolitical conditions that gave rise to these various movements and groups and their impact on the evolution of the Puerto Rican people.

## PRST 380. Tutorial in Puerto Rican

Studies. 3 hr.; 3 cr. Prereq.: J unior/senior standing and permission of Director. The student will agree to work on a specific project under the guidance and supervision of a faculty member in Puerto Rican Studies.

## Reading

See Special Sequences and Courses, page 196.

## Religious Studies

Acting Director: Patricia O'Connor

Advisory Council: Bird, Goldsmith Haan, Lawson, Purnell, Zadoian

Office: T-3, Room 24, 997-3099
Religious Studies is an exciting part of the offerings in the humanities at the College. Its resources in faculty, library, courses, lecture series, and special events provide a strong background in the area, particularly attractive to students in the humanities or social sciences.

Religious Studies' academic orientation is derived from the disciplines of history, sociology, psychology, and philosophy. These fields attempt to treat religious phenomena from a nonpartisan and scholarly standpoint. The broad scope of faculty specialization permits a comprehensive investigation of the pervasive religious concerns of the world's cultures. Students interested in a Religious Studies major/minor should consult with the Director as soon as possible after having recognized their interest in the discipline.

## The Major

The major in Religious Studies requires 36 credits. All majors must take 18 credits of core curriculum: RLGST 101, 102, and 390, and English 381; either Sociology 221 or Philosophy 116, and either History 130, Arabic 160, or RLGST 103. Of the remaining 18 credits, students must select 12 from one of the following four distribution groups: Comparative Religion; Religion and Culture; Religion and Philosophy; or Religion, Literature, and the Arts. The remaining 6 credits may be selected from any of the approved courses. At least 12 credits must be at the intermediate or advanced level (numbered 200 or above). Courses in the Religious Studies Program (211, 212,213 , and 260 ) may be used to fulfill requirements for any of the four distribution groups.

Because planning a sound curriculum
is an important part of the major and minor, selecting courses to meet the distribution requirements will be done in consultation with the Program Director. Students must secure approval for a program plan, and any later substitutions must receive approval from the Director

## Distribution Groups

The list of approved courses in each distribution group is available in the Religious Studies Office. Interested students may obtain the list from the Director. Students are reminded that their program plans must be approved before they embark on the major/minor.
A) Comparative Religion. Students must select courses in at least two but no more than three religious traditions. Traditions include Christian, East Asian, Islamic, J ewish, and polytheistic.
B) Religion, Literature, and the Arts. Students must select six credits in literature and six credits in the Art and Music Departments. Courses in this group will study religious and cultural history through art, literature, and music with religious content.
C) Religion and Culture. This group of courses in the social sciences will study the relationships between culture, ethnicity, religion, and society.
D) Religion and Philosophy. This group of courses will study the relationship between religion and philosophy using individual and collective philosophical viewpoints.

See appropriate department listing for scheduling information.

Interested students should contact Professor O'Connor in the Religious Studies office.

## The Minor

The minor in Religious Studies requires a minimum of 21 credits. All minors must take RLGST 101 and 102, and either Sociology 221 or Philosophy 116. Out of the four distribution groups listed, students are required to take six credits from one and six from another for a total of 12 credits. Nine of these credits should be at the intermediate or advanced level (numbered 200 or above).

## COURSES

101. Introduction to Western Religions. 3 hr .; 3 cr . A brief survey of the persistent problems in Western religious thought, comparing representative thinkers in the traditions of J udaism, Christianity, and Islam. Spring
Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). tOffered either Fall or Spring; see Class Schedule t†May be offered; see Class Schedule
102. Introduction to Eastern Religions. 3 hr .; 3 cr . A brief survey of religious thought in India, China, and J apan. Developmental analysis of fundamental religious concepts and their impact upon culture. Fall
103. Introduction to J udaism. 3 hr .; 3 cr. History of the devel opment of J udaic beliefs, practices, and interpretive traditions. Representative selections from Mishnah, Talmud, K abbalah, and later thinkers. Fall, Spring
104. Essentials of Buddhism. 3 hr.; 3 cr. A study of Buddhist thought, devotional practice, and literary traditions in several selected Buddhist sects. Spring
105. Religion, Myth, and Language. 3 hr .; 3 cr . A study of the interaction between categorical schemes and constructs used in the study of religion, including psychoanalytic, phenomenological, and structuralist approaches. $\dagger \dagger$
106. Religious Meaning. 3 hr .; 3 cr . A systematic study of images of man in contemporary thought and their relation to modern religion. $\dagger \dagger$
107. Studies in Religion. 3 hr.; 3 cr . Selected topics in religious studies. $\dagger \dagger$
108. Research Paper. 3 hr .; 3 cr . Open only to Religious Studies majors in the senior year by special permission of the Program Director. Intensive research under the direction of a faculty member in a selected aspect of the field, leading to the writing of a paper. This course is required for the completion of the Religious Studies major.

## Romance L anguages

The courses previously offered by the Romance Languages Department are now offered through the Department of European Languages and Literatures and the Department of Hispanic Languages and Literatures.

# Social Sciences Seminar 

For information, see page 198.

## Sociology

Chair: Samuel C. Heilman Deputy Chair: Bernard Cohen Graduate Adviser: Max Kilger
Assistant Chair for Evening Studies: Paul Blumberg

Dept. Office: Kissena 257, 997-2800
Professors: Beshers, Blumberg, Clough, Cohen, B., Cohen, S., Goldner, Heilman, K apsis, Levine, Min, Seiler, Smith; Associate Professors: Beveridge, Font, Mankoff, Miller, Reichler, Savage, Zimmer; Assistant Professors: Browne, Catsambis, Gallo, Kilger, Liang, Tang; Lecturer: Habtu; Department Secretaries: Seeger, Williams

For those who major in sociology, the purposes of the department are to introduce students to the sociological perspective in order to enhance their understanding of and participation in society; to prepare students for graduate study in sociology and other social and behavioral sciences, or for graduate and professional studies in social work, law, urban planning, journalism, and related fields; to equip students for junior-level positions in health, education, and welfare, public opinion and market research, or research and administration in largescale public and private organizations (social science positions beyond the junior level in these areas usually require graduate training); to give students a basic understanding of sociology for teaching in the social sciences.

## The Major

Students who want to major in sociology are required to take Sociology 101, 205, 212, 331, 334, and at least four additional courses in sociology, one of which must be an elective at the 300-courselevel, for a minimum of 27 credits.

Majors are encouraged to complete Sociology 205 and 212 as early as possible in their college careers. Sociology 331 and 334 should be taken after 212.

Students should take their 300-course level elective as juniors or seniors after having completed all other major requirements.

Students are urged to consult informally with faculty members as soon as they feel they might be interested in a sociology major. Further, each major must submit for approval to a department adviser a tentative plan of study before completing nine semester hours in sociology.

## The Minor

Students who plan to minor in sociology are required to take Sociology 101, 212, and either 331 or 334, and at least three additional courses in sociology for a minimum of 18 credits.

## Department Honors

Department honors at commencement are awarded to majors on the basis of their academic average within the College and within sociology. For details on this matter, inquire in the department office.

## COURSES

101. General Introduction to Sociology. 3 hr .; 3 cr . A general introduction to the basic concepts, theories, methods, and findings of sociology.
102. Sociology of American Life. 3 hr.; 3 cr. The development, structure, and sources of stability and change in American society, with special emphasis on its major social issues.
103. Social Statistics I. 3 hr.; 3 cr. Prereq.: Sociol ogy 101. Descriptive and inferential statistics, emphasizing interpretation of sociological data: distributions, correlations, and statistical significance. Not open to students with credit for Economics 249 or Psychology 107.
104. Social Problems. 3 hr.; 3 cr. Prereq.: Sociology 101. Analysis of such contemporary social problems as poverty, homelessness, racism, violence, drugs, family breakdown, alienation, and environmental degradation.
105. Criminal J ustice. 3 hr .; 3 cr . Prereq.: Sociology 101. This course will introduce students to criminal substantive and procedural law and the dilemmas of crime control in a democratic society. Students will learn about the institutional components of the criminal justice system (police, courts, and corrections). Topics will include plea bargaining, capital punishment, the insanity defense, the exclusionary rule, and racial disparities.
106. The Modern Urban Community. 3 hr.; 3 cr. Prereq.: Sociology 101. Factors involved in the development of the modern city and urban life style, with special
emphasis on neighborhoods, residential distribution, and regional change.
107. Ethnic and Racial Relations. 3 hr .; 3 cr . Prereq.: Sociology 101. Major ethnic and racial groups, ethnic contact, and ethnic relations in American society and in other cultures.
108. Sociological Analysis. 3 hr .; 3 cr . Prereq.: Sociology 101. The relationship between sociological theory and data through analysis of important sociological problems.
109. Deviance and Social Pathology. 3 hr.; 3 cr. Prereq.: Sociology 101. Different conceptualizations of "deviance" and the social processes through which people are labeled as "deviant." Representative categories of deviance such as drug abuse are examined.
110. The Family. 3 hr .; 3 cr. Prereq.: Sociology 101. Historical and contemporary factors that shape families, with special emphasis on the American family. Topics include changes over time, cultures and social classes, and interpersonal issues of family life.
111. Sociology of Education. 3 hr .; 3 cr . Prereq.: Sociol ogy 101. The learning environment, including social characteristics of schools and students' relationships with groups and other institutions that affect academic success.
112. Social Psychology. 3 hr.; 3 cr. Prereq.: Sociology 101. An introduction to social psychology from a sociological perspective. This course examines the many ways in which individuals influence and are influenced by society. Topics include socialization, the self, social interaction, identity, conversation, and the management of emotions.
113. Crime and J uvenile Delinquency. 3 hr.; 3 cr. Prereq.: Sociology 101. The major theories on crime and delinquency, methods of studying the offender, and crime statistics. Emphasis is on the criminal justice system, including the police, courts, and corrections.
114. Mass Communication and Popular Culture. 3 hr.; 3 cr. Prereq.: Sociology 101. This course focuses on mass communications, such as the popular press, radio, television, and motion pictures, as institutions that both reflect and influence society. New technologies and video-computer technologies will be examined.
115. Social Class in American Society. 3 hr.; 3 cr. Prereq.: Sociol ogy 101. Inequalities of class, status, and power with special emphasis on the U. S. Topics include social class in a "classless" society, social mobility and the American dream, social-class profiles, trends in inequality, and the relationship of social class to political power.
116. Interpersonal Behavior and Group Processes. 3 hr.; 3 cr. Prereq.: Sociology 101. This course focuses on interpersonal and group processes. Topics include inter-
personal communications and influence, intimate relationships, and small group processes.
117. Sociology of Religion. 3 hr .; 3 cr . Prereq.: Sociology 101. The nature of religion, its relationship to other institutions, and its changing role and function in modern society.

## 222. Social Welfare as a Social Insti-

 tution. 3 hr.; 3 cr. Prereq.: Sociology 101. Social welfare as an institution, with emphasis on its structure and development, and sociological analysis of problems of aging, divorce, adoption, etc.
## 223. Introduction to Social Work

Method. 3 rec., 5 field hr.; 4 cr. Prereq.: Sociol ogy 101 and 222. The basic theory and practice of social work. Students are required to serve in supervised field placement one half day each week
224. Complex Organizations. 3 hr.; 3 cr. Prereq.: Sociol ogy 101. The study of business and non-profit organizations. Topics include managerial decision-making, conflicts, power, careers, and evaluation processes as they affect organizations. Also discussed is how organizations and individuals in them succeed or fail.
225. Sociology of Drugs. 3 hr.; 3 cr. Prereq.: Sociol ogy 101. This course examines the changing scientific and popular understandings of the effect, harms, benefits, and patterns of drug use as well as the historical and ongoing debates about drug policy. Most of the major recreational drugs (opiates, cocaine, cannabis, psychedelics, alcohol, tobacco, and caffeine) will be discussed in comparative and historical perspective.
226. Political Sociology. 3 hr.; 3 cr. Prereq.: Sociol ogy 101. The operation of power and the relation of political institutions to other sectors of society.
227. Sociology of Medicine. 3 hr .; 3 cr . Prereq.: Sociol ogy 101. An examination of the relevance of sociology and its perspectives with regard to the profession of medicine, its interpersonal dimensions, the training of medical personnel, and epidemiology. Emphasis is placed on the social as well as the biol ogical and healing dimensions of medicine.
228. Work, Industry, and Society. 3 hr.; 3 cr. Prereq.: Sociology 101. Topics include the nature of work in the modern world, trends in the labor force, occupations and occupational prestige, problems and prospects of the American labor movement, the theory of the post-industrial society, recent trends in the U. S. economy and their impact on the American worker, and women and work.
235. Computers and Society. 3 hr .; 3 cr . Prereq.: Sociology 101 and 212. A scientific examination of the relationships of digital technology to the individual and society. Topics include issues of privacy, humanmachine interaction, interpersonal communication, Iaw and crime, effects on American
and global social structure, national security, and the scientific community.
236. Population Problems. 3 hr .; 3 cr . Prereq.: Sociology 101. Social factors influencing fertility and contraceptive use, mortality and migration, consequences of population growth, and population policies and programs in various societies.
237. Sociology of Selected Countries. 3 hr.; 3 cr. Prereq.: Sociology 101. A sociological analysis of the development of various societies, their institutions, sources of stability and change, and major social issues. Selected areas for analysis might include individual countries, larger regions, or types of societies. Course may be taken repeatedly as the area analyzed changes.
238. Social Change and Social Movements. 3 hr.; 3 cr. Prereq.: Sociol ogy 101. Social change and major social movements in past and contemporary societies, with special focus on important theories of social change.

## 239. Sociology of Developing Coun-

 tries. 3 hr.; 3 cr. Prereq.: Sociology 101. Origin and nature of problems and processes in developing areas: interrelationships between institutions, social change, and poverty.240. Selected Topics in Sociology. 3 hr.; 3 cr. Prereq.: Sociology 101. Topics to be announced.
241. The American J ewish Community. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Sociology 101. Demographic and social characteristics, communal and political organization, and problems of identity and assimilation within the American J ewish community.
242. Modern Israel: Sociological

Aspects. 3 hr.; 3 cr. Prereq.: Sociology 101 This course will detail, analyze, and observe modern I sraeli society, its social organization, development, and various ethnic groups. Included are the North Africans, Eastern and Western Europeans, Arabs, Armenians, and Americans who make up the texture of modern Israeli society. Specialists on each of these groups will be invited to address the class, and material artifacts will also be examined.
243. Sex and Gender in Comparative Perspective. 3 hr.; 3 cr. Prereq.: Sociol ogy 101. This course explores the social construction of gender in a comparative-historical perspective. Emphasis is given to the ways in which particular social and historical conditions shape gender relations in the economy, the political system, the family, and the ideology and practice of sexuality.
244. Sociology of Women. 3 hr.; 3 cr. Pre req.: Sociol ogy 101. This course explores the changing position of women as a social group, focusing on the contemporary United States. The sexual division of labor in the paid labor market and in the household, the relationship of women to family change and "family crisis," the changing role of women
in politics, and the changing social construction of female sexuality will be studied.
245. Women and Work. 3 hr.; 3 cr. Prereq.: Sociology 101. An exploration of the changing situation of women in the U.S. workforce. Included is a study of the causes and consequences of job segregation by sex, and sex differentials in pay. The relationship between women's paid work and their role in the family and society will also be explored.
246. The Sociology of Human Sexuality. 3 hr.; 3 cr. Prereq.: Sociol ogy 101. This course explores the social sources of patterns of human sexuality. Among the topics examined are why sexuality has been regulated in all known societies, the sociology of heterosexual and homosexual behav ior and identity throughout the life cycle, gender-based sexual socialization, sexual politics (e.g., rape) and commercial sex (e.g., prostitution and pornography).
247. Sociology of Law. 3 hr.; 3 cr. Prereq.: Sociology 101. This course examines the role of law in society and the devel opment of legal institutions in the United States from col onial times to the present
249. Sociology of Cinema. 4 hr .; 3 cr . Prereq.: Sociol ogy 101 or CAS 143 or 144. Film as both a reflection and refraction of society will be explored primarily through comparing American films from different time periods. The course will concentrate on the relationship between films and the industrial system that produces them - an area neglected by most film scholars and cultural sociol ogists.
250. Sociology of Friendship. 3 hr .; 3 cr . Prereq.: Sociol ogy 101. This course examines friendship and other primary relationships from a sociol ogical perspective. Social psychological and sociol ogical theory are used to understand friendship as a social phenomenon. The course focuses on friendship as a type of social relationship; how it reflects and affects social structures is discussed. All students are encouraged to pursue individually, or as a member of a group, original social research.
271. The Black Family. 3 hr.; 3 cr. Prereq.: Sociology 101 or permission of instructor Sociological theories regarding the black family. Topics include changes in the family, relations with public and social institutions, the nature of male/female relationships, the present state of the extended family, the black family as an agent in the social development of children.
272. Blacks in American Society. 3 hr.; 3 cr. Prereq.: Sociology 101 or permission of instructor. Topics include rural-urban migration, blacks in the urban setting, position of blacks in the changing structure of the American economy, the question of the dedining significance of race, and the relations among native and immigrant blacks.
273. Social Change in Africa. 3 hr .; 3 cr . Prereq.: Sociology 101 or permission of instructor. Problems and processes of
social change in Africa. Theories of socia change are evaluated in the context of Africa. Topics include: ethnicity; nationalism; rural and traditional social structures; urbanization and urban problems; class relations; state structures; state and civil society; social development.
274. Social Change in Latin America and the Caribbean. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Sociology 101 or permission of instructor. Problems and processes of social change in Latin America and the Caribbean. Various theories of social change are evaluated in the context of Latin America and the Caribbean. Topics include ethnic and race relations, migration (internal and external), state structures; state and civil society, interstate relations, problems of social development.

## 275. Sociology of Asian Americans. 3

 hr.; 3 cr. Prereq.: Sociology 101. This course takes a sociological approach to Asian Americans in general and six major Asian ethnic groups in particular. Topics include the history of Asian immigration, historical cases of discrimination against Asian Americans, settlement patterns, occupational and economic adjustment, community organization and ethnicity, intergroup relations, and marriage and family life.289. Sociology of Death and Dying. 3 hr.; 3 cr. Prereq.: Sociology 101. This course focuses on attitudes toward death, funeral practices in various cultures, the cultural components of mourning, and the social organization of death and dying in bureaucratic settings such as the hospital and nursing home.
290. Social Statistics II. 3 hr.; 3 cr. Prereq.: Sociology 101 and 205. Additional and more advanced statistical methods applied to the analysis of sociological data; multiple and partial correlation, analysis of variance, etc.
291. Field Work. 325.1, 3 hr.; 1 cr.; 325.2, 6 hr.; 2 cr.; 325.3, 9 hr.; 3 cr. Prereq.: Sociology 101. Each student will serve as an intern in a public or private agency and complete an individual research project under the direction of the instructor.
292. Foundations of Sociological

Theory. 3 hr.; 3 cr. Prereq.: Sociol ogy 101. Problems in sociological theory with special emphasis on contemporary approaches and general processes of theory construction.
332. Sociology of Knowledge. 3 hr.; 3 cr. Prereq.: Sociol ogy 101. Concerns the relationship between ideas and the social structure. Theories proposed by Marxists, phenomenologists, and functionalists to explain the relationship are examined.
333. Social Science Research Using Computers. 3 hr.; 3 cr. Prereq.: Sociology 101 and 205 or equivalent, or permission of the instructor. Introduction to the comput-er-assisted conduct of social science research; data gathering, processing,
analysis, interpretation and report writing
334. Methods of Social Research. 3 hr.; 3 cr. Prereq.: Sociol ogy 205 and 212. A study of various methods of social research, combined with practical experience in their application.
348. Orthodox J ews in America. 3 hr.; 3 cr. Prereq.: Sociology 101; Sociology 241 recommended. This course sociologically examines the contemporary condition of American Orthodoxy. Particular emphasis is placed on the persistence of traditional J udaism in modern America and the social tensions this engenders. Comparisons between Orthodox and other J ewish sects will be made, as well as between other traditional faiths.

## 351. Social E cology: Field Study of a

City. 3 hr.; 3 cr. Prereq.: Sociol ogy 101.
This course, each time using a particular city itself as a field setting, will enable students, under the supervision of the instructor, to examine the social ecology of neighborhoods, community life, urban development, and change on site. Lectures and tours through various sections of the city will focus on continuity and change, revitalization and change.
353. Ethnography. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: Sociology 101. Strategies of sociological field research; techniques of observation, documentation and analysis of groups, cultures, and communities.
355. Practicum in Academic Advisement of the Sociology Major. 1 hr . plus conf.; 1 cr. Prereq.: A minimum of three courses in sociol ogy at Queens College, junior standing, and Student Personnel 200 (Introduction to Counseling and Advise ment). This course, which is open to sociology majors only, may be taken concurrently with Student Personnel 300 (Practicum in Counseling and Advisement) or as a third-semester peer adviser. Students will be required to spend two hours a week interviewing students at the Department of Sociology, participate in various projects (e.g., developing a tutoring service, obtaining career and graduate training information) for 1 to 2 hours per week, and attend semi-monthly meetings with the Sociology Department supervisor, which will involve discussions of interview techniques, role playing, and recent devel opments in sociology. Course may be taken twice for credit.
381, 382. Senior Seminars. 3 hr.; 3 cr Prereq.: Advanced standing in sociology. Topics to be announced. (No student is permitted to enroll in more than one seminar per semester.)

391, 392. Special Problems. 3 hr.; 3 cr. Prereq.: Open to seniors of advanced standing (approx. A average in the department) majoring in sociology who receive permission of the department to register. The student undertakes an individual research problem and pursues it under the direction of a member of the department.

## Special Programs

See Special Sequences and Courses on page 198.

## Student Personnel

Dean of Students and Chair: Burton L. Backner

Dept. Office: Powdermaker 116, 997-5500

Associate Professors: Fleming, Frisz; Assistant Professors: Backner, Pardes, Simpson; Lecturers: J enkins, McCoy, M odeste, Townsend; Members of Dean of Students Staff - HEO Associate: Asfaw; HEO Assistants: Hayes, Pearsall, K necht, McCaffrey, Pierce-Anyan, Proctor; Assistants to HEO: Caporossi, Gray, Primavera, Rosa; Staff Nurse: Bernard; Special Services Counselor: Welch; Learning Disabilities Specialist: Rooney; Upward Bound: Anderson, Cruz-Atwell; Child CareTeachers: Bergen, Quilachamin, Sinclair, Y ates; Office Manager: Glaser; Secretaries: Coppi, Cummings, Hosford, Lynch, Reicher, Ross

The Department of Student Personnel is concerned with all students and their campus life. The Counseling and Advisement Office, Peer Advisement Program, Minority Affairs, the Office of Student Activities, Career Development Center, Health Service Center, Child Care Center, Office of Special Services for Disabled Students, International Student Services, Student Union, and Upward Bound are under the jurisdiction of the Dean of Students.

The activities and services of the department and other units are described in the section of this Bulletin entitled Student Life

## COURSES

Note: Students interested in broadening their background in the concepts presented in the following courses and in pursuing graduate studies in student personnel work are advised to take courses in related areas of psychology and the social services.

## Screening

Admission to Student Personnel courses is by permission of the instructor. Prior to acceptance into the counseling and advise ment courses, all students are required to go through a two-part screening process. Applicants are screened and selected by experienced peer advisers and by the coordinator of the Peer Advisement Program. Applications are available in PH 128.

## 200. Introduction to Counseling

Advisement. 3 lec., 1 practicum hr.; 3 cr . Prereq.: Upper sophomore standing and/or permission of instructor. Screening interview will take place during the semester preceding enrollment. This course combines counseling and advisement theory and practice aimed at giving an understanding of interpersonal interactions, communication skills devel opment, deci-sion-making and problem-solving, and interviewing and counseling techniques. It is designed to train students who have been specially screened and selected in the skills necessary to advise other students regarding academic concerns. F all, Spring
300. Practicum in Counseling and Advisement. 2 lec., 4 practicum hr.; 3 cr. Prereq.: Student Personnel 200 and permission of instructor. This course includes individual and group supervision in a practicum setting. Emphasis will be placed on further exploration of theoretical and practical issues in the advisement and counseling process, along with continued devel opment in interviewing skills and techniques. Four hours a week of advising students plus participation throughout the academic year, including Advisement Days and freshman registration periods, are required. Fall, Spring
302. Advanced Practicum in Counseling and Advising. 2 lec., 4 practicum hr.; 3 cr. Prereq.: Student Personnel 300 and permission of instructor. Continued supervision in a practicum setting. The experiences are parallel to those in Student Personnel 300. Students will initiate and complete individual projects in the area of counseling and advising (theory, training, or research). There will be an opportunity to integrate counseling and advising skills previously acquired with supervisory and training functions. Participation and service throughout the academic year, including Advisement Days and freshman registration periods, are required. Fall, Spring

## Courses in Reserve

## 301. Dimensions of Counseling and Psychoanalytic Theory.

303. Practicum in Dimensions of Counseling and Psychoanalytic Theory.

## Urban Studies

Chair: Leonard S. Rodberg
Dept. Office: Powdermaker 376, 9975130

Professors: Lawson, Muraskin, Seley, Steinberg; Adjunct Professor: Gallent; Associate Professors: Hanlon, Rodberg, Sardell, Tchen; Adjunct Associate Professor: Bass; Adjunct Assistant Professors: Fortuna, Pam, Yazicioglu; Adjunct Lecturers: Benson, E del, K och, Valance; Department Secretary: Sanders; Director of Community Studies Office: Manning

Urban Studies is concerned with metropolitan areas in terms of urban problems, community organization and development, administration, and public policy. The various social science disciplines are drawn upon to develop an understanding of, and solution to, the problems that characterize modern urban civilizations.

The undergraduate program provides a background for students who intend to work in city or state government, planning, community organization, law, or related fields.

## The Major

The major consists of 39 credits in courses from the Department of Urban Studies and closely related disciplines. It includes the following:

1. Urban Studies 101.
2. Urban Studies 200 (or equivalent).
3. 6 credits to be chosen from among Economics 101 (or 1), Political Science 102, and Sociology 101.
4. Either Urban Studies 360 or 370.
5. 24 credits of courses in Urban Studies that will be arranged with, and approved by, an adviser to give a concentration in a field of Urban Studies. Such concentrations include Housing and City Planning, Health and Human Services, and Ethnic Groups and Communities. Sociology 205 or 222 may be included among the 24 credits, if appropriate.

## The Minor

The minor consists of 18 credits in Urban Studies, including Urban Studies 101 or 102. At least three courses must be at the 200 or 300 level. If the student has not taken a course in social science methods or in statistics, then Urban

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). Offered either Fall or Spring; see Class Schedule. ††May be offered; see Class Schedule

Studies 200 must be taken in addition to the 18 credits in Urban Studies

## COURSES

14. Urban Aesthetics. 3 hr .; 3 cr . The city as an aesthetic environment and its effects on aspects of urban life. $\dagger \dagger$
15. Urban Issues: Poverty and Affluence. 3 hr .; 3 cr . Causes of prosperity and decline of cities; local fiscal strength and weakness; determinants of the individual income distribution; the role of the urban job market and other markets; economic and cultural theories of poverty; attitudes toward the poor; the role of federal policy. Fall, Spring
16. Urban Issues: Services and Institutions. 3 hr .; 3 cr . Survey of urban public programs. Analysis of selected examples (taken from health, transport, housing, education, welfare, protective, and other services). Comparison of analytical approaches to the analysis of institutions. Role of private, voluntary, and labor organizations in service delivery. Fall, Spring

## 105. Socioeconomic and Political

 Power in the City. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Analysis of forces that shape decision-making and public policy in the modern city. The course will examine the influence of political, economic, and social interest groups (including business, labor, and communities), as well as that of bureaucracies, political parties, and "machines." The relation of power and influence to the outcomes of policy will be explored.106. Cultural and Historical Development of Cities. 3 hr .; 3 cr . The anthropological and historical analysis of the development of cities throughout the world and over the past five millennia. The course will present various theories of the emergence of different types of cities. $\dagger$
107. Historical Perspective on Cur rent Urban Problems. 3 hr.; 3 cr. A study of current urban problems in historical perspective. The course examines problems brought to American cities by rapid growth, industrialization, commercial change, and economic cycles during the past century. The policies that were developed in response to these problems will be examined both as sources of current problems and as experiments whose results may be useful in formulating new policies.

## 113. Urban Subcultures and Life

Styles. (formerly Urban Studies 108) 3 hr.; 3 cr . The study of different subcultural life styles found in the modern city including those based on economic position, ethnic background, age, and social or sexual preference. Also studied are the effects of different urban conditions on individual life styles; attitudes toward life in the city, suburbia, and the country; images of city life.
114. Sexual Variance in the City. 3 hr .; 3 cr . This course studies the diverse sexual subcultures which flourish in urban areas.

Special attention is paid to the interaction of urban cultures with these sexual subcultures, and to the unique influence of the urban environment on sexual diversity and innovation.
117./E lementary E ducation 104. Introduction to Urban Education. 3 hr .; 3 cr . This course is designed primarily for noneducation majors. The focus is on the structure and history of education in the United States, especially the urban areas. It will explore questions involved in such areas as desegregation, financing, socioeconomic class, multicultural populations, and teaching as a profession.
131./Health and Physical Education 113. Urban Health Issues. 3 rec. hr. fieldwork; 4 cr . A review of health problems affecting the urban population. Emphasis on overpopulation, pollution, housing, and accidents.

## 132. Health Services and Policy. (for-

 merly Urban Studies 114) 3 hr.; 3 cr. An introduction to the structure and functions of institutions that provide personal and public health service. The course analyzes public policy issues, including educational licensing and the financing and regulation of health care services.
## 141. Introduction to Housing and

Urban Planning. (formerly Urban Studies 116) 3 hr.; 3 cr. An introduction to theoretical, methodological, and practical issues involved in social and physical planning for urban areas. It will include issues such as attracting economic devel opment, the citing of public services and facilities, and the regulation and supply of housing

## 151. Neighborhoods in the City and

 Suburbs. (formerly Urban Studies 104) 3 hr.; 3 cr . Analysis of the structural and functional properties of neighborhoods and their relation to the larger city and to urban problems.t200. Methods in Urban Research. 3 hr. 3 cr. Prereq.: 6 credits in urban studies, anthropology, economics, political science, or sociol ogy. An introduction to the methods employed in urban research, with an emphasis on demographic analysis, survey research, and observation. Students are taught how to interpret published research and how to plan and organize their own research and write reports. (Not open to students who have taken Soc. 212 and 334. For Urban Studies majors who have taken these two courses, the requirement of Urban Studies 200 will be waived.)
201. Computer Methods for Urban Policy Analysis. 3 hr.; 3 cr. Prereq.: Mathematics 6 and 6 credits in Urban Studies, Anthropology, Economics, Political Science, or Sociology. This course introduces the student to a variety of methods for performing urban policy analysis using microcomputers, including the use of spreadsheets, database systems, graphics programs, mapping systems, and statistical packages. Students will be introduced to essential file management functions and will learn to use these comput-
er-based tools to analyze, interpret, and display demographic, economic, and geographic data. Students will carry out and present projects using their own data or data provided by the instructor.

## 202. Racial and Ethnic Minorities in

 Urban America. 3 hr.; 3 cr. Prereq.: 6 credits in urban studies, anthropology, economics, political science or sociology. This course provides an overview of theory and research on American racial and ethnic minorities, with an emphasis on the relationships between these groups and urban institutions.203. Case Studies of Race and Ethnicity in Urban America. 3 hr.; 3 cr. Prereq.: Any six credits in anthropology, history, political science, sociology, or urban studies. Each semester a different racial or eth nic minority will be selected for intensive study, with emphasis on how its community and culture have changed through time. Students will be encouraged to participate in field research within the racial or ethnic community under examination. May be repeated once if topic varies.
204. Women in the City. 3 hr.; 3 cr. Prereq.: Any 6 credits in anthropol ogy, econom ics, history, political science, sociol ogy or urban studies. This course studies the spe cial influence of the urban environment on the lives of women. Topics include: Differences in women's roles between urban and rural societies; "women's work" in urban societies; the effects of urban habitation and the physical environment (the "built" environment) on women; women as consumers and providers of municipal services.
205. Cities of the World. (formerly Urban Studies 225) 3 hr.; 3 cr. Prereq.: 6 credits in urban studies, anthropology, economics, political science, or sociology. Studies development of foreign cities and attempts to solve problems that also face American cities. Comparative analysis of urban ecology and urban service institutions.
206. Development of the American City. 3 hr.; 3 cr. Prereq.: Any 6 credits in anthropology, history, political science, sociol ogy or urban studies. This course emphasizes the changing structure and function of American cities from their early history to the present day. Emphasis will be placed on the changing economic, political, and social impact of cities on the United States as a whole, and on major public service problems with which cities have had to deal. The various models for administration of housing, employment, transportation, public health, education and crime will be studied in historical context, with the special goal of finding relevant messages for contemporary public administration and urban planning.
207. Urban Protest Movements. 3 hr.; 3 cr. Prereq.: 6 credits in urban studies, anthropology, history, political science, or sociology. This course analyzes movements for change in urban policies and institutions, especially mobilizations by groups
without ready access to power through nor mal political channels.

## 212. Religion and Politics in Urban

 Society. 3 hr.; 3 cr. Prereq.: Any 6 credits in anthropology, history, political science, religious studies, sociol ogy or urban studies. This course considers examples of both left-leaning and right-leaning religiously motivated political action, abroad and in New York City. Guest speakers whose political actions are rooted in their religious communities and faith will present their views in class.214. Urban Religious Movements. 3 hr .; 3 cr. Prereq.: Any 6 credits in anthropology, history, religious studies, sociology or urban studies. M ost new religious movements today are centered in urban areas, and these are the cutting edge of the segment of the population that is becoming more religious while many of the longestablished religious groups are experiencing loss in seminarians and in attendance. This course examines the dynamics of these religious movements and their impact on urban society.
215. Studies of Selected Urban Service Institutions. 3 hr.; 3 cr. Prereq.: 6 credits in urban studies, anthropology, economics, political science, or sociology. Analysis in depth of a public or private institution or system of institutions providing services to urban residents. Different institutions will be analyzed each semester. (May be repeated once for credit provided the institution studied is different.)

## 221. Public Policy and Implementation.

 (formerly Urban Studies 210) 3 hr.; 3 cr. Prereq.: 6 credits in urban studies, anthropology, economics, political science, or sociol ogy. Analysis of the relationships between the development of public policy and the actual delivery of service: How resources are allocated in theory and practice.
## 223./Political Science 223. Introduc

 tion to Public Administration. 3 hr.; 3 cr. Analysis of the theoretical basis for administration; philosophies of administration. Description of the tools of administration and the relationship of administrative organization to other institutions in modern society.225. Urban Criminal J ustice System. 3 hr.; 3 cr. Prereq.: Any 6 credits in anthropology, history, political science, sociology, or urban studies. This course will deal with the modern criminal justice system as it has devel oped through time in cities. Special attention will be given to the urban problems that led to the creation and evolution of the professional police, criminal courts, and penal institutions. Emphasis will be placed upon the specifically urban influences (demographic, geographic, politi cal, economic, and social) that originally shaped and continue to mold the criminal justice system.
226. Health Policy-Making. 3 hr.; 3 cr. An examination of the process of health policymaking at the city, state, and federal levels
of government, from agenda-building through policy formulation, adoption, implementation, and evaluation of health policies. The nature of the relationships among executives, legislators, bureaucrats, judges, and other participants will be analyzed.
227. AIDS and Public Policy. 3 hr .; 3 cr . Prereq.: Any 6 credits in anthropology, health education, history, political science, sociology, or urban studies. This interdisciplinary course addresses the medical, epidemiological, and psychosocial issues surrounding the AIDS epidemic. It places the epidemic within a social, political and policy context, examining the impact of the AIDS epidemic upon the U.S. urban setting, including a specific analysis of the medical, public health, legal, and housing institutions.
228. Urban Epidemics: TB to AIDS. 3 hr.; 3 cr. Prereq.: Any 6 credits in anthropology, health education, history, political science, sociology, or urban studies. This course will deal with infectious diseases in American cities over time. Severe epidemics of contagious disease are a creation of civilization, requiring as they do the large population that crowded cities provide. The course will deal with a number of devastating diseases (among them tubercuIosis, cholera, syphilis, hepatitis, polio, and AIDS) and their effect on city life. The social construction of disease and the changing cultural meanings of different diseases will be dealt with.
229. Metropolitan Real Estate Markets. 3 hr.; 3 cr. Prereq.: Urban Studies 101 or Economics 101. An introduction to the real estate industry and the housing market, and to their place in urban society. Topics to be considered include land ownership law, zoning, and taxation; mortgage banking and its regulation and the roles of developers and realtors. Attention will be given to the market forces which affect prices of real estate and rates and terms of mortgages, and to the social consequences of real estate institutions, markets, and regulation, considering issues of neighborhood change, the distribution of profit, and the role of government.
230. Landlord-Tenant Politics in New York. 3 hr.; 3 cr. Prereq.: Any 6 credits in anthropology, history, political science, sociology, or urban studies. Dynamics of the landlord-tenant relationship and its political impact. The evolution of this relationship since the mid-nineteenth century is considered, with special attention to issues such as: rent regulations, conversions, gentrification, abandonment, and homelessness.
251./History 280. Urban Planning in the American Past. 3 hr.; 3 cr. How Americans designed and built towns and cities; an examination of the city-building process, emphasizing landmark urban plans. $\dagger \dagger$
231. Conflicts in Urban Planning. 3 hr .; 3 cr. Prereq.: 6 credits in anthropology, his-
tory, political science, sociology, or urban studies, including UBST 141 (or permission of the instructor). Major conflicts in the planning of cities and suburbs, and the social, economic, and political forces which create these conflicts. Issues of Iand use, group homes, transportation, business development, hazardous wastes, nuclear power, and community devel opment. Preparation of a research project resulting in a professional-quality report. Basics of preparing such reports, including data collection and analysis, research, and presentation.
232. Urban J ob Markets. 3 hr.; 3 cr. Prereq.: Any 6 credits in accounting, economics, history, political science, sociology, or urban studies. Changing job structures and labor force patterns and trends are considered in relation to employment and unemployment, education, discrimination, government programs, labor unions, business policy, and economic and social change. Human Resource devel opment and policy are studied in the urban setting.
233. Public Sector Bargaining. 3 hr.; 3 cr. Prereq.: Urban Studies 101. This course will examine the unique roles of public sector unions at the federal, state, and local levels. The growth and development of government unions will be studied. What the private sector can learn from the success of collective bargaining in the public sector will be considered. Compensation, dispute resolution and arbitration, and public sector labor legislation are among the topics to be covered.
234. Special Topics in Urban Studies. 3 hr.; 3 cr. Selected topics in Urban Studies: a lecture course at the intermediate level.
235. Organizing the Public. 3 hr .; 3 cr . This course combines fieldwork in projects sponsored by the New York Public Interest Research Group (NYPIRG) with lectures and workshops on skills related to citizen organizing. The history of student activism and its relationship to urban problems will also be discussed. Seven hours of fieldwork per week are required, with weekly fieldnotes, and a final report which draws on fieldwork, reading, and class discussions.
236. Special Problems. 3 hr.; 3 cr. Prereq.: J unior standing and permission of department. Selected issues in urban studies, with individual work done by the student. (May be taken twice for credit provided the topic is different.)
237. Urban Research Workshop. 3 hr.; 3 cr. Prereq.: Urban Studies 200, junior standing, and permission of department. Exploration of several methodological approaches to social research in the urban area. Group research projects utilizing these techniques to explore an urban problem in depth. (May be taken twice if the project is different.)
238. Fieldwork in Urban Studies. 1-7 hr. fieldwork; 3 cr. Prereq.: Permission of the department. This course is designed to give the student practical experience in
urban affairs and may take a variety of forms, such as development and execution of a research project requiring collection of data in the field, or practical experience in an urban institution under special supervision. Students will be assigned appropriate required reading. (May be repeated once for credit provided the project is different.)
239. Tutorial. Hr. to be arranged; 3 cr. per semester. Prereq.: One course in Urban Studies at the 200 or 300 level, junior standing, and permission of department. Further specialization and advanced work involving directed readings and research on a topic chosen by the student and his or her faculty sponsor. Includes regular conferences with the sponsor and preparation of a paper. (A student may receive credit for no more than two tutorials in Urban Studies and may take only one tutorial in a semester.)

## Women's Studies

Director: Hester Eisenstein
Office: Klapper Hall 605, 997-3098
Queens College offers an interdisciplinary major and minor in Women's Studies. The Women's Studies curriculum is designed to provide students with a solid foundation in the issues and methodologies appropriate for the study of women. The major consists of core requirements ( 12 credits), distribution requirements (a minimum of 9 credits), and elective requirements (a maximum of 15 credits)

## The Major

Core Requirements (12 credits)
WS 101. Introduction to Women's Studies WS 201. Theories of Feminism
WS 310. Research Seminar in Women's Studies
WS 320. Field Work in Women’s Studies

## Distribution Requirements

(minimum of 9 credits)
The student must take at least one course from those concerning Scientific Theories of Gender, one from those concerning Women and Culture, and one from those concerning Women and Society. Additionally, one of these courses will concern questions of race or ethnicity. When WS 210 is offered, the Director
of Women's Studies will specify which distribution requirement it satisfies. These courses should be selected from the following:

Scientific Theories of Gender
Biology 51. Sociobiology
FNES 224. Human Sexuality
Psychology 353. Psychology of Sex Roles
Psychology 354. Sexual Behavior
Women and Cultural Traditions
Anthropology 203. Human Sexuality
Anthropology 222. Sex, Gender, and Culture
English 326. Women Writers and Literary Tradition
Women and Society
E conomics 230. Women's Issues in Economics
History 247. Women in Modern European History
History 270. History of Women in the United States, Colonial to 1880
PRST 208. The Puerto Rican and the Latin American Woman
Sociology 243. Sex and Gender in Comparative Perspective
Sociology 244. The Sociology of Women
Sociology 245. Women and Work
Sociology 246. The Sociology of Human Sexuality
Sociology 271. The Black Family
The following courses may deal with topics concerning women and women's roles, and may satisfy distribution requirements. Consult the Director before registering for these courses.
WS 210. Selected Topics in Women's Studies
Comp. Lit. 225. Literature and Anthropology
Phil. 120. Contemporary Issues in Philosophy
Pol. Sci. 381. Seminar in American Politics
Sociology 240. Selected Topics in Sociology
English 396. Studies in Language, Literature, and Culture
Economics 383. Seminar in Selected Studies in Economics
GRST 201. Colloquium on the GreekAmerican Community

Electives (at least 15 credits)
FNES 147. Family Relations
FNES 157. History of Costumes and Furnishings: Ancient Egypt to the French Revolution
FNES 158. History of Costumes and Furnishings: French Revolution to the Present
Sociology 214. The Family WS 390. Tutorial in Women's Studies

The student may also use any courses listed under Distribution Requirements that are not used to satisfy distribution
requirements. For courses with varying topics, consult the Director.

## The Minor

The minor consists of a minimum of 21 credits in Women's Studies, including the core ( 12 credits) and the distribution requirements ( 9 credits). Students must have prior approval of the Director in order to include courses with varying titles among the distribution requirements.

## COURSES

101. Introduction to Women's Studies. 3 hr .; 3 cr . This course will provide a survey of the field of Women's Studies. The objective will be to introduce students to theories about similarity and difference between men and women and to increase students' understanding of the historical and current position of women in society, and the participation of women and their depiction in cultural traditions.
102. Theories of Feminism. 3 hr.; 3 cr. The main theories used in Women's Studies today will be analyzed from a historical perspective and with respect to the combined effects of gender, race, and class on the status of women in contemporary society. The course will include the study of the problems inherent in establishing full social equality for women.
103. Selected Topics in Women's Studies. 3 hr .; 3 cr . Topics to be announced. May be taken more than once if the topic is not the same

## 310. Research Seminar in Women's

Studies. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor or Director. A seminar stressing original student research on pre-announced topics. May be taken more than once if the topic is not the same.
320. Field Work in Women's Studies. 1 hr. rec./wk., 90 hr . fieldwork per semester; 3 cr . Prereq.: Permission of instructor or the Director. Students are assigned to work with host organizations such as: women's political organizations, battered women's shelters, welfare rights groups. Students prepare a formal document based on their experiences and readings.

## 390. Tutorial in Women's Studies

390.1-390.3, 1-3 hr.; 1-3 cr. Prereq.: Permission of Director of Women's Studies and Director of Interdisciplinary and Special Studies. Students undertake and complete an individual research project under the supervision of a member of the Women's Studies faculty.

[^14]
# W orker E ducation and the Labor Education and Advancement Project (LEAP) 

See Special Sequences and Courses on page 199.

## W orld Studies

See Special Sequences and Courses on page 201.

SPECIAL SEQUENCES \& COURSES

## A cademic Skills

Director: Howard H. Kleinmann
Office: Kiely 223, 997-5670
Adjunct Lecturers: Deana, Fallon, Izumi, Lerner, Weiss

The following courses may be offered in the Summer or in theJ anuary Intersession in the College's Basic Skills Immersion Program:
10.03. F undamentals of Mathematics. 3 hr.; 0 cr . Basic arithmetic and elementary algebra in preparation for the CUNY Assessment Test in Mathematics. Includes video-based instruction, work in the Mathematics Laboratory and tutoring.
20.03-04. ESL Reading and Writing Development. 20.03, 3 hr.; 0 cr., 20.04, 4 hr.; 0 cr . An integrated reading and writing course for nonnative speakers of English who need to improve their literacy skills. Practice writing paragraphs and short essays with emphasis on organization, development, grammatical accuracy and correct mechanics. Includes tutoring and work in the Reading Laboratory. Students
retake CUNY Assessment Test in Reading and Writing.

### 22.02-03. ESL Writing Development.

22.02, $2.5 \mathrm{hr} . ; 0 \mathrm{cr}$., $22.03,3 \mathrm{hr}$.; 0 cr . A course designed to improve the composition skills of nonnative speakers of English in preparation for the CUNY Assessment Test in Writing. Practice in thesis formulation, support and development, grammar and mechanics. Includes tutoring and may involve work in the Basic Skills Microcomputer Laboratory.

### 26.02-03. E SL Reading Development

26.02, 2.5 hr .; 0 cr., $26.03,3 \mathrm{hr} . ; 0 \mathrm{cr}$. A course designed to improve the reading skills of nonnative speakers of English in preparation for the CUNY Assessment Test in Reading. Includes interdisciplinary readings, work in the Reading Laboratory and tutoring.

### 30.02-04. Academic Reading and Writ-

ing. 30.02, 2.5 hr .; 0 cr., $30.03,3 \mathrm{hr}$.; 0 cr ., $30.04,4 \mathrm{hr}$.; 0 cr . An integrated reading and writing course emphasizing the development of academic literacy skills to help students pass the CUNY Assessment Test in Reading and Writing. Practice in reading interdisciplinary selections and writing expository, analytical, and persuasive essays. The course includes tutoring and may include work in the Reading Laboratory and Basic Skills Microcomputer Laboratory.
32.01-03. Academic Writing. 32.01, 1.5 hr.; 0 cr., $32.02,2.5 \mathrm{hr}$.; 0 cr., $32.03,3$ hr.; 0 cr. The course provides students with the basic writing skills necessary to become successful college students. Diverse essay types are practiced, with particular attention paid to the writing of arguments to prepare students to pass the CUNY Assessment Test in Writing. Computer-assisted instruction and tutoring may be included.
36.01-03. Academic Reading. 36.01, 1.5 hr.; 0 cr., 36.02, 2.5 hr.; 0 cr., 36.03, 3 hr.; 0 cr. Collegelevel reading from various disciplines to help students acquire the reading and study skills they need to be successful in college. Includes work in the Reading Laboratory, tutoring and/or computerassisted instruction, and prepares students to pass the CUNY Assessment Test in Reading

## Course in Reserve

50. The Learning Process.

## Reading

Coordinator: Anita Podrid
Office: Kiely 131, 997-5677

## course

Reading 001. College Reading and
Study Skills. 3 hr.; 2 cr. An intensive course for students who have not passed the CUNY Reading Assessment Test. The course is designed to help students acquire critical thinking and comprehension skills, a more sophisticated vocabulary, and effective study skills. Emphasis is placed on readings from literature and various acade mic disciplines. Class and laboratory work are integral parts of the course. Successful completion of this course will depend, in part, on the achievement of a passing grade on the CUNY Reading Assessment Test. A student may not receive credit for both Reading 001 and SEEK 123. Fall, Spring

## C ollege E nglish as a Second Language

Director: Howard H. Kleinmann
Office: Kiely 227, 997-5670
Lecturer: Goldhaber (English); Adjunct Lecturers: Barnett, Baum, Brandman, Cheung, Erlanger, Fishman, Hal berstam, Horowitz, K aplan, Kildare, Lasry, Lieberman, Mare, Oster, Stark, Steiner

These courses are designed to meet the English language needs of limited English proficiency students who have not passed the CUNY Assessment Test.

Students must see the CESL Director before registering for any courses.

## COURSES

CESL 10. Fundamentals of English. 13 hr.; 0 cr . Prereq.: Admission by placement examination or recommendation of CESL Director. The student will spend one hour per week meeting with the instructor in conferences, small groups, or other formats for intensive writing instruction, review, and practice. An intensive introductory

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125)
tOffered either Fall or Spring; see Class Schedule. $\dagger \dagger$ May be offered; see Class Schedule.
course of English as a second language stressing the development of aural comprehension, writing, reading, and oral communication skills. Includes work in the Reading Laboratory.

CESL 21. Foundations of Writing I. 5 hr.; 1 cr. Prereq.: Admission by placement examination or recommendation of CESL Director. The student will spend one hour per week meeting with the instructor in conferences, small groups, or other formats for intensive writing instruction, review, and practice. Emphasis on descriptive and narrative forms of writing, and an introduction to expository writing. Work on grammar, writing organization, and basic writing mechanics. Fall, Spring
CESL 25. Foundations of Reading I. 4 hr.; 1 cr. Prereq.: Admission by placement examination or recommendation of CESL Director. Emphasis on reading comprehension skills and vocabulary development. Stress on using graphic, syntactic, lexical, and rhetorical cues in understanding reading material. Includes work in the Reading Laboratory. Fall, Spring

CESL 28. Communication Skills. 4 hr.; 1 cr. Prereq.: Admission by placement examination or recommendation of CESL Director. Emphasis on listening to and comprehending academic lectures, making formal oral presentations, and vocabulary and idiom development. Fall, Spring
CESL 31. Foundations of Writing II. 5 hr.; 2 cr. Prereq.: CESL 21, or admission by placement examination, or recommendation of CESL Director. The student will spend one hour per week meeting with the instructor in conferences, small groups, or other formats for intensive writing instruction, review, and practice. Emphasis on expository forms of writing. Major attention given to planning and organizing writng, and integrating grammar, rhetoric, style, and mechanics in composing an essay. Fall, Spring

CESL 35. Foundations of Reading II. 4 hr.; 2 cr. Prereq.: CESL 25, or admission by placement examination, or recommendation of CESL Director. Reading material from the natural sciences, social sciences, arts, and humanities. Emphasis on comprehension skills, critical thinking, and academic vocabulary study. Includes work in the Reading Laboratory. Fall, Spring
CESL 50. Introduction to American Civilization. 4 hr.; 3 cr. Prereq.: Admission on recommendation of CESL Director. The student will spend one hour per week meeting with the instructor in conferences, small groups, or other formats for intensive writing instruction, review, and practice. Examination of American political manifestoes, poems, novels, autobiographies, paintings, music, and films that have shaped the character of the American people. Fall, Spring

# C ooperative E ducation and Internships 

Director: Tesfaye Asfaw

Office: J efferson Hall 201, 997-2850
Cooperative Education and Internships is an individualized education program that integrates classroom learning with: work experience that is career related, pays wages, and earns college credit (Co-op); or field experience pertinent to a course or topic of study that earns department credit (Internship). In addition, it offers the following courses for credit.

## COURSES

201. Orientation to the World of Work 201.1, 1 hr . lec.; $1 \mathrm{cr} ., 201.2,1 \mathrm{hr} .+60 \mathrm{hr}$. of work experience placement; 2 cr.; 201.3, 1 hr . lec. plus 120 hr . of work experience placement; 3 cr . Prereq.: Sophomore standing and permission of Director. (Only students who have difficulty securing placement because of poor language or interpersonal skills will be allowed to take the course for one credit, with the Director's approval). An introductory course that provides students instruction and training for participation in the world of work. Students will be placed in a structured workstudy program and assisted in learning about themselves, their career needs, the dynamics of the employment and selection process. Special emphasis is placed on effective interview techniques and job search strategies. The lecture is required of all Cooperative Education students concurrent with job placement.

## The Library

Chief Librarian: Sharon Bonk
Office: Rosenthal 328, 997-3760
A formal course in basic library research methods is offered by Library faculty each semester. Upon request, courserelated instruction in a variety of discipline areas, both graduate and undergraduate, is also available for class groups. These include, where relevant, instruction in online and print access to multiple data bases. Orientation tours are also offered on a regular schedule,
day and evening, during the first month of the semester. These are open to all library users. On a regular basis workshops are also offered about "CUNY +." These present an overview of selected online data bases available on the "CUNY +" system (including the online catalog of the City University of New Y ork libraries) and allow for hands-on practice. More specialized orientation is also offered to all new faculty annually.

## COURSE

150. Library Skills: Fundamentals of Library Research. 2 hr.; 2 cr. Prereq.: Satisfactory completion of English 110. Designed for undergraduate students who wish to improve their ability to use libraries in general and the Queens College Library in particular. Emphasis will be on the construction of search strategies and on the use of the catalog, indexes, abstracts, and other reference sources. Students' individual subject interests will be considered as much as possible so that the maximum benefit can be applied to their college work. Opportunities will be provided for the practical application of what is learned in class.

## DIVISION OF MATHEMATICS \& NATURAL SCIENCES <br> Science

Dean: Norman L. Goldman
Office: Remsen 125, 997-4105
The following are interdisciplinary science courses not belonging with any one of the science departments.
Note: Science 1 and 2 are administered by the Physics Department. Students with questions should contact the Chair of the Physics Department.

Courses in Reserve

1. Introduction to Science I.
2. Introduction to Science II.

## DIVISION OF SOCIAL SCIENCES Social Sciences Seminar

Chair of the Divisional Honors Seminars: Dean Savage

## COURSE

Social Sciences 381, 382. General Seminar in the Social Sciences. Hr. to be arranged; 3 cr . Prereq.: Advanced standing in departments of the social sciences. Recommended for all students who intend to qualify for honors in any department in the Social Sciences Division.

## Special <br> Programs

Acting Chair: Philippa Perry

Dept. Office: Delany 128, 997-3100
Director of Counseling: J enkins; Committee on Scholastic Standing: Lloyd; Financial Aid and Budget Officer: Franklin; Tutoring Coordinator: Can-non-Pitts; Assistant Director of Administration: Gittens; Department Secretaries: Rahaman, Warantz

The primary function of Special Programs is to house programs especially designed for educationally underprepared and low-income students. It currently contains the SEEK Program, which is described elsewhere in this Bulletin (see page 43). More information is available in the Operation SEEK Student Handbook, obtainable from the office of the Director of the SEEK Program.

Several faculty members from departments throughout the College are assigned to the program.

Associate Professor: Harris; Assistant Professors: Bobb, Patterson, Rodway, Rosenberg, Simpson; Lecturers: Agbeyegbe, Chen, Chiremba, Habtu, Hoffman, J enkins, Lalande, McCoy,

Milchman, M odeste, Perry, Romero, Rosenblum, Schwartz, Townsend

The program does not offer a major or minor course of study and is currently revising its offerings. Please consult with advisers for the status of the program.

The following courses offered by Special Programs meet the College's Basic Skills requirements.

## COURSES

## Reading Courses

The Reading Program is an organized effort that better equips the student to deal effectively and efficiently with college material. Realizing that a student comes to the program with skills, abilities, and experiences, we make them part of his or her learning activity. The curriculum is integrated with material that will assist the student's understanding of social problems and his or her immediate reality. The student is required to take a reading placement examination before enrollment.
SEEK 120. Reading IA. (formerly SP 100) 4 hr .; 1 cr . Emphasis on comprehension devel opment, word recognition, oral reading, listening skills, and enrichment activities. Designed for SEEK students whose native language is not English.

SEEK 121. Reading IB. (formerly SP 101) $4 \mathrm{hr} . ; 1 \mathrm{cr}$. Emphasis is on the building and expanding of an appropriate, fluent, academic vocabulary by using phonetic, context, and structural clues.

SEEK 122. Reading II. (formerly SP 102) 4 hr .; 2 cr . Prereq.: SP 101 or permission of the student's instructor in SEEK 120. Emphasis is on the development of skills for building vocabulary and comprehension of reading material in sentence and paragraph form.

SEEK 123. Reading III. (formerly SP 103) 4 hr.; 2 cr. Prereq.: SP 102. A student may not receive credit for both SEEK 123 and Reading I (College Reading and Study Skills). Emphasis is on comprehension, critical reading, reading rate, study skills, and test-taking skills.

## English Courses

SEEK 99. Basic Writing. (formerly English 001) 4 hr. plus conf.; 0 cr. Emphasis is on basic grammar, a sense of the sentence, and a sense of the paragraph. For students who score 5 or lower on the CUNY Assessment Test.

SEEK 100. An Introduction to Composition. (formerly English 100) 4 hr . plus conf.; 2 cr . Prereq.: Score between 6 and 9 on CUNY Assessment Test in writing. Emphasis is on the concept of paragraphing, grammar, and usage, as well as on description and narration. The course includes selected prose readings.

SEEK 101. English Composition. (formerly English 101) 4 hr . plus conf.; 3 cr . Prereq.: SEEK 100 or score of 10 or higher on CUNY Assessment Test in writing. Emphasis is on the expository essay and the research paper. The course includes selected prose readings.
SEEK 102. Introduction to Literature and Analysis. (formerly English 102) 4 hr . plus conf.; 3 cr. Prereq.: SEEK 101. Emphasis is on analysis in reading and in writing. The course combines continued training in writing clear and effective essays with studies in literature.

## Spanish Courses

SEEK 131. Elementary Spanish I. (formerly Spanish 1) $5 \mathrm{hr} . ; 4 \mathrm{cr}$. The first semester of study of elementary Spanish, emphasizing the four skills of language study.

SEEK 132. Elementary Spanish II. (formerly Spanish 2) 5 hr.; 4 cr. Prereq.: SEEK 131 or two years of high school Spanish. A continuation of SEEK 131.

## Mathematics Courses

SEEK 1. Techniques of Computation.
(formerly Math 1) 4 hr .; 0 cr . This course is designed for students who need a review in arithmetic skills. It will also provide an introduction to elementary algebra.
SEEK 4.15, 4.16. Elementary Algebra. (formerly Math 4) 2 cr . This course is designed for students with poor mathematical background, especially for those who have not had elementary algebra.

SEEK 6.14. Intermediate Algebra. (formerly Math 6) 4 hr.; 1 cr. Successful completion of this course satisfies the basic requirement in mathematics and prepares the student for Mathematics 10, 12, 14, 21 and 100. Students who have done well in Mathematics 6 may obtain permission to take Mathematics 101.

SEEK 10.24. Precalculus. 4 hr.; 2 cr. Pre req.: Mathematics 6 or knowledge of intermediate algebra. This course provides a background in those topics that are needed to be successful in calculus. Topics include graphing techniques, systems of equations, functions, logarithms, and trigonometry. Mathematics 10 will prepare students for Mathematics 21, 100, 101, or 111, depending on the individual's progress. Fall, Spring

Social Science Courses
The following are interdisciplinary social science courses not belonging within any one of the social science departments.
SEEK 111. Social Science I. (formerly Social Science 1) $4 \mathrm{hr} . ; 2 \mathrm{cr}$. The purpose of this interdisciplinary social science course will be to develop the elementary conceptual and methodological skills the student

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125). †Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.
needs in order to understand and utilize the social sciences.

SEEK 112. Social Science II. (formerly Social Science 2) 4 hr .; 3 cr . Prereq.: SEEK 111. The first of a two-sequence core of compensatory courses to introduce the student to an interdisciplinary approach to the social sciences. The course objectives are to distinguish between the social sciences and the natural sciences, analyze the historical context within which the social sciences developed, introduce students to a group of central concepts and major intellectual orientations within the social sciences, and to develop specific skills in areas of reading and writing social science materials, research, examination taking, and interpreting maps, graphs, and tables.
SEEK 113. Social Science III. (formerly Social Science 3) 4 hr.; 3 cr. Prereq.: SEEK 112. This course focuses on examining the manner in which the social sciences deal with social problems. It is a course aimed at the application of the various social science approaches to a number of social problems like poverty, race, etc. As such it will be an interdisciplinary course and students will be encouraged to use this approach to research a number of problems.

## Student Orientation

SEEK 195. Student Life Workshop. 1 hr. plus required individual counseling sessions and two 2 hr . library laboratories; 1 cr. P/ NC. The purpose of the Student Life Workshop is to provide incoming Special Program students with an orientation to SEEK and Queens College requirements and procedures. Assists the student in adjusting to the transition from high school to college and to the new experience of college and its new responsibilities. Course requirements will include reading and writing assignments designed to reinforce participation in other SEEK required courses. Fall, Spring

## Courses in Reserve

SEEK 141 (Formerly French 1).
SEEK 142 (Formerly French 2).

## W orker E ducation and the L abor Education and Advancement Project (LEAP)

Director: Gregory Mantsios
Program Office: T-3, Room 33, 997-3060; Fax 997-3069

The Labor Education and Advancement Project: Associate Director: Susanne Paul; Counsel or: De Lutro; Spe cial
Projects: Thompson
Worker Education Extension Center: Director: Sean Sweeney; Counsel or: Muller; Administrative Coordinator: Olsen

The Office of Worker Education was established in cooperation with a number of New York City labor unions as part of Queens College's effort to expand educational services to union members and the labor community. Its purpose is to provide union-sponsored, working adult students with an opportunity to:

1. gain a better understanding of the world of work, the economy, and society,
2. develop the skills and background necessary for occupational advancement and personal enrichment.

The Office of Worker Education assists union members returning to school, including non-degree, matriculated, and graduate students enrolled in a variety of programs at Queens College.

The Labor Education and Advancement Project (LEAP) serves working adult students on campus. The Extension Center serves students attending classes in Manhattan.

The Worker Education curriculum is available to LEAP students who are matriculated and 25 years of age or older. Students must be union members and must be recommended for admission by the Director or his/her designee.

The Worker Education curriculum provides students with a sequence of courses to meet the College's general education requirements for the bachelor of arts and the bachelor of science degrees - i.e., basic skills and the Liberal Arts and Sciences Area Requirements
(LASAR). Students complete the remaining credits required for the bachelor's degree in their major and through elective offerings. The curriculum draws on the maturity and common experiences of working adults. Students meeting their degree requirements through this curriculum may also qualify for a maximum of 36 life achievement credits.

For details of admission requirements and procedures, contact the LEAP office.

## Basic Skills and LASAR

Satisfactory completion of the following courses by students in LEAP will fulfill the College's general education requirements.

## LASAR COURSES

## The Humanities

English 95.4 hr.; 3 cr. Prereq.: Entrance determined by results of placement examination. Emphasis will be on a variety of writing forms, including narration, description, and analysis; attention will be given to matters of grammar, syntax, punctuation, and diction.
LEAP 1. Writing and the Literature of Work. 4 hr.; 4 cr. Prereq.: English 95 or results of placement examination and passing grade of CUNY Assessment Test or equivalent as approved by the department. This course enables students to sharpen critical thinking, reading, and writing skills in the context of an exploration of work. The course will analyze representations of labor in several genres. Students will practice a variety of college writing projects: analytical writing, responses to literary works, autobiography, and methods of research.
ACE 3. Studies in Literature. 3 hr . plus conf.; 6 cr. Prereq.: LEAP 1. Close reading and critical analysis of American and British fiction and poetry of various periods. This seminar combines a study of literature with continued training in clear and effective written expression. Conferences with the instructor will be scheduled.
ACE 4. Studies in Visual Arts and
Music. 3 hr. plus attendance at selected concerts and museums; 6 cr . The many convergences between music and the visual arts will be studied as they reflect aesthetic concerns common to both.

LEAP 6. Work, Class, and Culture. 4 hr.; 4 cr . Prereq.: LEAP 1. Students will examine how ways of thinking about work and workers have varied over time and place. Emphasis will be placed on the values, ethics, customs, and laws of a society that shape and regulate systems of production and distribution. A historical and anthropological approach will provide the basis from which to consider work, workers, and culture in the U.S. today.

## LEAP 7. African-American Literary

 Traditions. 4 hr.; 4 cr. Prereq.: LEAP 1. This course will focus on literary traditions that are distinctly American and are also influenced by international currents in culture and politics. Students will explore one or more African-American traditions, such as the literature of slavery, women's voices, expatriate African-American writing, or poetry. The emphasis will be thematic rather than strictly chronological, and the course will consider style, technique, and social content of major works.
## Math and Science

Bio. 8. Fundamentals of Biology. 2 lec., 2 lab. hr.; 3 cr . LEAP students are required to take either Biology 8 or Chemistry 15. A survey course in biology designed for students in LEAP. The areas of cell biology, heredity, development, physiology, ecology, and evolution are covered. Emphasis will be placed on human-related topics such as health, the environment, and current developments in biology. No previous knowledge of biology or chemistry is assumed. Not open to students who have taken Biology 11. MAT charge, \$10.
ACE 9. The Physical Sciences. 4 hr.; 4 cr. A course designed to give students a qualitative and quantitative view of the physical world. Topics chosen, primarily from physics (and to a lesser extent, astronomy), include: force, motion, gravitation, planetary motion, work and energy, heat, light, and electricity. During the study of each topic, selected numerical problems are solved. These problems, in addition to illuminating the subject matter devel op the students' skills in algebra, geometry (both plane and analytic), and trigonometry.
Psy. 101. General Psychology. 4 hr.; 4 cr. An introduction to the chief facts, principles, methods, and theories of psychology Topics discussed include the history of psychology, sensory and perceptual processes, motivation and emotion, behavior development, learning and cognition, psychometrics, personality, psychopathology, and social behavior.

Social Sciences and Pre-Industrial/NonWestern Civilization

ACE 15. Social Science Seminar I. 3 hr.; 6 cr . A study of the history of ideas in Western civilization from classical antiquity to the Reformation, from the perspective of the two disciplines, history and philosophy, and related social sciences. Through an analysis of sources, both original and secondary, emphasis will be placed on political developments, philosophical trends, religious movements, and social institutions. Extensive independent read ing under faculty supervision; oral and written presentations, research papers, and final examination.

ACE 16. Social Science Seminar II. 3 hr.; 6 cr. Prereq.: ACE 15. A continuation of the study of the historical development of Western civilization from the Reforma
tion to modern times, through an analysis of sources, both original and secondary. In addition to the perspectives of the older, well-established disciplines of history and philosophy, the course will draw upon the insights of the newer social sciences economics, sociology, and political science.

## Scientific Methodology and Quantitative Reasoning

Students must complete one course (minimum 3 credits) in college-level mathematics, computer science, data analysis, statistics, scientific methodology, or logic. Student's choice of course largely depends on the major selected. See LASAR section of this Bulletin for a list of acceptable courses.

## Health and Physical Education

Students must complete a minimum of one credit in health and physical education.

## Foreign Language Requirement

Students in LEAP may fulfill the College's foreign language requirement either by completing three semesters of foreign language study ( 11 credits) or by completing an alternative sequence of courses (a minimum of 15 credits) that is designed to provide a) a knowledge of language and its uses, b) basic foreign language reading and speaking skills, c) the history, literature, and/or culture of other nations.

The alternative sequence in Spanish language and culture includes:

LEAP 10. Language and Society. $4 \mathrm{hr} . ; 4$ Cr . This course is a comprehensive survey of the study of language. Students will analyze language structures, language change, and the philosophy of language. Students will also discuss the evolution of words and their meanings in various historical contexts, the introduction of "new" words into a language to meet changing technological and cultural needs, and the interactions among languages in modern society.

## One of thefollowing courses:

Spanish 111. Elementary Spanish I. 4 hr.; 4 cr. Intended for students with no previous training in Spanish. Designed to establish correct pronunciation, to teach the elements of grammar, to enable students to read, to understand spoken Spanish, to become familiar with cultural aspects of Spanish-speaking countries, and especially to establish a good basic vocabulary. Class hours include use of language laboratory.

Spanish 101. Fundamental Language Skills for Students of Spanish-Speaking Background. 3 hr .; 3 cr . Intended for those students who have a speaking knowledge of Spanish, but have little or no formal training in the language. Forms part of a two-semester sequence designed as an alternative to Spanish 111 through 203, and 204. Completion of the 101, 10 , sequence qualifies students for the Spanish 205, 206 level or for Spanish 224. Students who successfully complete 101 may not enroll in Spanish 111 or 112.

## Two of the following courses:

LEAP 40. The "Golden Age" of Spanish Culture. 4 hr.; 4 cr. Prereq.: LEAP 6, Spanish 111 or 101 . This course will explore the ascendant period in Spanish culture in the sixteenth and seventeenth centuries. Students will discuss the devel opment of the modern novel, from the anonymous publication of Lazrillo deTormes in the early sixteenth century to Quevedo's EI Buscon, and including works by Cervantes. The course also includes an analysis of the works of Velazquez (1599-1660), court painter to Philip IV, and a discussion of Spanish culture in a world context, with a focus on the Western Hemisphere.

LEAP 43. Latin American Literature. 4 hr .; 4 cr . The central myths and recurrent themes of Latin American literature from the Pre-Columbian period and chronicles of Spanish conquest to contemporary writing An examination of Native populations, peasantry, urban life, and the changing roles of women in Latin America will be conducted mainly through classroom discussion of works read beforehand.

LEAP 46. Survey of Latin American
History. 4 hr.; 4 cr. Latin American history including discussions of the Indian contribution to society and culture, the European colonial experience, struggles for independence, relations with the United States, and contemporary movements for social change.

LEAP students who wish to take a sequence in a language group other than Spanish should see a LEAP counsel or to obtain a list of approved courses. Courses used to satisfy the language requirement (either in the Spanish group or another group) may not be used to satisfy other requirements toward LASAR.

Students who have previously studied a foreign language and students for whom English is not a native language should refer to the section of this Bulletin that identifies conditions exempting students from the College's foreign language requirement.

## W orld Studies

Director: Peter Carravetta
Coordinating Committee: Buell, Carravetta, Kim, J ., Smith, Waterbury, Zevin

Office: King Hall 207, 997-5980
As the world grows increasingly interconnected, it is necessary to understand forms of human expression in a global frame of reference. The World Studies program provides a sequence of four team-taught, interdisciplinary courses that are designed to satisfy that need.

Employing perspectives from the humanities and social sciences, these courses explore various and often conflicting ways of conceptualizing the world, and examine cultures and societies - ancient and modern - from Asia, Africa, the Americas, Europe, and the Middle East. Each course involves the cooperation of a faculty member from the social sciences and one from the humanities. Sections are kept small to permit extensive interchange between students and teachers.

Although the courses form a logical progression, they may betaken in any order, or even simultaneously. Each course is designed to remain within a common framework, but the content of each section may vary somewhat depending upon the composition of the teaching team.

World Studies, which was developed with major grants from the Andrew W. Mellon Foundation and the National Endowment for the Humanities, is an innovative program that has been recognized as a national model by the Association of American Colleges. Its curriculum and syllabi are under continual review by an ongoing committee of faculty members from all divisions of the College.

## LASAR Satisfaction

WDST 101 and WDST 104 meet Humanities III; WDST 102 and WDST 103 meet Social Science. WDST 102 also meets Pre-Industrial/Non-Western Civilization.

For further information, visit the program office or phone 997-5980.

## COURSES

101. Interpreting the World. $3 \mathrm{hr} . ; 3 \mathrm{cr}$. Prereq.: English 95. A study of diverse cultural traditions, political and economic structures, and their interactions. The course will integrate social science and humanities viewpoints and methods of analyzing history, culture, and society.
102. Ancient Worlds. 3 hr.; 3 cr. Prereq.: English 95. An examination of the cosmologies, ideologies, economies, political structures, and social life of ancient civilizations as reflected in their mythic and literary texts and as interpreted by archaeology and history from the material evidence.
Regions explored may include Meso-
potamia, India, China, Africa, Meso-America, and the Andes.
103. E ncounters between Civilizations, 1500-1900. (formerly WDST 201) 3 hr.; 3 cr. Prereq.: English 95. A consideration of how contacts among civilizations helped shape the modern world. The movement away from regional isolation will be studied in terms of political and economic systems, scientific and technological development, social and cultural exchange, and literary and artistic expression.
104. Contemporary Worlds. (formerly WDST 202) 3 hr.; 3 cr. Prereq.: English 95. The emergence of new forms of global culture: an interdisciplinary study of societies, economies, cultures, and ideologies in the twentieth century.

## Course in Reserve

305. Advanced Seminar in World Studies.

Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 39, 127).
†Offered either Fall or Spring; see Class Schedule. $\dagger \dagger$ May be offered; see Class Schedule.


## College <br> Faculty

This list includes information as of Spring 1996

Abramson, Theodore, Professor of Elementary and Early Childhood Education and Services, Ph.D. Fordham University
Acker, J erome, Lecturer in Classical, Middle Eastern \& Asian Lan guages \& Cultures, M.Phil., Columbia University
Adelberg, Arthur H., Professor of Accounting and Information Systems, Ph.D., City University of New York; C.P.A
Agbeyegbe, Omayemi G., Lecturer in Political Science, J D, New Y ork University School of Law
Ahmed, Ali J imale, Associate Professor of Comparative Literature, Ph.D., University of California at Los Angeles
Alcalay, Ammiel, Chair and AssociateProfessor of Classical, Middle Eastern \& Asian Languages \& Cultures, Ph.D., City University of New York
Allen, J effery R., Assistant Professor of English, Ph.D., University of Illinois at Chicago
Allen, Ralph G., Professor of Drama, Theatre, and Dance, D.F.A., Y ale University
Alsop, David W., Associate Professor of Biology, Ph.D., Cornell Univer sity
Altenstetter, Christa, Professor of Political Science, Ph.D., University of Heidelberg
Alteras, I saac, Professor of History, Ph.D., City University of New York
Anderle, Martin, Professor of European Languages \& Literatures, Ph.D., University of Vienna
Anderson, Philip M., Chair and Professor of Secondary Education and Youth Services, Ph.D., University of Wisconsin at Madison
Andrews, Benny, Professor of Art, B.F.A., Chicago Art Institute

Angione, Marie, Lecturer in Mathe matics, M.S., Queens College, CUNY
Armour-Thomas, Eleanor, Associate Professor of Secondary Education and Youth Services, Ed.D., Teachers College, Columbia University
Artzt, Alice, Associate Professor of Secondary Education and Youth Services, Ph.D., New Y ork University
Avrich, Paul H., Distinguished Professor of History, Ph.D., Columbia University
Axelrad, George, Professor of Chemistry and Biochemistry, Ph.D., University of Kansas
Backner, Burton L., Dean of Students, Chair, and Assistant Professor of Student Personnel Ph.D., State University of New York at Buffalo

Baghban, Marcia M., Associate Professor of Elementary and Early Childhood Education and Services, Ed.D., Indiana University Bak, Sangmee, Assistant Professor of Anthropology, Ph.D., Harvard University
Baker, A. Harvey, Professor of Psychology, Ph.D., Clark University
Baker, Arthur D., Professor of Chemistry and Biochemistry, Ph.D., University of London
Barker, Gerard A., Professor of English, Ph.D., Stanford University
Bayne-Smith, Marcia, Assistant Professor of Urban Studies D.S.W., Columbia University

Berkowitz, Sol, Professor of Music, M.A., Columbia University

Berkowitz, William F., Professor of Chemistry and Biochemistry, Ph.D., Massachusetts Institute of Technology
Berman, Doreen, Associate Professor of Psychology, Ph.D., City University of New York
Beshers, J ames M., Professor of Sociology, Ph.D., University of North Carolina
Beveridge, Andrew A., Associate Professor of Sociology, Ph.D., Yale University
Bird, Thomas E., Associate Professor of European Languages \& Literatures, M.A., Princeton University
Birmelin, A. Robert, Professor of
Art, M.F.A., Yale U niversity
Birth, Kevin, Assistant Professor of Anthropology, Ph.D., University of California at San Diego
Bisland, Beverly, Instructor in Elementary and Early Childhood Education, M.A.T., Duke University; Certificate of Advanced Study in School District Administration, New York University
Bittman, Robert, Distinguished Professor of Chemistry and Biochemistry, Ph.D., University of California at Berkeley
Blackwell, Bonnie A., Assistant Professor of Geology, Ph.D., University of Alberta (Canada)
Blake, Virgil L.P., Associate Professor of Library and Information Studies, Ph.D., Rutgers University
Blumberg, Paul M., Professor of Sociology, Ph.D., University of California at Berkeley
Blumenfrucht, Israel, Chair and Associate Professor of Accounting and Information Systems, Ph.D., New York University
Bobb, Doreen J., Assistant Professor of English, Ph.D., Graduate School and University Center, CUNY
Bodnar, Richard J., Professor of Psychology, Ph.D., City University of New York
Bonk, Sharon, Chair, Chief Librarian, and Professor of Library and Information Studies, M.A., University of Minnesota (Library Science); M.A., University of Minnesota (American Studies)
Borod, J oan C., Professor of Psychol ogy, Ph.D., Case Western Reserve University

Bowen, Barbara E., Associate Pro fessor of English, Ph.D., Yale University
Bowman, J ohn R., Associate Professor of Political Science, Ph.D., University of Chicago
Brady, Anna M., Associate Professor of Library, M.A., H unter College, CUNY; M.L.S., Columbia Univer sity
Braun, Martin, Professor of Mathe matics, Ph.D., New York University
ridge
Bridges, Patricia S., Chair and Associate Professor of Anthropology, Ph.D., University of Michigan
Brings, Allen S., Professor of Music, D.M.A., Boston University

Brock, Patrick W.G., Associate Professor of Geol ogy, Ph.D., University of Leeds
Bronars, J oseph C., J r., Assistant Professor of Elementary and Early Childhood Education and Services, Ph.D., Catholic University of America
Brovey, Daniel J., Professor of Ele mentary and Early Childhood Education and Services, Ed.D. Teachers College, Columbia University
Brown, Bruce L., Professor of Psychology, Ph.D., Yale University
Brown, Fredda A., Associate Professor of Educational and Community Programs, Ph.D., University of Kansas
Brown, Royal S., Professor of European Languages \& Literatures, Ph.D., Columbia University
Brown, Theodore D., Chair and Professor of Computer Science, Ph.D., New York University
Browne, Basil R., Assistant Professor of Sociology, Ph.D., University of California at Berkeley
Brueckner, Hannes K., Professor of Geology, Ph.D., Yale University
Buchsbaum, J onathan, Associate
Professor of Communication Arts and Sciences, Ph.D., New Y ork University
Buell, Frederick H., Professor of English, Ph.D., Cornell University
Burkhart, Charles L., Professor of Music, M.Mus., Yale University Burnett, Henry, Associate Professor of Music, Ph.D., City University of New York
Burstein, Harvey, Lecturer in Philosophy, M.F.A., University of I owa
Byfield, Natalie P., Sub. Assistant Professor of Political Science,
M.A., Stanford University

Cadieu, Fred J., Professor of Physics, Ph.D., University of Chicago
Cairns, Charles E., Professor of Linguistics, Ph.D., Columbia University
Cairns, Helen S., Professor of Communication Arts and Sciences, Ph.D., University of Texas at Austin
Calhoon, Robert E., Associate Professor of Biology, Ph.D., Purdue University
Cannistraro, Phillip V., Distinguished Professor of History, Ph.D., New York University

Caputo, Daniel V., Professor of Psychology, Ph.D., University of Illinois
Carlebach, Elisheva, Associate Professor of History, Ph.D., Columbia University
Carlson, Cynthia J., Professor of Art, M.F.A., Pratt Institute Carlson, Harry G., Professor of Drama, Theatre, and Dance, Ph.D., Ohio State University Carravetta, Peter, Chair and Professor of European Languages \& Literatures, Ph.D., New York University
Carroll, Clare L., Associate Profes sor of Comparative Literature, Ph.D., Columbia University
Castiglione, Lawrence V., Professor of Secondary Education and Youth Services, Ph.D., New York University
Catelli, Linda A., Associate Profes sor of Family, Nutrition \& Exer cise Sciences, Ed.D., Teachers College, Columbia University
Catsambis, Sophia, Assistant Professor of Sociology, Ph.D., New York University
Chabora, Peter C., Professor of Biology, Ph.D., Cornell University
Chatterjee, Nilanjana, Assistant Professor of Anthropology, Ph.D., Brown University
Chave, Anna C., Associate Professor of Art, Ph.D., Y ale U niversity
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## Campus Map




## D irectory

## Administrative Offices

Admissions
Graduate Powdermaker 100F
Undergraduate Kiely 206
Affirmative Action Kiely 1311
Bursar J efferson 200
Dean of Education Powdermaker 100B
Dean of the Faculty - Arts Kiely 904
Dean of the Faculty - Mathematics \&
Natural Sciences Remsen 125
Dean of the Faculty - Social Sciences
Powdermaker 351
Dean of Students Powdermaker 116
President Kiely 1200
Provost Kiely 1104
Registrar J efferson 100

## Departmental Offices

Accounting \& Information Systems
Powdermaker 109
Anthropology Powdermaker 234
Art Klapper 172
Biology SB D346
Chemistry \& Biochemistry Remsen 206
Classical, Middle Eastern \& Asian
Languages \& Cultures King 203
Communication Arts \& Sciences
G BIdg. 100
Comparative Literature Kiely 310
Computer Science SB A202
Drama, Theatre \& Dance Rathaus 213
Economics Powdermaker 300
Educational \& Community Programs
Powdermaker 051
Elementary \& Early Childhood Education
\& Services Powdermaker 171
English Klapper 607
European Languages \& Literatures King 207
Family, Nutrition \& Exercise Sciences Remsen 306
Geology SB D216
Hispanic Languages \& Literatures Kiely 243
History Powdermaker 200
Library \& Information Studies
Rosenthal 254
Linguistics Kissena 347
Mathematics Kiely 237
Music Music Bldg. 203
Philosophy Powdermaker 260
Physics SB B334
Political Science Powdermaker 360
Psychology SB E318
Secondary Education \& Youth Services Powdermaker 193
Sociology Kissena 256
Special Programs/SEEK Delany 128
Student Personnel Powdermaker 116
Urban Studies Powdermaker 376

## Research Centers/Institutes

Asian/American Center T-3, 23
Center for Biology of Natural Systems Horace Harding, 4th fl.
Center for Byzantine \& Modern Greek Studies J efferson 301

Center for Improvement of Education
Powdermaker 04
Center for Jewish Studies J efferson 311
Center for New American Workforce Kiely 306
John D. Calandra Italian American Institute 25 West 43rd St., New York City
Michael Harrington Center for Democratic Values \& Social Change T-3, 14

## General

Academic Advising Kiely 104
Academic Senate Kiely 810
Academic Skills \& Resource Center Kiely 227
ACE-Adult Collegiate Education Kiely 134A
Africana Studies Kissena 340
Alumni Affairs Kiely 147
American Studies Klapper 631
Art Center Rosenthal, 6th fl.
Art Library Rosenthal, 6th fl.
Asian Studies King 203
Audio-Visual Services Kiely 183
Bookstore Dining Hall
Business \& Liberal Arts Kissena 315
Business Offices
Accounting J efferson 106
Payroll, Purchasing Kiely 257
Byzantine Studies J efferson 302
Campus Facilities Kissena 100
Career Development \& Internships
J efferson 201
Center for Environmental Teaching \& Research
Caumsett State Park, Lloyd H arbor
Child Development Center Kiely 245
Colden Center
College English as a Second Language Kiely 227
College Union Program Board Student Union B30
Corporate \& Foundation Relations
Kiely 143
Community Studies Powdermaker 352
Computer Labs I BIdg., 2nd fl.; SB, 1st fl.
Continuing Education Kiely 111
Counseling \& Advisement
Scholarships Powdermaker 119
Student Counselors (day session)
Powdermaker 128
CUE Razran 142
CUNY/Paris Exchange Program
Klapper 312
CUNY School of Law at Queens College 65-21 Main St., Flushing
Data Processing Dining Hall 151
Development Office Kiely 143
Disabled Students Committee Kiely 175
Educational Placement Powdermaker 104
English as a Second Language Kiely 111
English Language Institute Kiely 413
Ethnic Materials Information Exchange Razran 316
Evening Students Assn. Student Union 319
Film Studies Kiely 073
Financial Aid Powdermaker 127
Freshman Advising Kiely 104
Gertz Speech \& Hearing Center
Gertz Clinic 140
Godwin-Ternbach Museum Klapper, 4th fl.
Health Service Center FitzGerald 204
Honors \& Scholarships Powdermaker 119

Honors in Mathematics \& Natural Sciences
Remsen 120
Honors in Western Tradition Delany 305
ID Cards J efferson 202
Individualized Learning Lab Kiely 226
Information Center Kiely 101
Information Technology Office Kiely 142
Interdisciplinary \& Special Studies
Kiely 1107
International Student Services J efferson 105
Irish Studies J efferson 306
Italian-American Studies J efferson 306
Jewish Studies J efferson 311
Journalism Kissena 315
Labor Studies T-3, 14
Language Lab Kiely 226
Latin American Area Studies Kissena 310
Little Theatre King 115
Lost \& Found Student Union 131;
J efferson 204
Louis Armstrong Archives Rosenthal 337
Mail Room (College) behind student
cafeteria; Kiely 204
Mail Room for Student Organizations
Student Union, basement
Mathematics Lab Kiely 331
Minority Student Affairs Powdermaker 128
Music Library Music BIdg. 225
News \& Information Services Kiely 139
Office of Microcomputer Use in Education
Powdermaker 02
Parking J efferson 204
Pre-law Committee Razran 340
Pre-medical \& Pre-dental (Health Professions)
Committee SB B338
Public Interest Research Group (PIRG)
Student Union B22
Publications Kiely 1009
Puerto Rican Studies Kissena 355
Queens College Theatre Colden Center
Reading Lab Kiely 131
Religious Studies T-3, Room 224
Robert Morris Papers Research Office
Powdermaker 253
Scholastic Standards Committee
Graduate Powdermaker 100
Undergraduate J efferson 104
Security J efferson 204; Main Gate
SEEK Reading Lab Delany 112
Space Planning \& Allocation Kissena 100C
Special Events Delany G10
Special Services Kiely 171
Student Activities Powdermaker 103
Student Assn. Student Union 319
Student Services Corporation
Student Union 327
Summer Session Kiely 703
Television Studio King 104
Testing Center Kiely 231
Townsend Harris High School at Q.C.
149-11 M elbourne Ave.; Delany 301
Training \& Resource Center for Economic Edu-
cation Powdermaker 188
Upward Bound J Bldg.
Women's Studies Klapper 605
Worker Education \& LEAP T-3, 33
World Studies King 207
Writing Skills Workshop Kiely 232

## Index

Aaron Copland School of Music, 168
Absence, 58, 61
Academic Advising, 35, 42
Academic Senate, 10, 34
Academic Skills, courses in, 196
Academic Skills and Resource Center, 40, 44
Academic structure, 7
Accelerated study fee, 24
Accounting and Information Systems, 43, 72
Accreditation, 8
Activities, Student 34
Activity fees, 23, 24, 26
Administration, 212
Admissions, 18
ACE, 15, 19
evening students, 15
Fresh Start, 19
freshmen, 18
international students, 19
non-degree, 20
SEEK, 18
transfer students, 18
veterans, 19
Adult Collegiate Education (ACE), 15, 19, 74
awards, 52
Advanced placement, 56
Advisers
academic, 35, 42 day, 35 evening, 35
disabled students, 35
financial aid, 36
freshman, 36, 42
international students, 36
minority, 36
pre-professional, 42
scholarships, 35
transfer students, 42
veterans, 35
Affirmative Action, 66
Africana Studies, 75
Aid for Part-time Study (APTS), 28
Alcohol policy, 68
Alpha Sigma Lambda, 51
American Studies, 76
Anthropology, 78
Applied Mathematics, 163
Arabic, courses in, 98
Area requirements, 46
Art, 82
Art Library, 9
Asian/American Center, 12
Asian Studies, 85
Astronomy, courses in, 180
Athletics, 38
Attendance, 57
Awards, 50
B.A.-M.A., 42

Baccalaureate degrees, 39, 49
Bachelor of Fine Arts, 82
Bachelor of Music, 169

Basic skills requirements, 40
Bilingual/Multicultural education minor, 122, 187
Billable credits, 24
Biology, 87
Blood Drive, 35
Bookstore, 34
Business and Liberal Arts, 92
Byzantine and Modern Greek Studies, 93
Calandra Institute, 12
Calendar, 5
Campbell Dome, 10
Campus Ministry, 13
Career Development Center, 36
Catholic Newman Center, 13
Caumsett, 12
Center for Biology of Natural Systems, 12
Center for Byzantine and Modern Greek Studies, 12
Center for Environmental Teaching and Research, 12
Center for Improvement of Education, 13
Center for J ewish Studies, 13
Center for the New American Workforce, 14
CESL (College English as a Second Language), 45, 196
Chaney-Goodman-Schwerner Clock Tower, 9
Chemistry and Biochemistry, 94
Child care, 37
Child Development Center, 37
Chinese, courses in, 98, 99
Chinese, J apanese, Korean, and Asian Studies, 98
Choral Society, 12
City University of New York, 16
City University Supplemental Tuition Assistance (CUSTA), 28
Classical, Middle Eastern \& Asian Languages \& Cultures, 97
Classics, courses in, 101
Classification of students, 57
CLIQ Program, 37
Colden Center for the Performing Arts, 9
College English as a Second Language, 45, 196
College Life Introduction at Queens, 37
College Preparatory Initiative, 19
College Reading and Study Skills program, 45, 196
Combined B.A.-M.A. program, 42
Committee for Disabled Students, 35
Committee on Admissions and Re-entry Standards, 62
Committee on Honors and Awards, 35
Communication Arts and Sciences, 104
Comparative Literature, 108
Compensatory classes, 24
Complaint procedures, 65
Computer Science, 110
Computers, use of, 63
Computing Resources, 8
Concentration form, 41
Conduct, 63
Consumer Sciences, 137

Continuing E ducation, 45
Cooperative Education and
Internships, 13, 36, 197
Counseling, 36
disabled students, 35
veterans, 35
Counseling and Advisement Center, 36
Course and Faculty Evaluation Booklet, 56
Courses of study, 71
Credential services, 36
Credit(s), 57
advanced placement, 56
by external examination, 56
evaluation of prior, 19
load, 57
minimum residence, 39
CUNY, 16
assessment tests, 40,41
B.A., 42

CUNY School of Law at Queens College, 16
Curriculum, 12, 39
Dean of Students, 36
Dean's List, 50
Degree and certificate programs, 49
Degree requirements, 39, 43
Degrees, 8, 49
Delany Hall, 10
Dentistry, pre-, 42, 44
Departmental Awards, 52-55
Developmental courses, 24
Dining Hall, 10, 34
Diploma cards, 42
Directory, 217
Disability, 35
Disabled students, 10, 35, 66 parking, 38
Dismissal, 62
Divisions, curricular, 7, 39
Doctoral health professions, 44
Doctoral programs, 45
Drafting, course in, 180
Drama, Theatre, and Dance, 113
Drugs, 68

East Asian Studies, 118
Economics, 116
Education, School of, 119
Educational and Community Programs, 123
Elementary and Early Childhood Education and Services, 120
Secondary Education and Youth Services, 122
Educational and Community
Programs, 123
Educational Placement, 119
Electives, 43
Elementary and Early Childhood Education and Services, 120
Emergency closings, 38
Emergency Student Loans, 32
Engineering, 44
English, 124
placement examination, 40,125
English Language Institute, 45

## Enrollment, 7

Ethnic Studies, 154
European Languages and Literatures, 129
Evaluation of prior college credits, 19
Evening B.A., 15
Evening Student Association, 34
Evening Studies, 15
ACE, 15
advisers, 35
Evening Student Association, 34
Financial Aid, 15
Examinations
absence from, 58
credit by, 56
makeup, 58,59
placement, 40, 41
special test conditions, 40, 41
Executive Officer of the Undergraduate Scholastic Standards Committee, 42

Facilities, 8
Faculty, 7, 203
Family, Nutrition \& Exercise Sciences, 137
Fashion design, 138
Federal Parents' Loans for Students (FPLUS), 31
Federal Supplemental Educational Opportunity Grants (FSEOG), 30
Federal Work - Study Program (FWSP), 31
Fees, 21, 23-26
activity, 23, 24, 26
material and transportation, 25
payment of, 21
refund of, 23
special, 26
tuition, 21
Film Studies, 143
Financial Aid, 15, 27, 36, 43
Financial aid programs, 27, 36
Fine Arts, 82
FitzGerald Gymnasium, 9
FNES, 137
Foreign language requirement, 41
F ree semester 21, 22
French, courses in, 130
Fresh Start, 19
Freshman advisement, 36, 42
Freshman grading, 58
Freshman Year Initiative, 42
Full-time students, 21
G Building, 10
Geography, courses in, 119
Geology, 143
German, courses in, 132
Germanic, Slavic, and East European Languages, seeEuropean Languages and Literatures
Gertz Clinic, 10, 12
Godwin-Ternbach Museum, 12
Golden Key National Honor Society, 50

## Governance, 10

Grade-Point Average, 61
Grades, 57
Graduate programs, 45
Graduation procedure, 42

Graduation rate, 43
Grants, 30
Greek, Ancient, courses in, 100, 101
Greek, M odern, courses in, 133
Greek Orthodox Center, 13
Gymnasium, 9
Handicapped students, 10, 35, 38, 66
Health, policy, 35
Health and Physical Education, seeFamily, Nutrition \& Exercise Sciences
Health Service Center, 37
Hebrew, courses in, 101
Hebrew language and literature, 102
HEGIS codes, 49
High J ump, 19
Hillel/J ACY J ewish Center, 13
Hispanic Languages and Literatures, 146
History, 148
Holds, 26
Home Economics, see Family, Nutrition \& Exercise Sciences
Honor societies, 50
Honors and awards, 50
Honors and Scholarships, Office of, 35
Honors in the Mathematical and Natural Sciences, 152
Honors in the Western Tradition, 43, 153
Horace Harding Building, 9
Housing, 26
Identification cards, 35 number, 56
Immunizations, 35
Inactive status, 57
Information Center, 35
Information Technology, Office of, 8
Insurance, health and accident, 35
Interdisciplinary and Special Studies, 41, 42, 154
Interlibrary loan, 10
International students
admission, 19
adviser, 36
Internships, 36
Irish Studies, 155
Italian, courses in, 134
Italian American Institute, 13
Italian-American Studies, 155
$J$ apanese, courses in, 98-100
J azz, studies in, 174
$J$ efferson Hall, 9
J ewish Studies, 156
J ournalism, 158
J ournalism, pre, 105, 125
Kappa Delta Pi, 51 ,119
Kiely Hall, 9
Kissena Hall, 9
Klapper Hall, 9
K orean, courses in, 98-100
Laboratories, 9
Labor Education and Advancement Project, 15, 199

Labor Resource Center, 14
Labor Studies, 158
LASAR (Liberal Arts and Sciences Area Requirements), 46
Last Semester Free Policy, 21, 22
Latin, courses in, 100
Latin American Area Studies, 160
Law, pre, 44
Law Advisement Committee, 44
Law School, 16
LEAP, 15, 199
Learning Center, 9
Leave of absence, 61
LeF rak Concert Hall, 10
Liberal Arts and Sciences Area
Requirements (LASAR), 46
Library, 10
Library and Information Studies, 161
Library department, 160, 197
Linguistics, 161
Loans, 30-32
Major, 41
Map, campus, 214
Master's programs, 45
Material charges, 25
Mathematics, 163
competency test, 41
Lab, 45
placement examination, 41
Matriculated students, 18
Medical office, seeHealth Service Center
Medicine, pre, 42, 44
Merchandising, 138
Michael Harrington Center for Democratic
Values and Social Change, 14
Ministry, 13
Minor, 43
Minority advisement, 36
Minority Affairs, 36
Mission statement, 11
Music, The Aaron Copland School of, 168
placement examination, 170, 171
Music Building, 10
Music Library, 10
National Direct Student Loan Program
(NDSL), see Perkins Loan
Native Americans, State Aid to, 30
New York State Residency, 22
Non-credit remedial courses, 24
Non-degree students, 18, 20, 21 evaluation of prior college credits, 19
Nondiscrimination policies, 66
Non-doctoral health professions, 44
Off-Campus and Outdoor Activities, 139
Office of Assessment Testing, 40
Office of Special Services, 37, 40
Office of Technology, 13
Oriental Studies, courses in, 98
Overlapping courses, 57

## Packaging, 27

Parents' Loans for Undergraduate
Students (FPLUS), 31

Paris exchange program, 56
Parking, 10, 37
Part-time students, 21
Pass/No Credit grading, 58
Paul Douglas Teacher Scholarship
Program, 29
Peer advisers, 36
Pell Grants, 30
Perkins Loans, 31
Permits, 56
Pharmacy, pre, 42,44
Phi Beta Kappa, 50
Philosophy, 175
Photocopying, 10
Physical Education

$$
\begin{aligned}
& \text { requirements, 41, 137, } 138 \\
& \text { seealso Family, Nutrition \& Exercise } \\
& \text { Sciences }
\end{aligned}
$$

Physics, 178
Placement, see Career Development Center
Placement, teacher, 123
Placement examinations, 40, 41, 56
English, 40
mathematics, 41
reading assessment, 41
writing assessment, 40
Political Science, 180
Portuguese, courses in, 146
Post-Baccalaureate, Pre-Health Concentration, 44
Powdermaker Hall, 10
Pre-engineering program, 44, 178
Pregnancy, 35
Prejournalism, 105, 125
Prelaw, 44
Pre-professional advisement, 36,42
Preprofessional and professional programs, 43
Presidents, 11
Pro rata refund, 23
Probation, dismissal, and reentry, 61
Protestant Center, 13
Psychology, 183
Puerto Rican Studies, 187
Queens College Auxiliary Enterprise Association, 34

Razran Hall, 10
Reading and Study Skills Program, 45, 196
Reading Assessment Test, 41
Reading, course in, 196
Reading Lab, 45
Records, student, access to, 62
Recreation Office, 38
Re-entry, 19, 61, 62
Refunds of tuition fees, 23
Regents Award for Children of
Deceased or Disabled Veterans, 29
Regents Award for Children of Deceased Police Officers, Firefighters, or Corrections Officers, 29
Registration, 56
Religious Observance, 64

Religious Studies, 188
Remedial courses, 24
Remsen Hall, 10
Repeated courses, 60
Requirements for the baccalaureate degree, 39
changes in, 43
CUNY, 42
Queens College, 40
Research, 7
Residence credits, minimum, 39
Residency definitions, 22
Retention standards, 61
Romance Languages, see European Languages and Literatures and Hispanic Languages and Literatures
Rosenthal Library, 9
Rules and Regulations for the Maintenance of Public Order, 63-65
Russian, courses in, 135
Scholars' Program, 18, 35
Scholarships, 18, 29, 32, 35, 51
adviser, 35
Scholastic index, 61
Scholastic Standards, Executive Officer to the Undergraduate Committee on, 42, 57
Scholastic Standards, Undergraduate Committee on, 42, 57-62
School of Education, 119
School of General Studies, seeEvening Studies
School Psychology program, 119
Science, courses in, 189
Science Building, 10
Second baccalaureate, 19, 39
Secondary Education and Youth Services, 122
SEEK Program, 18, 30, 43
Senior citizens, 19
Sexual discrimination, 66
Sexual harassment, 66-68
Sigma Xi, 51
Slavic and East European Languages, 136
Smoking, 68
Social Sciences Seminar, 198
Sociol ogy, 189
Spanish, courses in, 146
Special collections, 9
Special fees, 26
Special Programs, 198
Special Sequences and Courses, 196
Special Services Office, 37, 40
Speech, see Communication Arts and Sciences
Speech - Language - Hearing Center, 12, 104
State Aid to Native Americans, 30
Statement of Purpose, 11
Student Association, 34
Student classification, 57
Student Integrity, 62
Student Life, Office of, 34
Student number, 56
Student Personnel, 192
Student records, 62

Student Retention Programs, 37
Student Union, 34
Study Abroad, 56
Substance Abuse Policy, 68
Supplemental Educational Opportunity Grants (FSEOG), 30

Technology, Office of, 13
T-Buildings, 10
Testing Center, 41
Test of English as a Foreign Language
(TOEFL), 40
Tobacco policy, 68
Townsend Harris High School, 13
Training and Resource Center for
Economic Education, 14
Transcripts, 26
Transfer students, 18
Transportation, 26, 221
Tuition and Fees, 21
refunds, 23
Tuition Assistance Program (TAP), 27
Tutoring, 43
Undergraduate Schol astic Standards Committee, 42, 57-62
Upward Bound Project, 13, 37
Urban Studies, 192
Veterans Administration Educational
Benefits, 19, 31
Veterans' benefits, 31,35
Veterinary, pre, 42, 44
Vietnam Veterans Tuition Award Program, 29

Withdrawal(s)
during Summer Session, 60
from College, 61
from course, 60
reentry, 61
retention standards, 61
Women's Studies, 195
Work-Study Program, 31
Worker Education and Labor Education and Advancement Project (LEAP), 15, 199
World Studies, 201
Writing Assessment Test, 40
Writing Skills Workshop, 45
Yiddish, courses in, 103
Your Right to Know, 63,66

## Transportation

Queens College/CUNY is located at the corner of the Long I sland Expressway (LIE) and Kissena Boulevard (exit 24) in Flushing.

## By Car

The campus can be reached from Manhattan via the Midtown Tunnel; from the Bronx or Westchester via the Triboro, Bronx Whitestone, or Throgs Neck Bridge; and from farther out on Long I sland via the Long Island Expressway, Grand Central Parkway, or Northern Boulevard.

## By Public Transportation

Via Flushing: Take the Long Island Railroad or the IRT subway to M ain Street, Flushing. From Main Street, take the Q2534 or Q17 bus.

Via Forest Hills: Take the IND subway to
Continental Avenue, Forest Hills. From
Continental Avenue, take the Q65A bus to Kissena Boulevard and J ewel Avenue.

Via Kew Gardens: Take the IND to Union Turnpike. Then take the Q74 bus to the main gate.

Via J amaica: Take the IND subway to Parsons Boulevard or the Long Island Railroad to the J amaica station. From J amaica Avenue and 160th Street or Hillside Avenue and Parsons Boulevard in J amaica, take the Q25-34 bus. From Hillside Avenue and either 169th or 179th Street in J amaica, take the Q17 bus to the Long Island Expressway and Kissena Boulevard.

## Bus Lines

Q25-34 (Queens Transit Bus Line) Runs from Main Street, Flushing (IRT and LIRR stations), along Kissena and Parsons Boulevards to J amaica Avenue and 160th Street (BMT and IND connections). Stops at the main gate.

Q44 (NYC Transit Authority Bus Line) Runs from West Farms Square, Bronx (IRT station), to Sutphin Boulevard, J amaica (LIRR station). Stops at Main Street and Melbourne Avenue, two blocks west of the campus.

Q74 (NYC Transit Authority)
Runs from Union Turnpike, Kew Gardens (IND station), along Vleigh Place, Main Street, and the LIE service road, and then turns onto Kissena Boulevard. Stops at the main gate.

Q65A (Queens Transit)
Runs from Continental Avenue, Forest Hills (IND station), alongJ ewel Avenue to 165th Street. Stops one block from the campus.

Q17 (NYC Transit Authority)
Runs from Main Street, Flushing (IRT and LIRR stations), to 165th Street terminal in J amaica (passing the IND 179th Street station). Travels along Kissena Boulevard, the LIE service road, 188th Street, and Hillside Avenue. Stops at Kissena Boulevard and the LIE, two blocks from the main gate.

Q88 (NYC Transit Authority) Runs from Springfield Boulevard and Union Turnpike along Springfield Boulevard to 73 rd Avenue, along 73rd Avenue to 188th Street, along 188th Street to the LIE, along the LIE service road to Queens Boulevard and Woodhaven Boulevard. Stops at Kissena Boulevard and the LIE, two blocks from the main gate.

Notes

Notes

The Undergraduate Bulletin was produced by the Queens College Office of Publications
J ohn Cassidy, Acting Director and Editor Hélène B. Guidice, Assistant Editor
Dyanne Maue, Managing Editor Naomi Rivlin, Proofreader


[^0]:    *Students who major in Education must schedule student teaching during the daytime.

[^1]:    *See appropriate Tel ephone Registration Guide for specific refund dates

[^2]:    *Students enrolled in Math 4 are required to take either four, five, or six hours of classwork based on department recommendations. Students enrolled in Math 6 are required to take either three or four hours of classwork based on department recommendations.

    |  |  |  |
    | :--- | :--- | :--- |
    | Perkins, and Stafford/F ord Loans) who | Weeks of | Refund |
    | withdraw from all their classes during | Attendance | Percentage |
    | the first part of the semester. First-time | $1-2$ | $90 \%$ |
    | attendees who withdraw during the | $3-4$ | $50 \%$ |
    | first 60\% of the semester receive a re- | $5-8$ | $25 \%$ |
    | fund equal to the percent of the semes- |  |  |
    | ter remaining when they withdraw. | Fee for Accelerated Study |  |
    | Continuing students in receipt of Title | The non-instructional fee for acceler- |  |
    | IV assistance who withdraw during the | ated study will be applied uniformly to |  |
    | first 50\% of the semester receive a tu- | resident and non-resident students. |  |
    | ition refund according to the foll lowing | The fol lowing schedule applies to this |  |
    | chart: | fee: |  |

[^3]:    Note: Certain sections of some courses have a film charge as determined by the departments for that specific section. At the time of the printing of this Bul-
    letin, it is not possible to determine which sections of specific courses will have a film charge. The departments that have special sections with film courses are Communication Arts and Sciences and Interdisciplinary and Special Studies. The fees and charges listed above cannot be refunded if paid or canceled if billed.

[^4]:    *New admissions have been suspended for the 1996-97 Academic Year

[^5]:    +Also fulfills the Pre-Industrial and/or Non-Western Civilization (PI/NWC) requirement.
    ${ }^{1}$ A student cannot fulfill the Tier 2 requirement with English 251 or 252 if English 151 was taken to fulfill Tier 1 . A student cannot fulfill the Tier 2 requirement with English 253 or 254 if English 152 was taken to fulfill Tier 1.
    ${ }^{2}$ Neither course in the History sequence on Western civilization by itself may be used toward fulfilling both the Humanities III and Social Sciences area requirements. If both courses are completed, they may be applied to both the Humanities III requirement and one of the two courses in the Social Sciences requirement.
    ${ }^{3}$ A student may not take both Biology 9 and 11 to satisfy the Physical \& Biological Sciences area requirement.
    ${ }^{4}$ A student may not take both Biology 12 and 30 to satisfy the Physical \& Biological Sciences area requirement.
    ${ }^{5}$ A student must take both Chemistry \& Biochemistry 16 and 17 to satisfy the Group A requirement; Chemistry \& Biochemistry 16 alone satisfies the Group B requirement.
    ${ }^{6}$ A student may take only one course from among Physics 1, 103, 121, and 145 toward satisfying the Physical \& Biological Sciences requirement.
    ${ }^{7}$ A student may not take both Physics 6 and Physics 7 to satisfy the Physical \& Biological Sciences requirement.
    ${ }^{8}$ A student may not take both Astronomy 1 and 2 to satisfy the Physical \& Biological Sciences requirement.

[^6]:    Includes BA for Secondary School Teaching, grades 7-12
    ${ }^{2} \mathrm{~K}$-12 Teacher
    ${ }^{3}$ Requirements for this degree are under revision; contact the Aaron Copland School of Music for more details.

[^7]:    *If category $D$ is chosen, one of the courses must be a general course on ethnicity.

[^8]:    *Admission to this major is no longer being accepted.

[^9]:    *Admission to this major is no longer being
    accepted.
    ${ }^{* *}$ Admission to this minor is no longer being accepted.

[^10]:    *Students opting for this sequence should take Physics 145 and 146 instead of Physics 103, and may not use Physics 225 to satisfy Group B electives.

[^11]:    1. $160,163,261,264$
    2. Two of the following with a
[^12]:    *If not offered in fulfillment of requirement 3.

[^13]:    Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
    †Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ May be offered; see Class Schedule.

[^14]:    Note: English 95 or its equivalent is the minimum corequisite for all courses (see pp. 40, 125).
    †Offered either Fall or Spring; see Class Schedule $\dagger \dagger$ M ay be offered; see Class Schedule

