CATALOG
1993–1995

KINGSBOROUGH COMMUNITY COLLEGE
The City University of New York

2001 Oriental Boulevard
Manhattan Beach, Brooklyn, N.Y. 11235
718-368-5000
ADMINISTRATIVE OFFICERS

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A.A.S., B.A., M.A.

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A.A., A.B., M.B.A., Ed.D.

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B.A., M.A., Ed.D.

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B.S., M.S., Ed.D.

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B.A., M.A., Ed.D.

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B.A., M.A., Ed.D.

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B.S., M.A., Ed.D.

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B.S., M.A., Ph.D.

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B.A., M.S., Ph.D.

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B.A., M.A.

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B.A., M.A., Ed.D.

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A.B., J.D.

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B.A., M.S.

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B.A., M.S., Ph.D.

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B.A., M.A.

Joseph Musicus, Administrator for Business Affairs
A.A.S., B.B.A.

Robert E. Berryman, Director of Personnel Services
B.A., M.B.A.
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KINGSBOROUGH COMMUNITY COLLEGE

History

Kingsborough Community College was founded in 1963 as the ninth Community College of The City University of New York and the twenty-seventh State-wide two-year college. It is administered by the Board of Trustees of The City University of New York.

Kingsborough offers three degree programs. The Liberal Arts program leads to the Associate in Arts (A.A.) degree; programs in the Arts (Music, Fine Arts and Theatre Arts), Mathematics and the Sciences lead to the Associate in Science (A.S.) degree; programs in Business, the Health Sciences and Human Services lead to the Associate in Applied Science (A.A.S.) degree. Daytime and Evening Sessions are held throughout the academic year. A wide variety of Continuing Education, non-credit courses are available.

In September 1964, Kingsborough admitted its first students into two temporary locations in Sheepshead Bay and in mid-Brooklyn. In the Fall of 1965, the College received its permanent, unique and beautiful, 67-acre site at Manhattan Beach. Cradled on three sides by the waters of Sheepshead Bay, Jamaica Bay and the Atlantic Ocean, the College’s ultra modern campus, composed of a continuous series of inter-connected buildings has been lauded as a forward-looking solution to the problems of College growth and urban pressure. Outstanding features include: spacious classrooms; unusual facilities such as an interactive terminal and microcomputer laboratories, rotational chemistry labs, individual study and experimental stalls; sophisticated learning aids; library and media center; computer center; lecture halls and learning resource center; science technology and visual arts buildings; College Hall lounge, study, counseling and faculty offices; theatre-auditorium, student-faculty center; physical education facilities with two gymnasiums and an Olympic-size indoor swimming pool; special facilities for the nursing, business, and secretarial/office administration departments; offices for administration, general services and a power plant.

The College Marina is capable of berthing 40 small boats as well as one or two large craft, including the R/V CUNY at Kingsborough, an 82-foot former Coast Guard patrol boat now the college’s teaching and training vessel.

The Center for Marine Development and Research, with specially equipped laboratories, aquarium, nautical displays, is in the new, spectacular Marine and Academic Center. The building also has academic offices, classrooms, study areas, conference and meeting rooms, dining facilities and a large outside piazza used for graduation and other official ceremonies, concerts and theatrical performances.

As an integral part of college concerns, the campus facilities in-and-out-doors include maximum accessibility and usability by students with disabilities.

Objectives

Kingsborough is committed to: meeting its educational mission by finding and implementing additional innovative features; fulfilling its obligations to students and community; contributing to the over-all performance of the CUNY system.

To achieve these objectives Kingsborough:

a. exerts every effort to serve the educational needs of those within the geographic area;

b. offers educational programs that contribute to a balanced university educational system and avoid duplication where needs are already being met by other university units;

c. responds as far as possible with educational programs in areas where it has the capacity to fill demonstrated needs not already being met;

d. develops and defines logical areas of specialization without scattering its energies;

e. continues to focus efforts on Liberal Arts transfer programs, as well as on the career programs in Business, Human and Public Service, Health and Related Services, Fine and Performing Arts;

f. remains in compliance with existing Federal, State and City rules, regulations and requirements as they apply to educational institutions.
Goals

Kingsborough Community College is committed to the advancement of the goals of the New York State Board of Regents. Toward this objective, Kingsborough's activities include:

I. Promoting recognition and support of community colleges as the basic institutional approach to provide broader public educational opportunities above the high school level.

II. Encouraging efforts to have community colleges: open to all high school graduates or persons with equivalent educational backgrounds; operated at low cost to students; be located within reasonable daily commuting distance of students' homes.

III. Enhancing college performance goals with:
   a. General Education. (To provide post secondary-school general background and experience for all students in conjunction with their major academic fields of study.)
   b. College or University Transfer Education. (To offer the requisite courses for two years of collegiate study to competent students who are interested in continuing for the bachelor's degree and to develop articulation agreements with four-year institutions so that there is little or no loss of credit upon transfer.)
   c. Occupational or Career Education. (To present programs beyond high school, but below professional levels of education and training, for students who seek immediate entry into the productive labor force, as well as for employed individuals who wish to improve their skills, or learn new ones. These programs serve business, industry, or government organizations that need employees with higher level abilities.)
   d. Adult or Continuing Education. (To assist adults of all ages to meet changing educational, cultural, and economic conditions and/or implement changes in their personal objectives with continuing education programs above the high school level.)
   e. Guidance and Counseling. (To furnish necessary testing, guidance, and counseling which enables students to recognize and accept their individual strengths and limitations, and to choose the most suitable programs based on objective information and personal situations.)
   f. Open Admissions. (To provide supportive services, tutorial and remedial assistance and guidance programs which will most effectively help students meet the CUNY standards of competence, a requirement for every Kingsborough graduate.)

The Future

Kingsborough Community College will continue to respond and grow in order to most effectively meet the ever-changing complexion of the dynamic urban area in which it is situated. New programs will be introduced and existing ones routinely re-examined in light of shifting economic, social, occupational, and recreational requirements of the community. Any defined needs will be translated into educational programs. The College will always attempt to meet is responsibilities by contributing its facilities and its reservoir of talent to the population it serves.

Accreditation

Kingsborough Community College is fully accredited and approved by the Middle States Association of Colleges and Secondary Schools. The Nursing Program has received accreditation from the National League for Nursing. Academic programs have been approved by the University of the State of New York, and the New York State Education Department.

The College is a member of the American Association of Junior Colleges, American Council on Education, Association of Colleges and Universities of the State of New York, Council of Higher Educational Institutions in New York City, Junior College Council of the Middle Atlantic States, Middle States Association of Colleges and Secondary Schools, New York State Association of Junior Colleges, and the Association of College Unions-International.
ACADEMIC CALENDAR

Kingsborough conducts classes on an innovative, special academic calendar. Classes are held during a 12-week Fall session which starts in September, and ends late in December. This is followed by a 6-week Winter module which ends during February. A 12-week Spring session starts at the beginning of March, and ends in the middle of June. This is followed by a 6-week Summer module which runs until the end of July.

All matriculated students in the degree programs are required to attend both 12-week sessions. Attendance during the 6-week modules are optional. No additional tuition fees are required from full-time matriculated students who attended the previous 12-week session. Among the advantages the 6-week modules offer is the opportunity to take added courses that, in some programs, may make it possible to earn the Associate Degree in less than two full years. Students who choose to attend only the two 12-week sessions have an opportunity to seek employment to earn additional funds, obtain field experience, fill co-op requirements, etc., or, to use the periods for rest and relaxation before starting the next regular 12-week session.

Affirmative Action

Kingsborough Community College is an Affirmative Action Equal Opportunity Institution. The college does not discriminate in any way, on the basis of age, sex, sexual orientation, religion, race, color, national or ethnic origin, disability, veteran or marital status in its student admission, employment, programs access, and administration of educational policies.

Dean Vera Mattingly (Room A-217, ext. 5650) is the College Affirmative Action Officer, the Section 504 coordinator for persons with disabilities and the Title IX coordinator which prohibits sex discrimination in federally assisted programs.
ADMISSIONS INFORMATION and PROCEDURES

Students must accept personal responsibility for fulfilling their individual program, admission, degree and graduation requirements; for meeting college deadline and attendance dates; for abiding by the rules and regulations as printed in official Kingsborough publications and announcements.

Admission Information Center
Room F-123, ext. 5800

Information about attending Kingsborough Community College is available from the Admission Information Center.

Matriculation

Prospective students who plan to attend the college to earn a degree, apply for "Matriculated Status" and may attend either Day or Evening sessions. Day session matriculants should be prepared to carry a minimum of 16 credits or 16 equated credits per semester (see page 29).

Basic Admission Requirements

Applicants who have not previously attended any college require a high school diploma or its equivalent (GED). High school certificates and IEP diplomas are not acceptable.

Applicants who earned a United States Armed Forces Institute Diploma must submit proof of having earned a total score of 225 on GED examinations.

Applicants who have attended any college or university, and wish to be considered for matriculated status, must hold a High School or Equivalency Diploma, and submit an official college transcript. Transfer students are required to meet CUNY Standards of Retention indices as a condition for admission.

The College has been authorized to admit, each semester, a limited number of matriculated students over the age of 21 who are not high school graduates or equivalent but who are GED examination candidates enrolled in Kingsborough's GED preparation program.

Non-Degree Students*

Prospective students who are not interested in earning a degree should apply for admission directly to Kingsborough. The application forms are available only from the College Admission Information Center. The Admission Information Center should be contacted for application filing dates.

Non-degree students and part-time matriculants are classified as Evening Session students but are permitted to take day classes on a space available basis.

*Non-degree students are NOT eligible for financial aid.

Transfer of Credits

Upon evaluation and acceptance by the college, applicants may receive a maximum of thirty (30) credits for courses completed at other accredited institutions, provided:

a. each course was completed with a satisfactory grade;

b. each course content is related to similar course work at Kingsborough;

c. a statement of honorable dismissal is submitted from each institution attended.

Advanced Standing

Prospective students may be granted advanced standing, exemption, or credit, subject to departmental approval, if they receive the following grades in courses which are appropriate to Kingsborough's degree program course offerings:

- Satisfactory scores earned on the Advanced Placement Examinations administered by Educational Testing Service;
- Score of 50 or higher on subject examinations of the College Level Examination Program (CLEP);
- "C" grade or higher, on the New York State College Proficiency Examination (CPE);
- "P" (pass) grade on the New York State College Proficiency Examination (CPE) in the area of Foreign Languages.
Admission Application Procedures

Matriculated Status
A. United States Citizens and Permanent Residents who have not attended a college or university previously, apply for admission by requesting the University Application Processing Center (UAPC) Form from either number 1, 3, 4 or 5 below.

NOTE: Current high school seniors in the New York City public schools (and several parochial schools) must use the UAPC Personalized Application available from the “College Advisor’s” Office in their High School.

B. United States Citizens and Permanent Residents with previous college attendance must file an Advanced Standing (Transfer) application. The form is available from number 1 or 4 below.

NOTE: Applicants whose post-secondary school attendance was limited solely to institutions such as Hospital Schools of Nursing, Secretarial Science Schools, non-college-degree-granting Technical Institutes and LPN Training Schools, are considered applicants without advanced standing. Apply for admission through University Application Processing Center number 3 below.

C. Students with Foreign Educational Experience. Applicants who hold (or expect to obtain) temporary (non-immigrant) visas, apply for admission through number 6 below.

NOTE: Kingsborough is authorized under Federal Law to enroll non-immigrant alien students. The college issues Immigration Form I-20 to international students accepted as full-time matriculants. The college does not issue immigration forms to international students who wish to attend part-time (carrying less than 12 credits or less than 12 equated credits) or, who are non-degree students.

1. Kingsborough Community College
   Admission Information Center—Room F-123
   2001 Oriental Boulevard
   Brooklyn, New York 11235

2. Kingsborough Community College
   Admissions Services—Room A-105
   2001 Oriental Boulevard
   Brooklyn, New York 11235

3. University Application Processing Center
   Box 136, Bay Station
   Brooklyn, New York 11235

4. Office of Admission Services
   101 West 31st Street
   New York, New York 10001

5. College Advisor’s Office of any local High School

6. International Student’s Office
   The City University of New York
   101 West 31st Street
   New York, New York 10001

Admission Deadline Dates

Students who wish to be assigned to Kingsborough as their first choice of college, should strictly observe the deadline dates for filing their applications to attend the College.

Preference may be given to applications received by dates listed.

I. Students who wish admission as matriculants for:
   - September admission
     apply directly through the University Application Processing Center by January 15
   - September admission with advanced standing,
     apply directly to CUNY Office of Admission Services by March 15
   - February admission
     apply directly through the University Application Processing Center by October 15
   - February admission with advanced standing,
     apply directly to CUNY Office of Admission Services by November 1

II. Students who wish admission as non-degree students for:
   - September admission
     apply directly to Kingsborough by August 15
   - February admission
     apply directly to Kingsborough by January 15

NOTE: Occasionally the application deadline dates indicated above are extended on the basis of available space. Kingsborough’s Admission Information Center should be contacted for any possible changes in filing dates.
TUITION

Tuition is charged each semester* and is payable at registration.

New York State TAP Awards (where the student can prove eligibility with an Award Certificate) reduces the student’s liability on the day of registration.

MATRICULATED NEW YORK CITY RESIDENTS—residents of NYC for 12 consecutive months immediately preceding the first day of classes.

FULL-TIME (12 or more credits + or, 12 or more equated credits ++) ........................................ $1,050.00

PART-TIME (less than 12 credits + or, less than 12 equated credits ++)

per credit + or equated credit ++ ........................................ 85.00

NON-DEGREE - NEW YORK CITY RESIDENTS per credit + or equated credit ++ ............. 100.00

NOTE: Students who reside in counties outside New York City but within New York State are eligible for New York City resident rates if they present a valid certificate of residency from their county on, or before, the day of registration. The certificate must have been issued within two months prior to registration.

MATRICULATED OUT-OF-CITY RESIDENTS, OUT-OF-STATE-RESIDENTS, FOREIGN STUDENTS

FULL-TIME (12 or more credits + or, 12 or more equated credits ++) ........................................ $1,338.00

PART-TIME (less than 12 credits + or, less than 12 equated credits ++)

per credit + or equated credit ++ ........................................ 104.00

Foreign students who have an alien registration card must present it to the registrar. The registrar determines residency status for tuition purposes.

Students who already possess at least an Associate Degree or its equivalent, will be charged tuition according to their residency and matriculated status.

Upper division students (61 or more credits with passing grades) on permit from another CUNY unit, will pay tuition at their home college.

SUPER CITIZENS (65 years of age and over with proof of age and New York State residency) do not pay tuition. However, a registration fee of $52.00 per semester is required.

(See Required Fees page 11)

*A semester consists of either the FALL session plus WINTER module or the SPRING session plus SUMMER module.

+ The number of credits for each course is indicated with course title and description.

++ Equated credits pertain to non-credit remedial courses. See course descriptions.

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All tuition and fee schedules are subject to change without prior notice, at any time, upon action of the Board of Trustees of The City University, the City and/or State of New York. Should fees or tuition be increased, payments previously made to the College will be counted as partial payment. Notification of additional amounts due, time, and method of payment, will be sent to individuals involved.
REQUIRED FEES

These Fees are NOT Refundable

Consolidated Services Fee (ALL students) ................................................................. $2.00

Student Activity Fee Per Semester (Including University Senate Fee)
  a. Full-time Students .................................................................................................... 45.00
  b. Part-time Students ................................................................................................ 20.00

Special Fees
  a. Application ............................................................................................................. 35.00
     Transfer Students ................................................................................................. 40.00
  b. Readmission to the College .................................................................................. 10.00
  c. Special or Make-up Examinations
     (College permission to take an exam at other than scheduled times)
     First examination ................................................................................................. 15.00
     Additional examinations ....................................................................................... 5.00 each
  d. Transcripts (to other than CUNY units) ............................................................... 4.00 each
  e. Duplicate receipt fee ............................................................................................. 5.00
  f. Super Citizens (65 years of age and over with proof of age and N.Y.S. residence)
     pay a Registration Fee (plus consolidated services fee)—Per semester .......... 52.00
  g. Cooperating Teacher (plus consolidated services fee)—Per semester .............. 27.00
  h. Accelerated Study Fee for matriculated students for academic credits in excess of 18:
     less than or equal to 2 ......................................................................................... 75.00
     greater than 2 but less than or equal to 4 ......................................................... 175.00
     greater than 4 but less than or equal to 6 ............................................................ 350.00
     greater than 6 ....................................................................................................... 525.00

Penalty Fees
  A. Late Registration .................................................................................................. 15.00
     (to enroll after last day of regular registration)
  
  *B. Program change ................................................................................................. 10.00
     *This fee is waived when:
     a. the College initiates the change;
     b. a course is dropped without replacement
  
  C. Non-payment/Late Payment Service Fee ............................................................ 15.00
  
  D. Payment Reprocessing ...................................................................................... 10.00
     (payment with a personal check which is not honored by the bank)

NOTE:

No student will be permitted to register for a new term unless, and until, any indebtedness to the college is resolved.

Payments may be made by personal check or money order, made payable to Kingsborough Community College. Registration is not complete until all fees are paid.
Tuition Refund Policy

In general, no portion of the Student Activity, Miscellaneous, Penalty or Special Fees will be refunded. A student who withdraws after the scheduled opening date of the session, or during the term, (full-time students who decrease their credit load, will be charged per credit) will receive tuition refunds according to the following schedule.*

<table>
<thead>
<tr>
<th>Date of Formal Withdrawal from Course(s) or the College</th>
<th>Fall and Spring Sessions</th>
<th>Winter and Summer Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before scheduled opening date</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Within six calendar days after scheduled opening date</td>
<td>75%</td>
<td>50%</td>
</tr>
<tr>
<td>Between seventh and twelfth calendar days after</td>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>scheduled opening date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between thirteenth and seventeenth calendar days after</td>
<td>25%</td>
<td>none</td>
</tr>
<tr>
<td>scheduled opening date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beyond seventeenth calendar day after opening day</td>
<td>none</td>
<td>none</td>
</tr>
</tbody>
</table>

Should the sixth, twelfth, or seventeenth day fall on a weekend, the refund period would be extended to the next business day.

*Students entering Military Service may qualify for a refund other than as listed. The Registrar should be notified of the military status at the time of withdrawal.

Withdrawal from the College

The date that the withdrawal form is completed and submitted—NOT the last date of class attendance—is considered the official date of withdrawal from the college. No portion of the Student Activity, Special, Penalty or Miscellaneous Fees is refundable except when a student’s registration is cancelled or when the college withdraws or cancels courses.
The Registrar's Office, under the jurisdiction of the Dean of Instructional Services, maintains academic records for all students and is responsible for the registration of students into classes after they have been admitted to the College.

A prerequisite to attend classes is the completion of registration each semester, following instructions from the Registrar's Office. Students who do not receive registration material by the start of announced registration periods should immediately contact the Registrar's Office. No student is considered registered until all appropriate forms are filed with the Registrar's Office and tuition and fees are paid.

The following services performed by the Registrar's Office are available upon application:

- Advanced Standing. Information—page 8
- Certification to Outside Agencies
- Change of:
  - Address and/or Name
  - Curriculum
  - Grades. Information—page 32
  - Status
  - Day to Evening/Evening to Day. Information—page 33
- Exams:
  - Finals—Conflicts/Make-Ups. Information—page 31
- Graduation. Information—page 29
- Permit to Attend Other Colleges
- Readmission
- Records Access. Information—page 298
- Residency Determination. Information—page 10
- Transcripts. Information—page 11
- Transfer to CUNY Senior College
  - after completing 2 year degree. Information—pages 36
- Withdrawal from College
  - and/or Course. Information—pages 12

*The latest ACADEMIC CALENDAR, with information on filing dates and deadlines, is available in the Registrar’s Office.*
Health Regulations and Services
Health Services Office, Room A-108, ext. 5684, or 5399

“All students born after January 1st, 1957, who attend college in New York State, are required to present proof of immunity against Measles, Mumps and Rubella,”
New York State Public Health Law # 2165.

Students will not be allowed to register unless this requirement is met.

All entering matriculated students should have a complete physical examination including a Chest X-Ray or Tuberculin Skin Test taken within the past year. A completed health statement, available from the Health Services Office, should be completed by the student’s personal physician. The College requires signed authorization (by parent or legal guardian for students under 18 years of age) to release any medical records.

Nursing program students require specific immunization and tests which must be completed prior to attending hospital affiliations.

First aid, emergency treatment, psychological counseling and referral, educational, preventive and advisory services are provided. Registered nurses are in attendance when classes are in session. By appointment, a clinical psychologist and college physicians are available to see students and college personnel with specific problems or questions. Any accident or illness incurred during school hours or enroute to the college should be reported immediately.

NOTE
The College will not monitor student participation in physical education or athletics. Students are responsible for following the advice of their physicians in these matters. The college will take no responsibility whatsoever for any injury students may suffer should they participate without medical advice, or against medical advice, or for any injury suffered as a result of any physical incapacity.
Uda Bradford, Assistant Professor
Marilyn Chernin, Higher Education Officer
Peter Cohen, Instructor
Anthony Colarossi, Associate Professor
Diego Colon, Associate Professor
Vannessa Green, HEO Assistant
Carolyn Gribben, Assistant Professor
Wayne Harewood, HEO Assistant
Otis Hill, Professor and Acting Chairperson
Oliver Klapper, Professor
Desmond Lewis, Associate Professor
John Lin, Assistant Professor
Estelle Miller, Instructor
Angelo Pappagallo, HEO Associate
Marilyn Perez, Assistant to HEO
Murray Plissner, Professor
Manuel Pomales, Associate Professor
Ella Puccio, Assistant Professor
Morris Rabinowitz, Associate Professor
William Rivers, Professor
Jennie Roman, Assistant Professor
Natalie Rubinton, Professor
Barbara Sadownick, HEO Assistant
Charles Schwartz, HEO Assistant
Robert Schwartz, Associate Professor
Norman Toback, HEO Associate
Clyde Wesley, HEO Associate
Anne Winchell, Associate Professor
Side view of outside stairwell connecting the award-winning Health and Physical Education Building with the Administration Building.
DEPARTMENT OF STUDENT DEVELOPMENT
Room A-216, ext. 5563

The Department of Student Development is dedicated to helping students achieve self-understanding and direction so that they can develop their maximum educational, social, and personal potential.

To aid students in their adjustments to the college community, and toward the realization of goals during and after college, the Department offers a wide variety of services within a framework designed to highlight individual growth.

Counseling and Related Services

Individual and group counseling conferences are scheduled as needed by the counselor, and/or student to deal with academic orientation, pre-registration, mid-semester evaluations and advance program planning. On-going counseling programs are available to Foreign and ESL (English as a Second Language) students, mature adults and veterans.

Counselors are always available to assist with academic planning and to discuss matters of personal, social or vocational concerns.

Students who require intensive help with individual problems can receive professional, specialized counseling, which is given on a strictly confidential basis. Where protracted or particular help is required, referrals are made to appropriate experts on campus or, in community resources or agencies.

Among the programs available to achieve additional goals, are: Peer Advisor Programs; Health Services; Special Services for Disabled Students; Selected Educational and Vocational Testing; High Risk Student Advisement; My Turn; Honors Option; New Start; College Now; Diploma Now. For information contact Dean Natalie Rubinton, ext. 5563.

Orientation

All incoming freshman are invited to participate in an Orientation Program. An integral part of the Department's offerings include two credit-bearing courses (Student Development (SD) 10 and 11) to prepare students to obtain maximum personal and scholastic benefit from their attendance at Kingsborough.

Course Offerings

SD 10 Freshman Seminar

Group discussion and seminars are the basis for a course geared to help incoming freshman meet typical problems encountered in college. Areas covered include study habits, learning problems, career and program planning, college resources, adjustment to college life, and related problems.

SD 11 Career and Life Planning

Students have an opportunity to explore careers in relation to their interests, abilities, aptitudes and their college experiences. They learn how to plan for future work and leisure time. Topics include: the nature of work; contemporary changes in careers and work ethic; self assessment; jobs and changing life styles. Current labor market information is introduced followed by intensive, individual research and exploration of occupations. Instruction and practical assignments explore the dynamics and techniques of job-seeking; decision-making; goal-planning and priority-setting.
Co-Curricular Activities—Office of Student Life
Room U-204, ext. 5597

The Department of Student Development co-curricular activities program was designed to enrich students' total college experience. These activities make possible: development of leadership skills and a sense of responsibility; contact with individuals of diverse backgrounds and interests; opportunity to serve the college and the community.

Students and faculty work together in making decisions in areas of college governance, discipline, etc. Opportunities are available on the College Council, the Kingsborough Community College Association, and the Faculty Student Committee on Student Discipline.

Over eighty student organizations, organized and administered by students with assistance from faculty advisors, develop programs which are academic, cultural, educational and social. Included are team sports and athletics, dramatics, special interest groups, social groups, a radio station, newspaper, yearbook and a peer advisor program.

There are five Student Government Councils, each representing a different curriculum area (Business, Evening Studies, Liberal Arts, Mathematics and Sciences, Public and Health Services).

Open to all students, many events are scheduled throughout the semester. They include lectures, films, art shows, dances, music and videos. Dates and campus locations of each event are published in "What's Happening", the weekly newsletter.

All activities coordinated by this office. Contact Dean Marilyn Chernin.

Student Handbook
An important resource and guide, the Student Handbook provides students with information on all aspects of college life: campus rules and regulations; academic standards; counseling and related services; special programs; student activities, and more.

Student Publications
Room M-230, ext. 5603

Student publications provide an outlet for the expression of ideas, opinions, creativity and talent.

Scepter, the College newspaper, prints college news, reviews college activities and sports, carries letters, opinions, commentary and items of interest to KCC students and faculty. Mace publishes longer articles and thematic work in a magazine format. Anthem, the College literary journal, allows for the expression of student poetry and fiction. Odyssey, offers students an opportunity to produce a yearbook representative of the college, the year, and its graduates.

All publications are written, produced, managed and distributed by KCC students with a faculty advisor. They are supported by the KCC Association, and have been cited for excellence.

Career Placement and Transfer Counseling
Room C-102, ext. 5115

Assistance in making career decisions is available to all Kingsborough students through individualized counseling sessions, testing instruments, and computer assisted guidance systems. A comprehensive and up-to-date career library is maintained and the office serves as a Center for part, and full-time employment opportunities. "Career Day" programs, held throughout the year, bring representatives from major corporations and government agencies to the campus.

Information is available on requirements for transfer to senior colleges of CUNY, SUNY and private colleges with current college catalogs and college videos from 50 states maintained. "Transfer Days", held in the Fall and Spring, bring representatives of senior colleges from every part of the city and state. On-campus recruitment for career placements are scheduled throughout the year. For information contact Dr. Oliver Klapper.
Bilingual Program
Room D-206, ext. 5576

The Bilingual Studies Program started at Kingsborough in 1970. It offers academic training toward a 2-year degree for bilingual (Spanish-English) High School Graduates or holders of the GED Equivalency Diploma in the fields of business, science, and liberal arts. Assistance, offered in English and Spanish, includes intensive counseling and orientation, developmental instruction, tutorial services, financial aid, and cultural activities.

The Program's objectives include: offering bilingual students instruction to further their educational goals; increasing their ability to function comfortably within this society's framework; stressing the importance of maintaining a viable identity within the Spanish-speaking minority communities in New York. For information contact Dr. Diego Colon.

College Discovery
Room D-102, ext. 5520

The College Discovery Program was designed to assist economically and academically disadvantaged students with good potential to succeed in college. Under the sponsorship of The City University of New York, College Discovery students receive financial assistance, specialized counseling, tutorial and remedial services. Students are accepted into the program through the University Application Processing Center (see page 9). For information contact Dr. William Rivers.

Day Care Center
Room M-101, ext. 5157

A limited number of Kingsborough's day students' children—who are from 2 years and 9 month to 5 years of age—are professionally cared for at the campus Day Care Center while their parents attend classes. Funded by the Kingsborough Community College Association, applicants are accepted on a first come, first served basis. The facility is under the direction of, and administered by, Kingsborough student-parents. For information contact Professor Uda Bradford.

Peer Advisor Program
Room U-204, ext. 5597

The Peer Advisor Program prepares students to play a significant part in assisting freshmen to make an easier adjustment to college. Qualified students are trained to use a student-to-student approach to help with problems and provide needed support.

Special Services (Disabled)
Room D-205, ext. 5175

Students with disabilities will find all Career Programs easily accessible due to the special architectural design of the college, as well as its over-all academic structure. For example, there are Biological Sciences Laboratory stations for students with disabilities. Specific assistance such as special registration, tutoring, reserved parking permits, disability related accommodations and individual counseling are offered to students with special needs. Disabled prospective students are invited to visit the College before applying for admission. Contact this office to arrange for an appointment and an information-sharing interview. For information contact Dr. Anthony Colarossi.
New Start Program
Room C-102, ext. 5115

The New Start Program assists referred, eligible students who experienced academic difficulty at participating senior colleges. At KCC, these students receive specialized counseling and support services and may use up to 30 previously earned credits toward an associate degree. After graduation from Kingsborough, they may continue their education at a senior college, under the CUNY transfer guarantee policy. For information contact Dr. Anne Winchell.

H.E.L.M. (Health Education for Lifestyle Management) Center
Room C-102, ext. 4909

The H.E.L.M. Center offers a setting that unifies all student wellness, lifestyle management, health referral (including AIDS, substance abuse, family violence, pregnancy, and abortion) and fitness education programs. The Center functions as a natural initiating point to increase students’ awareness of the importance of development in each dimension as well as of the holistic and interactive benefits of involvement in all dimensions of campus life. For information contact Professor Judith Perez.

Mature Adults Resource Center
Room L-516, ext. 5157

The Mature Adults Resource Center offers assistance to adults who return to college by including assessment of their interest in continued college education. Referrals are made for vocational interest tests, support groups, resources and events of particular interest to returning (or new) adult students.

A special meeting place, the Mature Adults Center (L-516), is open and available all day. Mature adults can meet there during the semester to talk with each other, study together, etc. Beginning the second week of classes, discussion groups are held on Wednesdays. For information and time contact Ms. Estelle Miller.

"My Turn" Program
Room F-219, ext. 5079

"My Turn" is a tuition-free college education program for New York State residents 65 years of age and older. Kingsborough was granted permission to waive CUNY’s admission requirements for a high school or GED diploma from qualified applicants. "My Turn" students are permitted to take as few or as many credits per semester as they wish. The program includes special counseling and other services.

A $52 registration fee is charged each semester and all penalty fees must be paid. Documentation of age and residence must be submitted with the admission application. Students are accepted on a matriculated or non-degree basis subject to availability of space. To apply as a matriculated student, check appropriate filing dates (page 13). For information contact Dr. Barbara Ginsberg.

Veterans Affairs Program
Room D-206, ext. 5159

All veterans and/or their dependents should visit this Office of Veterans Affairs for information and assistance relating to: educational benefits; jobs; housing; insurance; personal and business loans; dental and medical referrals; vocational rehabilitation and other entitlements.
Financial Aid*
Room U-201, ext. 5681

Financial assistance is available to students through programs administered by the College or by outside agencies. The financial aid programs aim to assure that no qualified student is denied the opportunity for higher education because of the need for supplementary financial assistance.

Applicants for admission, and students already enrolled in the College who are citizens or permanent United States residents, are invited to meet with a financial aid counselor to determine eligibility and type of assistance available. Allocation of funds is subject to existing Federal, State and City University guidelines, and the availability of funds.

General Information
Prospective students may apply for financial aid when they confirm their acceptance at the College. Applications and detailed financial aid information are available upon request at Kingsborough’s Financial Aid Office.

Continuing Eligibility
All students receiving financial aid must be in good academic standing and making satisfactory progress toward their degree. In addition, they are also subject to the existing rules and regulations of the Federal and State Governments, CUNY Board of Trustees and Kingsborough Community College.

Estimated Student Expenses
In addition to tuition and fees, dependent student expenses for an academic year are estimated at approximately:

- Books and Supplies: $500
- Transportation: $675
- Personal Expenses: $2100
- Room and Board: $1500

Additional information is available upon request in the Financial Aid Office.

Rights and Responsibilities of the Student as a Consumer
Part 178 of Title 45 U.S. Code of Federal Regulations of the Higher Education Act of 1976 requires that the Financial Aid Office have available certain types of information concerning the rights and responsibilities of prospective students. Accordingly, in compliance with federal and state laws and regulations relating to truth-in-lending, all students are hereby advised to review carefully the appropriate sections, in the College Catalog and Student Handbook, dealing with such areas as academic programs, cost of attendance, types of aid available, need analysis, refund procedures, satisfactory rate of academic progress, complying with deadlines for applications and documentation requests, etc.

Academic Standards
Students must maintain Kingsborough’s academic standards (page 30). Students who fail to do so will be placed on probation. Students who make satisfactory progress during their probationary period will continue to maintain their academic standing with the college and their concurrent eligibility for financial aid.

*Non-Degree students and those holding foreign students’ visas are NOT ELIGIBLE for aid.
*Any student required to register with the Military Selective Service, who fails to do so is INELIGIBLE for Federal Financial Aid.
*All bank loan recipients who completed their degree requirements and/or are leaving the college, must schedule a loan exit interview with the financial aid office.
Financial Aid Programs Currently Available Include:

I. SCHOLARSHIPS AND GRANTS

a. New York State Regents Scholarships—Freshmen holding the Regents College and Nursing Scholarships will be awarded $250, annually without regard for amount of tuition or family income. This award is based on a competitive examination.

b. Agency Scholarships—Kingsborough students may be eligible for scholarship assistance provided by various religious, fraternal and community agencies, business and industrial firms.

c. Supplementary Educational Opportunity Grants—Federal funds are allocated for grants to financially needy and educationally deserving students under the Higher Education Act of 1965. Amounts range from $200 to $2,000, depending on need, family ability to contribute, and availability of funds.

d. Pell Grant Program—A federal aid program authorized by the Education Amendments of 1972. Designed to provide financial assistance for students who could not otherwise attend post-high school institutions. The amount of the grant is based on family contribution, cost of education, and the amount of federal funds actually available for the program. Important criteria must be met when considering an applicant’s eligibility:
   1. citizenship or permanent residency status;
   2. either full-time attendance as a student, or, taking 6 or more credits
   3. a student who attempted 30 remedial (equated credits) will not be paid for remedial credits taken in excess of the 30 equated credit limit. Payment will be ONLY for real and equated credits taken.

e. Tuition Assistance Program (TAP)*—Designed to assist full-time students taking 12 or more credits to pay all or a portion of their tuition. To be eligible, a student must be a U.S. citizen or permanent resident, a resident of New York State and meet the approved academic and program requirements. You may qualify for TAP if you and/or your family’s N.Y. State net taxable income is $50,000 or less. The amount of the award varies and does not have to be repaid.

f. Supplemental Tuition Assistance Program (STAP)*—Full-time undergraduate students who received TAP for the first time on or after July 1, 1981, who are educationally disadvantaged and require remedial courses may be eligible for up to one year of the STAP funds.

g. Aid for Part-Time Study (APTS)—Provides tuition assistance to eligible part-time undergraduate students taking between 6-11.5 credits per semester in a degree granting program. Eligibility requirements include good academic standing, filing for PELL, N.Y. State residency and other program requirements. The income limitation for dependent students and their families is $25,000 or less. The net taxable income cut-off for independent students is $10,000 or less. The amount of the award cannot exceed $2,000 or tuition, whichever is less.

h. Mayors Scholarship Program (MSP)—This program was established by the Mayor’s Office of New York City and sponsored by the Federal Housing and Urban Development agency. It is designed to provide supplemental financial aid to full-time students enrolled in degree-granting programs. Eligibility is based on financial need and residence in certain designated areas. The amount of each award ranges from $200 to $500.

* Detailed requirements for eligibility to receive and continue in the TAP and STAP Programs are available in the Financial Aid Office. They should be obtained and carefully read by each applicant and/or recipient.
II. LOANS

a. Perkins (Direct) Loans (formerly NDSL)—Provided under the National Direct Education Act—these loans, in amounts up to $1,500 per year, are available to eligible students. No payment is required during the student’s attendance at college. Repayment, at an annual interest rate of 5%, starts six months after graduation or termination of studies, and may be extended over a ten-year period, depending on the amount borrowed. Up to 50% of the indebtedness may be canceled for students who enter the teaching profession for a period of five years. Students who teach for seven years, in areas designated as disadvantaged, may have the loan canceled.

b. Stafford Loan (formerly Guaranteed Student Loans GSL)—Loans are available for students enrolled in degree programs, who carry at least six credits per semester. The applications are available at any local bank participating in the program. The student begins to repay the loan six months after studies are terminated, at an annual interest rate of 8%. Maximum annual amounts available may not exceed $2,625 a year.

c. Supplemental Loans for Students (SLS—formerly known as ALAS)—The SLS program provides loan amounts that supplement Guaranteed Student Loans. Independent undergraduate students are eligible to borrow up to $4,000 per year with an aggregate maximum of $20,000. However, these annual limits include any amounts borrowed through the SLS. The current interest rate on SLS loans varies up to 9.3%. A student may not borrow if the estimated costs of attendance minus financial aid shows no need.

d. Parent Loans for Undergraduate Students (PLUS)—Parents of dependent undergraduate students may borrow, for any one student, up to $4,000 per academic year to a maximum of $20,000 for each child. Repayment is required to begin within 60 days after disbursement. Interest rates vary up to 12%. Amount borrowed must not exceed cost of attendance as determined by the institution, minus financial aid received.

e. Nursing Student Loans—For eligible students enrolled at least half-time in the Nursing program. Maximum amount available to an individual borrower in an academic year may not exceed $2,500, or the amount of the student’s need, whichever is less. Repayments commence nine months after graduation or termination of studies. Annual interest rate is 6%. Effective September 29, 1979, with the enactment of Public Law 96-76 loans made from Nursing Loan Funds are not eligible for cancellation for employment. Loans made prior to September 29, 1979 are eligible for cancellation benefits.

f. Commercial Loan Programs—Many banks, insurance companies, and finance corporations lend funds for education purposes. In many cases these loans are made without regard to financial need. While interest rates may be relatively higher, such loans may be helpful to those who are not in serious financial need.

III. WORK-STUDY PROGRAM

The College Work-Study Program provides jobs for students who must earn money while attending college. Students may work an average of 20 hours a week while they attend classes and up to 35 hours a week during vacation periods. Students are paid from $4.25 to $6.25 an hour and are employed on-campus or in approved off-campus positions.
SPECIAL PROGRAMS

The Administration and faculty have inaugurated a number of far-reaching "Special Programs" designed to benefit Kingsborough students. They are available to the general college population, meeting the needs of a variety of specialized groups.

"College Now" Program
Room L-705, ext. 5170

A Kingsborough Community College cooperative educational venture with CUNY and the NYC Public School System. High School seniors are offered the opportunity, tuition free to: improve basic academic skills, take college level courses, earn college credit while attending their own high schools.

Among the College level offerings are courses in Biological Sciences (page 126), Business (page 133), English (page 148), Humanities (page 207), Social Sciences (page 189).

For information contact Dr. Stuart Suss, Program Director.

Computer Center

The Kingsborough Community College Computer Center serves administrative departments requiring data processing support. The Computer Center has an IBM 9221 that links Kingsborough with the CUNY University Computer Center which has an IBM 3090 and an IBM 3081 Computer (See CUNY Computer Facilities, page 310).

Administrative Computing
Room L-117, ext. 5640
(under the auspices of the Dean of Instructional Services)
For information contact Mr. Howard Reznikoff.

Instructional Computing
Room L-116, ext. 5037
(under the auspices of the Provost)
For information contact Dr. Philip Greenberg.

Cultural Affairs

The Performing Arts Festival presentations on the KCC campus, include outstanding Broadway plays, dance companies, concerts, and comedy. Students and faculty may attend at special rates. The Children's Theatre Series offers attractive and educational fare for the younger set.

For information, contact the KCC Box Office 718-368-5596 (Room E-305).

CUNY Baccalaureate Degree Program
Room E-309, ext. 5403
For information, contact Dr. Julio Hernández-Miyares (page 310).

Health Services Center
Room A-108, ext. 5684

The College Health Office reviews the student medical forms and evaluates health status, facilitates the removal of handicaps to learning and ascertains the need for special adaptations of the college program to ensure the maximum development of each student (see page 14).

First aid, emergency treatment, educational, preventative and advisory services are provided. Registered Nurses are in attendance when classes are in session to assist students with specific health problems. Any accident or illness incurred during school hours or enroute to the college should be reported immediately.

For information contact Dr. Alfredo Torres, Director.
**"Honors Option" Program**

Room F-106, ext. 5365

An enriched, challenging and rewarding curriculum is available to academically skilled, high achieving students. Courses are especially designed to stimulate thinking and research and provide exposure to classical and interdisciplinary studies.

First semester students who are enrolled for at least 12 credits and achieve a scholastic index of 3.20 or better are given the opportunity to apply for this special "Honors Option" program the following semester. Those accepted, may enroll in one or more of the "Honors" courses each semester, are invited to attend faculty lecture programs, receive priority registration and other privileges and activities.

Students who complete at least 12 credits of the courses offered in this program have the designation "Honors Option" entered on their transcripts. A cumulative index of 3.00 and at least a "B" grade in every course offered by the "Honors Option" is required for retention in the program.

**Institute for Public Service (KIPS)**

Room F-309, ext. 5524

The Kingsborough Institute for Public Service, started in 1970, continues to pursue its mission of education and service for the College and the community. It makes it possible for the entire college population to take an active part in social, economic, public service and political action projects. The Institute serves as an initiator and facilitator in the exploration and development of public service projects recommended by faculty, students and community members. In the development of these projects, KIPS does not take any particular political or social point of view, but treads the line between education and activism fairly and objectively by presenting varying approaches, philosophies and viewpoints in its debates, panels, conferences, publications and other programs. Programs include: conferences, lectures and debates primarily in response to campus needs, community requests or joint campus-community involvement; special services such as the annual Health Fair, Community Services Referral, Voter Registration, Volunteer Fair, Clergy Conference and others.

For information contact Prof. Sidney Helfant, Director.

**Marine Education**

Room M-243, ext. 5525

The Office of Marine Education has developed a number of programs that take advantage of the College’s ideal waterfront location. These include: instructional programs in seafood business management and vessel operations to prepare students for careers in recreational boating, seafood and commercial fishing industries; special training and research projects; seafood retail training; training programs for naval reserve personnel and other groups who need training in vessel handling and boat operations; a seafood import/export program for students from abroad.

In cooperation with the Office of Continuing Education an extensive summer sailing program is offered.

For information contact Dr. Milton Drucker, Dean of Marine Education.
Radio Station WKRB

Room U-228, ext. 5817

The College’s student-operated FM radio station broadcasts on 90.0 MHz and covers South Brooklyn and major portions of Queens and Staten Island, attracting approximately 200,000 listeners each week. WKRB serves the community with outstanding entertainment, news, public affairs programming and local sports broadcasts. Participating students develop skills in engineering, management, public relations, business, news, community relations and on-air techniques.

For information, contact Prof. David Frankel (ext. 5288) or Stephen Castellano (ext. 5817).

Speech, Language and Hearing Center

Room E-206, ext. 5809

Students with various speech and language problems: articulatory (cerebral palsy, hearing loss or deafness), voice disorders (hoarseness and breathiness), rhythm disorders (disfluency, stuttering), and inadequate intelligibility, have the opportunity of working on a one-on-one basis with certified speech-language pathologists, or in small groups. Students can refer themselves to the Center or be referred by faculty.

Teacher Studies

Room F-123, ext. 5946

Teachers and other school personnel on sabbatical leave for study, or those taking after school courses for salary differentials, may fulfill course requirements through the Teacher Studies Program. (A Co-Operating Teacher fee of $27 per semester is required.) The Office of Teacher Studies is staffed by Kingsborough Community College Counselors who are familiar with public and private schools. They provide advisement in submitting courses for approval, arranging programs and time schedules and interpreting regulations. An exclusive pre-registration service is available. Seminars and varied cultural activities offer valuable opportunities for social interaction and professional development and advancement, in a stimulating academic environment with all campus privileges.

For information contact Dr. Lawrence Feigenbaum, Director.

Tutorial Services

Room L-605, ext. 5118

Free tutoring in most academic and business courses is available on an individual or small group basis to Day and Evening Session students. Students requiring this service apply in the Institute’s Office which is under the auspices of the Dean of Instructional Services.

For information contact Lucille Nieporent, Director.
SPORTS*

The Health, Physical Education and Recreation Department offers a program of intramural, recreation, and athletic activities geared to promote a variety of interests and skills.

Intramurals

The intramural program is designed to enable students to participate in a wide variety of athletic and recreational activities on a voluntary basis.

The program consists of individual and team events such as touch football, ping-pong, tennis, swimming, body-building, 3- and 5-man basketball, bowling, soccer, racquetball, weight-lifting, volleyball, and karate. Special events include a 2-mile Kingsborough Classic Run, and Wheelchair Superstars.

Recreation

The recreation program offers students the opportunity to participate in sports and physical fitness activities at their own convenience. Activities include basketball, swimming, tennis, training with weights, and racquetball. Recreational clubs include modern dance, karate and skiing.

Athletics

The Athletic Program is renowned in the northeastern part of the United States, offering men and women the opportunity to participate in a wide range of sports. Emphasis is placed upon promoting enjoyment, fitness, skill development, knowledge, and sportsmanlike competition.

For women the growing program includes the following varsity teams: softball, and volleyball. The women's program is sanctioned by the Metropolitan Community College Athletic Conference (MCCAC) the local conference, and by the National Junior College Athletic Association (NJCAA) on the regional, district, and national levels.

Male varsity team programs include: baseball, basketball, soccer, and tennis. The men's program is sanctioned by the Metropolitan Community College Athletic Conference (MCCAC) the local conference, and by the National Junior College Athletic Association (NJCAA), on regional, district and national levels.

Kingsborough is a member of Region XV, District of the NJCAA. There are 24 regions and 10 more encompassing districts geographically within the NJCAA. Victorious teams in the Regional structure compete against each other to determine District champions in each sport. The 10 District champions in turn compete for National titles.

*Note

The College does not monitor individual student participation in physical education or athletics. Students are responsible for following the advice of their physicians in these matters. The College will take no responsibility for any injury which may be suffered should a student participate without medical advice, or against medical advice or for any injury suffered as a result of any physical incapacity whatsoever.
Academic Standards

Students must maintain Kingsborough's academic standards (page 30). Students who fail to do so will be placed on probation. Students who make satisfactory progress during their probationary period will continue to maintain their academic standing with the college and their concurrent eligibility for financial aid.
ACADEMIC INFORMATION

A matriculated student is one who is registered for a specific degree in a particular program (curriculum).

All full-time students must enroll in a program of study carrying a minimum of 12 credits or 12 equated credits during the Fall and Spring sessions. Full-time students usually carry a program of 16 to 18 credits or equated credits.

Part-time students, those carrying fewer than full-time credits, generally attend the Evening Studies Program. It is possible to carry a full-time program during the Evening. However, full-time Evening Study is not available for all Kingsborough degree programs, but can be used for basic necessary courses and credits before completing requirements in Day Session. Counselors are available for consultation and for specific information.

Non-Degree Students* who request a change to Matriculated Status must meet the following requirements:

1. Proof of high school graduation or equivalent on file in the Registrar's Office.
2. Take required CUNY Skills Assessment Tests.
3. Good academic standing at the end of the current semester (at least a 2.00 cumulative index).

If a college was attended previously, the following criteria must also be met:

A. Meet requirements in 1, 2, 3 listed above.
B. Have an official copy (copies) of previous college(s) transcript(s) on file in the Registrar's Office.
   - If the cumulative average at the previous college(s) was below a 2.00, the completion of a minimum of 12 credits or 12 equated credits, will be required at Kingsborough Community College with at least a 2.00 cumulative index.

*Non-Degree students are NOT eligible for financial aid.

Freshman Course Placement

AFTER acceptance by the College but BEFORE registration each entering matriculated student (and non-degree students attempting to achieve matriculation), will be required to take the CUNY Freshman Skills Assessment Tests. Results of these mandatory placement tests (in reading comprehension, writing and mathematics) determine specific course assignments in appropriate English and Mathematics classes (pages 140 and 197).

Basic Skills Proficiency

Each student must meet standards of proficiency in the basic skills areas of reading, writing and mathematics established by the College. In addition, the CUNY 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, to determine whether they meet the minimal University College standards. Those who initially fail to meet these requirements will be given appropriate remedial instruction to assist them to achieve the required skills competency levels. Students who fail to achieve the minimal CUNY standards by the end of their sophomore year* will not be permitted to continue in the University.

*The end of the sophomore year is the semester, or session, in which the programs degree requirements for graduation are completed.

Graduation Requirements

Students in all programs follow courses of study designed to provide a sound general education and a carefully developed program of occupational or pre-professional education.

Eligibility for Graduation requires the completion of one of the programs of study as outlined in the statement of requirements with an overall minimum Cumulative Index of 2.00 (at least a "C" grade) for all courses taken at Kingsborough Community College (see page 41).

In order to receive a Kingsborough degree, a student is required to have completed the final thirty credits toward that degree while enrolled at Kingsborough. Where one or more credit bearing courses to be included in this sum are to be earned at another institution, prior permission must be obtained from the appropriate KCC faculty committee.
The grade of "INC" (incomplete), or its equivalent, shall be awarded only when the course requirement has not been completed for good and sufficient reasons and where there is reasonable expectation that the student can, in fact, successfully complete the requirements of the course.

The grade of "W" (withdrawal without penalty), shall be awarded only when it is clear that the student has good and sufficient reasons for withdrawing from the course, and is doing so at a time when passing work is being done in the course.

Non-credit grades, failing grades, withdrawal grades and their equivalents shall be incorporated in a student’s cumulative average for the purpose of determining academic standing and satisfactory progress toward a degree.

The following table is used when evaluating a student’s academic progress and determining satisfactory progress toward a degree.

<table>
<thead>
<tr>
<th>Attempted Credits or Equated Credits</th>
<th>Minimum Satisfactory Rate of Completion</th>
<th>Minimum Cumulative GPA (Index)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 to 23%</td>
<td>50%</td>
<td>1.50</td>
</tr>
<tr>
<td>24 to 35%</td>
<td>66%</td>
<td>1.75</td>
</tr>
<tr>
<td>36 and over</td>
<td>75%</td>
<td>2.00</td>
</tr>
</tbody>
</table>

(Both the ”W” grade and equated credits are included in the determination of a student’s rate of completion.)

Students who fail to achieve these standards will be placed on probation for one semester and if unable to correct their deficiencies during that semester will be dropped from the college. The normal academic appeals procedure of the college will continue to consider individual cases, and to make such exceptions to the implementation of these guidelines as unusual circumstances may warrant.

Students who are dropped from the college for academic reasons may apply for readmission after one semester. Acceptance will be subject to faculty decisions (see page 32).

*Kingsborough Community College Council action.

Credits

Points allowed for courses taken in the college. Usually based on one credit for each weekly class hour. In some cases, the number of required hours may exceed the number of credits granted (i.e., science and physical education courses).

Example: Chemistry 12 — 6 hrs. 4 crs.
          History 11 — 3 hrs. 3 crs.
          Phys. Ed. 2 — 2 hrs. 1 cr.

Equated Credits

Weekly class hours in remediation and compensatory courses, for which actual credit is not allowed may, for certain purposes, be counted in the same manner as are credits.

Example: Math M1 — 4 hrs. 0 crs. AND 4 Equated credits.
          English C1 — 5 hrs. 0 crs. AND 5 Equated credits.
Grade Point Index

The Grade Point Index is obtained by multiplying the grade point value by the number of credits for the course, then totaling the grade points and dividing by total credits. For example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Point Value</th>
<th>Credits</th>
<th>(Points × credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>A</td>
<td>4</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>French</td>
<td>D</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Music</td>
<td>C</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Physics</td>
<td>B</td>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>History</td>
<td>F</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Total 16  Grade Point Total 34

Grade Point Index (34 divided by 16) equals 2.125 or just above "C" average.

Remedial Courses (□)

Remedial courses are specifically designed for students whose skills assessment test scores indicate that special remediation assistance is required. Remedial, no credit courses are designated by a □.

Basic Courses (+)

Basic courses are courses that individual Kingsborough departments feel are essential for college students so that they may learn the fundamental and basic concepts of a discipline. Basic courses are designated by a +. Some basic courses require prerequisite courses or Department permission. This is indicated with the course description.

Advanced Courses

Advanced courses are courses that individual Kingsborough departments feel are important as follow-up courses to explore, either in breadth or depth, the areas of knowledge to which students have been introduced while taking the basic courses.

EXAMINATIONS

Mid-Term

Mid-term status is provided orally by Instructor. They are not entered on the permanent record.

Final

Students are responsible for meeting examination schedules. Students who have a conflict with a final examination schedule must immediately report to the Registrar's Office for rescheduling.

To receive early notification of grades students may submit postcards to their instructors at final exams. The Registrar's Office mails grade reports to students at the conclusion of each session.

Make-up Final

Students who miss final examinations for legitimate reasons may apply for make-up examinations. Generally, permission is granted only to students who maintain passing grades up to the final examination period. For each make-up examination, a "Petition for Final Make-up Examination" form, with the Instructor's signature must be completed and received in the Registrar's Office by deadline dates.

Students pay $15, for the first make-up exam plus $5, for each additional exam. (page 11).
GRADES

Grades indicate how well a student is doing academically. They deserve careful attention as evidence of good progress, or as an indication of the need for counseling, for increased effort, or both.

Standard Grades*

Students receive an official grade for each course at the end of a semester. This becomes part of the permanent record. The standard grades are:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90–100%</td>
<td>4 Excellent</td>
</tr>
<tr>
<td>B</td>
<td>80–89%</td>
<td>3 Good</td>
</tr>
<tr>
<td>C</td>
<td>70–79%</td>
<td>2 Fair or Average</td>
</tr>
<tr>
<td>D</td>
<td>60–69% (Lowest Passing Grade)</td>
<td>1 Below Average but Passing</td>
</tr>
<tr>
<td>F</td>
<td>59 and Below</td>
<td>0 Failure</td>
</tr>
<tr>
<td>R</td>
<td>Minimum Level of Proficiency Not Met for Remedial Courses</td>
<td>—</td>
</tr>
<tr>
<td>NC</td>
<td>Minimum Level of Proficiency Not Met for Compensatory Courses</td>
<td>—</td>
</tr>
<tr>
<td>INC</td>
<td>Term’s Work Incomplete</td>
<td>—</td>
</tr>
<tr>
<td>W</td>
<td>Withdraw Without Penalty</td>
<td>—</td>
</tr>
<tr>
<td>WF</td>
<td>Withdraw Failing (Counts as Failure)</td>
<td>0</td>
</tr>
<tr>
<td>WU</td>
<td>Withdraw Unofficially (Counts as Failure)</td>
<td>0</td>
</tr>
<tr>
<td>AUD</td>
<td>Audit</td>
<td>—</td>
</tr>
</tbody>
</table>

NOTE: Students may register to repeat a course if they received an “F”, “W”, “R”, “NC”, “WF”, or “WU” grade.

Effective September 1, 1990, if a student repeats a course in which an “F”, or an administrative failing grade was originally earned and subsequently earns a passing grade of “C” or better in the same course, the original failing grade will remain on the students transcript but will no longer be computed into the grade point average. The total number of failing credits earned during enrollment in CUNY which may be deleted is 16. Students who wish to replace an “F” grade earned before September 1, 1984, must first receive approval from the appropriate faculty committee.

A course in which a “D” grade was received may be repeated only if a more advanced course in that discipline has not already been completed.

Students who receive a “C” grade or better in any course offered at the college MAY NOT REPEAT that course. In unusual and extenuating circumstances the rule may be waived by the appropriate college committee.

(Regulations above do NOT apply to students in the Nursing Program page 211).

*Kingsborough Community College Council action.

“R” Grade

The “R” grade does not count in computing the scholastic index. It is given to a student in a remedial component who does not meet the minimum requirements at the completion of the semester. A student who receives the “R” grade in the same remedial component three times, will NOT be permitted to repeat that course again.

Grade Change

Students may appeal a final grade NO LATER than the end of the semester following that in which the grade was given. Special requests and petitions, relating to a grade should be addressed to the Chairperson, Committee on Academic Review.

Scholastic Standing

The measure of scholastic standing is based on the number of graded credits and/or equated credits taken and the grade received.
CHANGE of CURRICULUM

For any curriculum change, except Nursing* which has special regulations, students must file the appropriate form in the Registrar’s Office, following the deadline dates on the Academic Calendar.

A curriculum change cannot go into effect until one semester in the original choice has been completed. The new curriculum goes into effect the semester following the student’s application. The most recent information on college policy, and all proper forms for a change of curriculum or change from Evening to Day Session, are available in the Registrar’s Office.

*Nursing Curriculum Requirements: Retention, Pre-Nursing Sequence (page 211)

AUDITING POLICY

To audit a course a student must:

a. obtain permission from the Department Chairperson and course Instructor.
   [Permission to remain in the class is on a space available basis.]

b. formally register, as an auditor, for the course under current tuition policy.

The grade of “AUD”, which carries no credit and cannot be changed to any other grade will be given at the completion of the term.

WITHDRAWAL

From the College

Students who find it necessary to withdraw from the college must complete and file an official form in the Registrar’s Office. Students who contemplate such action should first discuss the matter with a counselor to see if alternatives are possible and advisable. The date that the withdrawal form is completed and submitted to the Registrar’s Office—NOT the last date of class attendance—is considered the official date of withdrawal from the college. For last days to withdraw without academic penalty, check the Academic Calendar. For tuition refund, see page 12.

A student who expects to return to Kingsborough, should fill out a Readmission Form at the same time. A readmission fee is charged when the form is submitted (page 11).

Readmission deadline dates are:

- Fall readmission — June 15
- Spring readmission — December 15

From a Course

After consultation with a counselor and before such action is taken, the proper forms must be filed with the Registrar’s Office. The date that change of program or withdrawal form is completed and submitted to the Registrar’s Office—NOT the last date of class—is considered the official date of withdrawal from the course. See “Grades Assigned” under Student Attendance Policy (page 34).

DISMISSAL

A student who is dismissed for academic reasons may not apply for readmission until one semester after dismissal.

Application for readmission, with required readmission fee, must be filed with a letter of appeal to the Committee on Admissions and Academic Standing explaining the reason for the poor scholarship. Academic records will then be evaluated by the Committee. If the Committee believes the records indicate that the student will be able to make satisfactory progress toward earning the degree within a reasonable period of time the student may be readmitted. If, at the end of the semester of readmission, the student’s academic level has not been raised to CUNY’s standards, nor has adequate progress in achieving the appropriate standards been shown, the student will then be dismissed.
STUDENT ATTENDANCE POLICY

As it is to a student's advantage to attend all scheduled classes and laboratories in which they are enrolled, the College has instituted an attendance policy.

All students are expected to attend all classes regularly and punctually. Students enrolled in remedial courses are required to attend classes regularly to maximize the opportunity to overcome any diagnosed basic skills deficiencies.

A student in any course who has been absent 15% of the number of contact hours a class meets during a session is deemed excessively absent.

<table>
<thead>
<tr>
<th>12-Week Session</th>
<th>6-Week Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Hours per week</td>
<td>Excessive Absences per session</td>
</tr>
<tr>
<td>2 hours</td>
<td>4 hours of absences</td>
</tr>
<tr>
<td>3 hours</td>
<td>6 hours of absences</td>
</tr>
<tr>
<td>4 hours</td>
<td>8 hours of absences</td>
</tr>
<tr>
<td>5 hours</td>
<td>10 hours of absences</td>
</tr>
<tr>
<td>6 hours</td>
<td>12 hours of absences</td>
</tr>
<tr>
<td>Course Meetings per week</td>
<td>Maximum Absences allowed</td>
</tr>
<tr>
<td>2 hours</td>
<td>2 absences</td>
</tr>
<tr>
<td>3 hours</td>
<td>3 absences</td>
</tr>
<tr>
<td>4 hours</td>
<td>4 absences</td>
</tr>
</tbody>
</table>

Where the course includes classroom lectures plus another component such as laboratory/field placement, etc., the 15% excessive absences policy applies to either component.

If excessive absences were due to special circumstances, timely appeal may be made to the Dean of Students for permission to continue in class. Approval by the Instructor is necessary for reinstatement.

Students who officially withdraw from courses within the first seventeen days of a session will have "no grade" recorded on their student transcripts.

Students who register for a course(s), and then do not officially withdraw from the course(s) for which they registered will receive a "WU" grade even if they never attend that class. Check the Academic Calendar for withdrawal dates.

INDEPENDENT STUDY

The college offers students the opportunity to take a limited number of credits outside the traditional course structure as Independent Study, designated by the course number “81”. Students registering for such courses undertake a prescribed program of individual and/or group research and may attend seminars or workshops dealing with their field of study. All work will be conducted under the supervision of the assigned instructor and will be evaluated and graded by the instructor.

Successful completion of the “81” courses generally requires from 1 to 3 hours per week and earns from 1 to 3 credits per semester. These courses are open ONLY to upper freshmen and sophomore students who have an overall B average (3.00 index) in the subject area, and departmental approval.

Students will be permitted to take no more than 6 credits of Independent Study in any one area and no more than 12 credits toward the degree.

TOPICAL and PILOT COURSES

In addition to the courses described in the catalog, the College offers a group of courses that meet the immediate needs and interests of various members of the student population or, gauge the appropriateness and popularity of new subject areas. These topical and pilot courses are designated by the course number “82”. These courses appear in the Schedule of Classes for the term in which given.
HONORS

DEAN'S LIST

DAY SESSION

Matriculated students in the Day Session who complete at least 15 credits in a Fall or Spring semester with a 3.20 grade index or better, and who have not received a "WF", "WU", "F", "R", "NC" or "INC" for that semester at the time the Dean's List is produced, are eligible for the Day Session Dean's List for the semester in which the superior record is achieved. Attainment of the Dean's List becomes a part of the student's permanent record and appears on all transcripts.

EVENING SESSION

Matriculated students in the Evening Session who complete at least 7 credits in a Fall or Spring semester with a 3.20 grade index or better, and who have not received a "WF", "WU", "F", "R", "NC" or "INC" for that semester at the time the Dean's List is produced, are eligible for the Evening Session Dean's List for the semester in which the superior record is achieved. Attainment of the Dean's List becomes a part of the student's permanent record and appears on all transcripts.

Note: Day and Evening work completed during the winter or summer modules is not considered.

HONOR SOCIETIES

PHI THETA KAPPA
National Junior College Honor Society

Society members are selected on the basis of academic excellence. Students who complete 45 credits or more, with at least 30 of them at Kingsborough, and earn a cumulative index of 3.70 or higher, are invited to join the Society.

MU ALPHA THETA
Junior College Mathematics Honor Society

Sponsored by the Mathematical Association of America, membership is open to students who: complete six credits or more in mathematics courses numbered 14 or higher, and in computer science courses; maintain at least a "B" grade in those courses; receive the recommendation of the Mathematics Department Faculty.

PHI BETA LAMBDAX
National Business Honor Society

Students majoring in Secretarial/Office Administration, who maintain a cumulative "B" average after completing 30 credits at Kingsborough and who have given service to the Secretarial/Office Administration Department, are eligible for membership.

HONORS OPTION PROGRAM

For academically skilled, high achieving students. See page 25 for description.

WITH HONORS

Students who graduate from Kingsborough, with an Index of 3.5 or better, will have graduated "With Honors", inscribed on their diploma. Graduated "With Honors" also becomes a part of the student's permanent record, and appears on all transcripts.
KCC “TWO-PLUS-TWO” PROGRAM

Articulation agreements are in effect between CUNY, SUNY, and many private senior colleges. These agreements make it possible for students who complete, and graduate from, specific KCC two-year programs, to transfer directly into the third year of the collaborating four-year institution without any loss of credit. These students, therefore, are able to earn two college degrees in four years.

TRANSFER to SENIOR COLLEGES and UNIVERSITIES

CUNY ARTICULATION POLICY:

WHEREAS, The City University of New York was established as an independent system of higher education governed by its own Board of Trustees responsible for the governance, maintenance, and development of both senior and community colleges; and

WHEREAS, The legislative intent leading to the enactment of The City University Governance and Financing Act stipulates that the University must remain responsive to its urban setting and maintain close articulation between senior and community colleges; and

WHEREAS, The educational mission of The City University includes a commitment to maintain and promote academic excellence while also providing open and equal access to the totality of the University’s students; and

WHEREAS, The City University is an integrated, unique and comprehensive system of higher education, mandated in law and in fact to serve the special needs of the people of the City of New York for purposes of upward educational, social and intellectual mobility; and

WHEREAS, The goal of access implies that success on each step of the college ladder should be followed by access to higher levels of learning through vertical linkage between associate in arts, baccalaureate, and graduate programs; and also implies the inter-college transferability of courses and credits in the Liberal Arts and Sciences; and

WHEREAS, The courses in the Liberal Arts and Sciences offered at each college in the University were developed by their respective faculties and approved by the Trustees of The City University and the State Education Department for the University as well as for the relevant college units of the University.

*Adopted by the CUNY Board of Trustees, June 24, 1985.
THEREFORE BE IT RESOLVED,

That the Board policy statement of February 26, 1973 be fully implemented as a basic policy component of the Board of Trustees. This policy states that "All City University Community College Associate in Arts and Associate in Science degree recipients shall be accepted as matriculated students at a senior college of The City University and that these students be given priority for transfer over non-university students seeking transfer and that upon such transfer they be granted a minimum of 64 credits toward a baccalaureate degree and be required to complete only the difference in credits between 64 and the total credits required..."; and be it further

RESOLVED, That effective September 1, 1986 all Liberal Arts courses taken in one City University college be considered transferable, with full credit, to each college of The City University; and that full credit be granted for these courses in all departments and programs; and be recognized for the fulfillment of degree requirements; and be it further

RESOLVED, That based on a fair and reasonable evaluation of a student's transcript at least nine (9) credits* be granted in the student's major unless the senior college determines that it wishes to grant additional credit in the major; and be it further

RESOLVED, That effective September 1, 1988 all Science courses taken in one City University college be considered transferable, with full credit, to each college of The City University; and that full credit be granted for these courses in all departments and programs and be recognized for the fulfillment of degree requirements; and be it further

RESOLVED, That based on a fair and reasonable evaluation of a student's transcript at least nine (9) credits* in Laboratory Science be granted in the student's major unless the senior college determines that it wishes to grant additional credit in the major; and be it further

RESOLVED, That when transferring from a community college to a senior college, credit be granted for course work taken in the Liberal Arts and Sciences in the community college irrespective of whether the student has fulfilled the requirements for the Associate degree; and that a maximum of 68 lower level (freshman and sophomore) credits be transferred from one college to another unless the senior college determines that it wishes to grant additional credit, and that no more than 64 credits be required above the Associate in Arts or the Associate in Science degrees in order to fulfill the requirements for a baccalaureate degree; and be it further

RESOLVED, That excluded from this policy are skills courses, such as writing, and professional courses, such as Nursing or Education, where instruction is begun at the community college and continued at the senior college. Such courses shall be granted credit, but the senior college shall determine the proper level of placement in its course sequence; and be it further

RESOLVED, That in order to maintain academic standards and to insure a higher degree of probable achievement, all community college students be required to pass all three Freshman Skills Assessment Tests, prior to transferring to a senior college. Those students who meet the admission requirements of a senior college, and who wish to transfer to a senior college from outside the University, shall be required to take the Freshman Skills Assessment Tests and be placed at the appropriate skills level as determined by the senior college; and be it further

*It is understood that the relationship of course sequence and credit within the major will vary from college to college and major to major and that the allocation of credits will vary slightly.
RESOLVED, That the President or his/her designee is hereby authorized to grant exceptions to the provisions regarding Freshman Skills placement to select students under special circumstances. The number and nature of exceptions shall be reported annually to the Chancellor; and be it further

RESOLVED, That as part of the foregoing resolutions, vocational and skills courses such as typing, taken independently or as part of a liberal arts degree program not be awarded credit upon transfer except in such cases where the senior college determines that it wishes to grant such credit; and be it further

RESOLVED, That the Office of the Chancellor (through the Vice-Chancellor for Academic Affairs) be responsible for arranging meetings between faculties and administrative staffs of the various colleges of the University, so that articulation in the Sciences will be fully completed by September 1, 1988, and that articulation in the professional and career areas on a course-by-course basis will be substantially improved; and be it further

RESOLVED, That within each discipline meetings shall be held by department chairs and program coordinators of each college or their designees from all branches of CUNY. These meetings shall be co-chaired by one community college and one senior college representative and shall have as their explicit goal the improvement of articulation; and be it further

RESOLVED, That at these meetings the departmental representatives shall review the syllabi, examinations, and student papers, as well as entrance and exit criteria; and be it further

RESOLVED, That the Vice-Chancellor for Academic Affairs shall monitor the progress of the articulation meetings. The co-chairs of each group shall report the results of their group's deliberations to the Vice-Chancellor, who shall, in turn, transmit these reports, together with a summary of the results to the University Faculty Senate, the heads of the faculty governance bodies of the individual colleges, the Council of Presidents, the Chancellor, and the Board of Trustees; and be it further

RESOLVED, That the Vice-Chancellor shall monitor the implementation of these articulation policies utilizing periodic and systematic audits; and be it further

RESOLVED, That the community colleges and senior colleges establish an articulation advisement unit at each of the colleges in order to counsel students on career goals, courses to be taken at the student's college prior to transfer, and the requirements expected upon transfer.

EXPLANATION: The above resolutions represent a clarification of the mission of The City University and will result in removing remaining barriers and arbitrary distinctions which may yet exist with respect to intra-University transfer. These resolutions strengthen the University's commitment to upward mobility and equality for opportunity for all students regardless of race, ethnicity or economic status.
SUNY TRANSFER POLICY

The SUNY Transfer Guarantee Program pledges that "A New York State resident who wishes to transfer from a State University of New York two-year college, including all community colleges throughout the state, and who possesses, or who will have, an Associate in Arts or Associate in Science degree at the time of transfer, is guaranteed an opportunity to continue education on a full-time bases at a senior campus of the University." All other students, with or without a degree, may apply for admission to SUNY units but the guarantee does not extend to them.

PRIVATE COLLEGE TRANSFER POLICIES

Students who wish to transfer to a private college should check catalogs, directories and other literature available at Kingsborough or directly from the college they wish to attend.

NOTE: Details are available from Kingsborough's Counseling Faculty, the KCC Student Handbook, or the Admissions Office of the unit desired.

CATALOG

During the first semester at the college, each Kingsborough student receives the college catalog from a counselor. The information spelled out in the catalog is important while attending the college and may prove invaluable in the future.

Careful reading of the catalog makes it possible to check on all the courses required for each particular degree. Course descriptions also help to make decisions about those electives which are of the greatest interest and value. Other catalog information alerts students to specific college requirements, rules and regulations and the special opportunities and advantages available on campus. Information on articulation agreements with senior CUNY and private colleges and universities and transfer opportunities are described.

After graduating from Kingsborough, alumni discover that many senior colleges, universities and professional schools frequently require a copy of the Kingsborough Community College catalog, (printed during the years of attendance) in which are printed exact course descriptions and other details that may be needed in order to properly evaluate credits. The catalog information may also be useful and helpful for employment opportunity consideration.

The Kingsborough catalogs are printed in very limited quantities and replacements may not be possible. Students are urged to carefully keep the catalog they receive.

Prospective students who are interested in attending Kingsborough should request publications about the college from the Admission Information Center.
The Evening Studies Program serves an integral role in the College's educational offerings. Individuals who are unable to attend courses during the day are given an opportunity to pursue part-time and/or full-time studies in the evening. Many courses are offered on Saturdays.

The Evening Studies Program serves:

- Adults eager for a second or new career or, for job upgrading;
- Parents planning to return to the work force;
- Super Citizens (New York State residents 65 years of age and over), who wish to avail themselves of opportunities in higher education under the College's tuition waiver policy for senior citizens. With proof of age and residency, only a $52 registration fee is charged each semester;
- Veterans pursuing their education objectives by attending College;
- Adults seeking education opportunities and cultural interests for self-improvement and intellectual stimulation.

An extensive variety of course offerings are available in the Evening Studies Program. They include courses in the liberal arts, humanities, business and commerce, and the health sciences. At present, evening students can pursue Associate Degrees in Accounting, Business, Marketing Management, Computer Data Processing, Secretarial/Office Administration, and Liberal Arts. Students interested in other degree programs, which are only offered in the day session, can commence their studies in the evening and transfer to the day session to complete their degree.

Evening students may avail themselves of the following services:

- Counseling services, including Career Counseling and Placement;
- Financial Aid advisement;
- Tutoring in most subject areas;
- Accounting, English, Foreign Languages, and Mathematics Laboratories.

For information regarding matriculated an non-degree status in the Evening Program contact the Admission Information Center or Evening Studies Office.
CURRICULA

Kingsborough Community College offers a choice among three degree programs. Graduates who successfully complete the courses prescribed for the two-year program of their choice can earn the degree that curriculum carries: the Associate in Arts (A.A.) degree, the Associate in Science (A.S.) degree, the Associate in Applied Science (A.A.S.) degree.

Students must consult with an advisor when selecting courses to assure that their choices meet the curriculum requirements of the prospective major.

The Associate in Arts (A.A.) degree is awarded upon satisfactory completion of the required credits for Liberal Arts. Candidates for this degree concentrate their studies in the fields of Languages; Literature and the Arts; Mathematics and the Natural Sciences; the Behavioral and Social Sciences; Health and Physical Education. Requirements and credits start on page 47.

The Associate in Science (A.S.) degree is awarded upon satisfactory completion of the required credits for programs offered in Mathematics, in the Sciences and the Arts. Candidates for this degree follow programs which closely parallel the A.A. program, but have greater concentration in Mathematics or Science, or in one of the Arts areas in which they plan to major. These programs include Biology (with the Occupational Therapy and the Pharmacy Transfer Options and concentrations in Pre-Physician Assistant and Food Science), Chemistry (with concentration in Food Science), Community Health, Computer Science, Engineering Science, Environmental Health and Science, Mathematics, Mental Health and Human Services (with concentration in Gerontology), Physics, Pre-Physical Therapy, Fine Arts, Music and Theatre Arts. Requirements and credits start on page 51.

The Associate in Applied Science (A.A.S.) degree is awarded upon satisfactory completion of the required credits in the Career programs: Business, Health and Social Service. Candidates for this degree follow programs which concentrate in the applied field. The professional fields in which these programs are offered include Accounting (with concentration in Tax Accounting), Broadcasting Technology and Management, Business Administration transfer programs, Computer Data Processing (with concentrations in Computer Programming and Microcomputer Applications), Early Childhood Education, Education Associate, Fashion Merchandising, Fisheries and Marine Technology (with concentrations in Seafood Business Management and Vessel Operations), Journalism and Print Media, Marketing Management, Nursing, Personnel Management and Labor Relations, Secretarial/Office Administration (with four options, Executive, Legal, Medical, School, plus a concentration in Word/Information Processing), Sports, Fitness and Recreation Leadership, Travel and Tourism. Requirements and credits start on page 73.

PROGRAMS

The College expects that every Kingsborough student will make consistent and determined progress toward earning a degree; seriously strive to perform well in all courses; spend approximately two hours of outside preparation, study and work for EACH hour of classroom instruction and, is committed to taking full advantage of the opportunities the College offers for a quality education.

The Administration and faculty are concerned with providing education of the highest degree of excellence; building basic skills which will facilitate and encourage further learning; assisting students to develop their individual potentials to their highest levels, and helping students establish a firm foundation upon which to build their future careers.

Students in all programs follow courses of study designed to provide a sound general education and a carefully developed program of occupational or pre-professional education.

Non-credit, non-degree courses and programs are offered by Continuing Education (see page 257).
### DEGREE PROGRAMS*

<table>
<thead>
<tr>
<th>Program Requirements</th>
<th>HEGIS Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Associate in Arts (A.A.)</strong></td>
<td></td>
</tr>
<tr>
<td>Liberal Arts</td>
<td></td>
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<td>Pharmacy Transfer Option</td>
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<td>Fashion Merchandising</td>
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<td>Fisheries and Marine Technology</td>
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<td>Seafood Business Management Concentration</td>
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<td>Vessel Operations Concentration</td>
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<td>Journalism and Print Media</td>
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<td>Marketing Management</td>
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<td>Personnel Management and Labor Relations</td>
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<tr>
<td>Secretarial/Office Administration</td>
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<tr>
<td>(Executive, Legal, Medical, School) plus</td>
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<td>Word/Information Processing Concentration</td>
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<td>Travel and Tourism</td>
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<td><strong>Health Programs</strong></td>
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<td>Education Associate</td>
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<tr>
<td>Sports, Fitness, and Recreation Leadership</td>
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<td></td>
<td>Page 93</td>
</tr>
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</table>

*NOTE: Enrollment in other than registered (or otherwise approved) programs may jeopardize a student's eligibility for certain student aid awards.
COURSE DESCRIPTIONS

Art Department
Courses—page 99

Behavioral Sciences and Human Services Department
Courses—page 107

Biological Sciences Department
Courses—page 121

Business Department
Courses—page 129

English Department
Courses—page 141

Foreign Languages Department
Courses—page 153

Health, Physical Education and Recreation Department
Courses—page 167

History, Philosophy and Social Sciences Department
Courses—page 181

Mathematics and Computer Science Department
Courses—page 193

Music Department
Courses—page 203

Nursing Department
Courses—page 213

Physical Sciences Department
Courses—page 219

Secretarial/Office Administration Department
Courses—page 231

Speech and Theatre Department
Courses—page 241

Travel and Tourism Department
Courses—page 253
DEGREES

All matriculated students must successfully complete the total number of required credits for their degree, divided into four basic categories:

1. **College-Wide Requirements**—four to eight credits in Freshman English courses. Three-credit Health and Physical Education course (HPE 12) required of ALL students except those majoring in Nursing (see page 88) or Vessel Operations (see page 84). Non-credit courses in Corrective Speech and/or remedial courses in English and/or Mathematics may be required.

2. **Department Requirements**—as specified in all curricula except Liberal Arts.

3. **Group Requirements**—limited courses are offered within five general areas.

4. **Free Electives**—choices from the entire range of course offerings. In some programs, Department or Program Director consultation may be required.

**Associate in Arts**

Students matriculated for the A.A. degree must successfully complete a minimum of 64 credits, divided into three basic categories.

1. **College-Wide Requirements**—courses which all students must take (see 1 above).

2. **Group Requirements**—47 credits chosen from: I) the Performing and Visual Arts; II) Language*, Literature ○ and Philosophy; III) Social Sciences; IV) Behavioral Sciences; V) Mathematics and Natural Sciences. These choices are the foundation for future academic studies and depend on background, interests, area of prospective specialization, future career goals.

3. **Free Electives**—courses to make up the total number of credits required for the degree. Students may choose from groups already mentioned or from any other courses offered by the College. In some programs, Department or Program Director consultation may be required.

*Placement recommendations for entering freshmen who wish to continue with a familiar foreign language are made by the Department of Foreign Languages based on language proficiency.

○ Students who wish to do so, will be permitted to take a Foreign Language Literature Course taught in English to fulfill the literature requirement in this group.

**Associate in Science**

and

**Associate in Applied Science**

Students matriculated for the A.S. degree or the A.A.S. degree must successfully complete the number of credits specifically required for that degree. These credits are divided into four basic categories.

1. **College-Wide Requirements**—courses which all students must take (see 1 above).

2. **Group Requirements**—courses which offer limited choices within general areas. Students may choose from a wide selection of course offerings.

3. **Department Curriculum Requirements**—courses which students must successfully complete in the chosen area of specialization, such as Nursing, Sports, Fitness and Recreation Leadership, Chemistry, Biology, etc.

4. **Free Electives**—courses to make up the total number of credits required for the specific curriculum. Students may choose from groups already mentioned or from any other courses offered by the college. In some programs, Department or Program Director consultation may be required.

Detailed statement of all degree requirements are in the Degree Programs section of the catalog.
THE ASSOCIATE IN ARTS (A.A.) DEGREE

Students are exposed to the humanities, social sciences and mathematics. The objectives are similar to the prescribed courses frequently found in the first two years of baccalaureate liberal arts programs. Attention is focused on advanced and specialized courses of interest and concern. Students who plan to continue their studies and earn higher degrees, find that their Kingsborough A.A. degree serves as a solid foundation for transfer to a senior or professional college. Provisions for smooth transfer between KCC and CUNY, SUNY and many private colleges are in effect.

A student must earn at least a "C" grade (2.00 index), and have fulfilled all degree requirements to be certified for the degree.

PROGRAMS

Behavioral Sciences and Human Services • Biological Sciences • English • Fine Arts • Foreign Languages • Health, Physical Education and Recreation • History, Philosophy and Social Sciences • Mathematics • Music • Physical Sciences • Speech and Theatre.
A.A. LIBERAL ARTS

Requirements for Matriculants

COLLEGE REQUIREMENTS*
(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .......... 4 credits
ENG 22 ............................................................................................................. 4
HPE 12 ............................................................................................................. 3
If Required
ENG 03 &/or 04, C1 .......................................................................................... 0
MAT M1 & M2 or MAT R2 proficiency ........................................................... 0

GROUP REQUIREMENTS
At least 6 credits of the 9 credits selected from EACH group - I thru IV - must be in Basic Courses.

I. Performing and Visual Arts (2 areas) ............................................................ 9 credits
   Art - Music - Speech - Theatre Arts
II. Language and Literature (2 areas) ............................................................... 9
   Foreign Language - Literature - Philosophy
III. Social Sciences ......................................................................................... 9
   Economics - History - Political Science
IV. Behavioral Sciences (2 areas) .................................................................... 9
   Anthropology - Psychology - Sociology
V. Mathematics and Sciences (2 areas) ............................................................ 11
   Biological Sciences - Mathematics & Computer Science - Physical Sciences - Chemistry - Earth Science

ELECTIVES—Sufficient to meet required total of .............................................. 64 credits
THE ASSOCIATE IN SCIENCE (A.S.) DEGREE

The Science, Mathematics, Fine and Performing Arts courses offered in these programs provide sound foundations in those specialities as well as in the essential liberal arts. They were designed to permit students the opportunity for exploration with specialization in their major field. The Kingsborough A.S. degree will serve as a perfect foundation for transfer to a senior or professional college, or, for accepting a position in the chosen field.

A student must earn at least a “C” grade (2.00 index), and have fulfilled all degree requirements to be certified for the degree.

PROGRAMS

**Arts**
- Fine Arts • Music • Theatre Arts

**Mathematics**
- Mathematics • Computer Science
- Biology

**Science**
- (with concentrations in Food Science and in Pre-Physician Assistant, Occupational Therapy and Pharmacy Transfer Options)
- Chemistry (with concentration in Food Science)
- Community Health • Engineering Science
- Environmental Health and Science
- Mental Health and Human Services
- Physics • Pre-Physical Therapy
A.S. DEGREE PROGRAMS

ARTS PROGRAMS
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   Requirements, page 62
   Course Descriptions, page 99
Music
   Requirements, page 67
   Course Descriptions, page 203
Theatre Arts
   Requirements, page 70
   Course Descriptions, page 247

HEALTH AND SCIENCES PROGRAMS
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   Requirements, page 53
   Course Descriptions, page 121
Chemistry
   Requirements, page 55
   Course Descriptions, page 219
Community Health
   Requirements, page 57
   Course Descriptions, page 175
Engineering Science
   Requirements, page 59
Environmental Health and Science
   Requirements, page 61
Mental Health and Human Services
   Requirements, page 65
   Course Descriptions, page 117
Occupational Therapy Transfer Option
   Requirements, page 53
Pharmacy Transfer Option
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Physics
   Requirements, page 68
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Pre-Physical Therapy
   Requirements, page 69
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MATHEMATICS PROGRAMS
Computer Science
   Requirements, page 58
   Course Descriptions, page 195
Mathematics
   Requirements, page 64
   Course Descriptions, page 197
A.S. BIOLOGY**

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .................. 4 credits
ENG 22 .................................................................................................................. 4
HPE 12 .................................................................................................................... 3
If Required
ENG 03 &/or 04, C1 ................................................................................................. 0
MAT M1 & M2 or MAT R2 proficiency .................................................................... 0

DEPARTMENT REQUIREMENTS+

Preparatory Biology (BIO 10 if required, page 121) ............................................ 0 credits
General Biology I and II (BIO 13–14) .................................................................. 8
Biology Laboratory Courses (excluding courses for Allied Health students) ........ 8
General Chemistry I and II (CHM 11–12, page 219) ........................................... 8
Analytic Geometry and Pre-Calculus Math (MAT 14, page 199) ....................... 4

The following variations in degree requirements are based on articulation agreements.

<table>
<thead>
<tr>
<th>OCCUPATIONAL THERAPY TRANSFER OPTION*</th>
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<tbody>
<tr>
<td>General Biology I and II (BIO 13–14) .................................................................. 8 credits</td>
</tr>
<tr>
<td>Human Anatomy and Physiology I and II (BIO 11–12) ........................................... 8</td>
</tr>
<tr>
<td>General Chemistry I (CHM 11) ............................................................................. 4</td>
</tr>
<tr>
<td>Elements of Statistics (MAT 20, page 199) ......................................................... 3</td>
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<tr>
<td>PLUS</td>
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<tr>
<td>Completion of 40 hours of volunteer or paid experience in an occupational therapy</td>
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<td>facility approved, in advance, by the Program Coordinator. ..............................</td>
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<tr>
<th>PHARMACY TRANSFER OPTION*</th>
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<tbody>
<tr>
<td>Preparatory Biology (BIO 10, if required) .......................................................... 0 credits</td>
</tr>
<tr>
<td>General Biology I and II (BIO 13–14) .................................................................. 8</td>
</tr>
<tr>
<td>Human Anatomy and Physiology I and II (BIO 11–12) ........................................... 8</td>
</tr>
<tr>
<td>General Chemistry I and II (CHM 11–12) ............................................................. 4</td>
</tr>
<tr>
<td>Organic Chemistry I and II (CHM 31–32) ............................................................ 10</td>
</tr>
<tr>
<td>Analytic Geometry and Pre-Calculus Math (MAT 14) ........................................... 4</td>
</tr>
<tr>
<td>Calculus I (MAT 15) ............................................................................................. 4</td>
</tr>
<tr>
<td>Recommended</td>
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<tr>
<td>General Physics I (PHY 11, page 225) .................................................................. 5</td>
</tr>
</tbody>
</table>

*Courses must be discussed in advance with Department Advisor. Specific recommendations for |
group distribution courses or electives are dependent upon the requirements of particular |
occupational therapy or pharmacy programs to which the student may wish to apply for transfer.

Total credits: 64–65
## PRE-PHYSICIAN ASSISTANT CONCENTRATION

- **Preparatory Biology** (BIO 10, if required) ................................................................. 0 credits
- Biology (BIO 13-14), Chemistry (CHM 11-12), Mathematics (MAT 14) ....................... 20 credits
- Human Anatomy and Physiology (BIO 11-12) ................................................................. 8 credits
- General Psychology (PSY 11 pg. 110) .................................................................................. 8 credits
- Human Growth and Development (PSY 32) ....................................................................... 3 credits

**Recommended Electives**
- Microbiology in Health and Disease (BIO 51) ................................................................. 4 credits
- Science of Nutrition (SCI 70 pg. 228) ................................................................................. 3 credits
- Cardiopulmonary Resuscitation (HE 20 pg. 167) .............................................................. 1 credit
- Emergency Health Care (NUR 41 pg. 214) ........................................................................ 2 credits
- Organic Chemistry I and II (CHEM 31-32 pg. 219) ............................................................. 10 credits

*Specific electives must be discussed in advance with Department Advisor.*

**PLUS** Completion of voluntary program concerned with direct patient care at least one year before transfer to a Senior College offering a program leading to certification as a Physician Assistant.

## FOOD SCIENCE CONCENTRATION

**Biological Sciences Emphasis**

- Preparatory Biology (BIO 10, if required) ......................................................................... 0 credits
- Biology (BIO 13-14), Chemistry (CHM 11-12), Mathematics (MAT 14) ....................... 20 credits
- Introductory Food Science (BIO 40) ..................................................................................... 3 credits
- General Microbiology (BIO 50) ............................................................................................. 4 credits
- Basic Principles of Molecular Biology (BIO 58) ..................................................................... 4 credits
- Science of Nutrition (BIO 70) .............................................................................................. 3 credits
- Organic Chemistry I (CHM 31) ............................................................................................. 5 credits
- Food Analysis (CHM 40) ..................................................................................................... 3 credits

**Recommended**
- Calculus I and II (MAT 15-16, pg. 199) ........................................................................... 8 credits
- General Physics I (PHY 11, pg. 225) .................................................................................... 5 credits

*Transfer to Cornell University’s College of Agriculture and Life Sciences to earn a B.A. Degree in Food Science is possible without loss of credit, to a limited number of high average KCC graduates. On a space-available basis, transfer is also available to additional graduates of this KCC program. For further information contact Department Chairperson.*

## GROUP REQUIREMENTS

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

1. Performing and Visual Arts ................................................................. 3 credits
   - Excluded are Art & Music Studio, Theatre Production & Technique Courses
   - Art - Music - Speech - Theatre Arts
2. Language and Literature ................................................................. 3 credits
   - Foreign Language - Literature - Philosophy
3. Social Sciences ...................................................................................... 3 credits
   - Economics - History - Political Science
4. Behavioral Sciences .............................................................................. 3 credits
   - Anthropology - Psychology - Sociology
5. Mathematics and Sciences ................................................................. 24 credits
   - Biological Sciences - Mathematics & Computer Science - Physical Sciences

**ELECTIVES**—Sufficient to meet required total of .......................................................... 64-65 credits

- Department requirements may be used to satisfy groups I-V requirements.
- Consultation with the Department Advisor is required.
- These programs are within the Biological Sciences Department (pages 119-126).
A.S. CHEMISTRY**
Total credits: 64–65

Requirements for Matriculants

COLLEGE REQUIREMENTS*
(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .......................... 4 credits
ENG 22 .................................................................................................................. 4
HPE 12 ................................................................................................................ 3
If Required
ENG 03 &/or 04, C1 .................................................................................................. 0
MAT M1 & M2 or MAT R2 proficiency .................................................................. 0

DEPARTMENT REQUIREMENTS+

General Chemistry I and II (CHM 11-12, page 219) ...................................................... 8 credits
Organic Chemistry I and II (CHM 31-32) ...................................................................... 10
Advanced General Physics I and II (PHY 13-14, pg. 225) .............................................. 10
Calculus I and II (MAT 15-16, pg. 199) ...................................................................... 8

FOOD SCIENCE CONCENTRATION#•

Chemistry Emphasis

General Biology I and II (BIO 13-14, pg. 121) ............................................................... 8 credits
General Microbiology (BIO 50) ..................................................................................... 4
General Chemistry I and II (CHM 11-12, pg. 219) ...................................................... 8
Organic Chemistry I and II (CHM 31-32) ...................................................................... 10
Analytic Geometry and Pre-Calculus Math (MAT 14, pg. 199) ..................................... 4
Introductory Food Science (BIO 40) .............................................................................. 3
Science of Nutrition (BIO 70) ..................................................................................... 3
Food Analysis (CHM 40) ........................................................................................... 3
Recommended
Calculus I and II (MAT 15-16, pg. 199) ................................................................... 8
General Physics I (PHY 11, pg. 225) ......................................................................... 5

#Transfer to Cornell University’s College of Agriculture and Life Sciences to earn a B.A. Degree in Food Science is possible without loss of credit, to a limited number of high average KCC graduates. On a space-available basis, transfer is also available to additional graduates of this KCC program. For further information contact Department Chairperson.
GROUP REQUIREMENTS.......................................................... 12 credits

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

I. Performing and Visual Arts.................................................. 3 credits
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature.................................................. 3
    Foreign Language - Literature - Philosophy

III. Social Sciences................................................................... 3
    Economics - History - Political Science

IV. Behavioral Sciences.......................................................... 3
    Anthropology - Psychology - Sociology

V. Mathematics and Sciences.................................................. 24 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences
   (Met by Department requirements)

ELECTIVES—Sufficient to meet required total of........................................... 64–65 credits

Department requirements may be used to satisfy groups I-V requirements.

† Consultation with the Department Advisor is required.

** This program is within the Physical Sciences Department (pages 217–228)
A.S. COMMUNITY HEALTH**  
Requirements for Matriculants  

Total credits: 64

**Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .......................... 4 credits
ENG 22 ...................................................................... 4 credits
HPE 12 ...................................................................... 3 credits

If Required
ENG 03 &/or 04, C1 ........................................................ 0 credits
MAT M1 & M2 or MAT R2 proficiency ............................ 0 credits

DEPARTMENT REQUIREMENTS+

Introduction to Community Health (COH 11, pg. 175) ................................................................. 3 credits
Critical Issues in Community Health (COH 12) ................................................................. 3 credits
Epidemiology (COH 13) ............................................................................................................. 3 credits
Drugs, the Individual and Society (HE 40, pg. 168) ................................................................. 3 credits
Human Sexuality (HE 52) ........................................................................................................ 3 credits
Health Education Elective+ ........................................................................................................ 3 credits
Introduction to Gerontology (MH 35, pg. 117) ........................................................................... 3 credits
Human Anatomy and Physiology I and II (BIO 11, 12, pg. 121) ............................................ 8 credits
Elements of Statistics (MAT 20, pg. 199) ................................................................................... 3 credits
General Psychology (PSY 11, pg. 110) .................................................................................... 3 credits
Human Growth and Development (PSY 32) .............................................................................. 3 credits
Science of Nutrition (BIO 70) .................................................................................................. 3 credits
Introduction to Sociology (SOC 31, pg. 113) ............................................................................ 3 credits

GROUP REQUIREMENTS ........................................................................................................... 12 credits

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

I. Performing and Visual Arts ........................................................................................................ 3 credits
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature ........................................................................................................... 3 credits
   Foreign Language - Literature - Philosophy

III. Social Sciences ....................................................................................................................... 3 credits
   Economics - History - Political Science

IV. Behavioral Sciences ................................................................................................................... 3 credits
   Anthropology - Psychology - Sociology

V. Mathematics and Sciences ........................................................................................................ 6 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences
   (Met by Department Requirements)

ELECTIVES—Sufficient to meet required total of ........................................................................ 64 credits

( Specific electives must be discussed in advance with the Department Advisor.)

Department requirements may be used to satisfy groups I-V requirements.

+ Consultation with the Department Advisor is required.
** This program is within the Health, Physical Education and Recreation Department (pages 165-178).
A.S. COMPUTER SCIENCE**
Requirements for Matriculants

**COLLEGE REQUIREMENTS**
(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)*

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<th>Course</th>
<th>Credits</th>
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<td>ENG C2 or ENG 12</td>
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<tr>
<td>ENG 22</td>
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<tr>
<td>HPE 12</td>
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*If Required*

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<th>Course</th>
<th>Credits</th>
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<td>ENG 03 &amp;/or 04, C1</td>
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<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
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**DEPARTMENT REQUIREMENTS**

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<th>Credits</th>
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<td>Introduction to Computing (CS 12, pg. 195)</td>
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<tr>
<td>Computer and Assembly Language Programming (CS 14)</td>
<td>5</td>
</tr>
<tr>
<td>Discrete Structures (CS 35)</td>
<td>5</td>
</tr>
<tr>
<td>Program Design and Analysis (CS 37)</td>
<td>4</td>
</tr>
<tr>
<td>Calculus I, II and III (MAT 15, 16, 21, pg. 199)</td>
<td>12</td>
</tr>
<tr>
<td>Differential Equations (MAT 55)</td>
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<tr>
<td>Linear Algebra (MAT 56)</td>
<td>3</td>
</tr>
<tr>
<td>Biology I and II (BIO 13-14, pg. 121) OR Physics I and II (PHY 11-12, pg. 110) OR Advanced General Physics I and II (PHY 13-14)</td>
<td>8-10</td>
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**GROUP REQUIREMENTS**

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

<table>
<thead>
<tr>
<th>Group</th>
<th>Requirements</th>
<th>Credits</th>
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<tbody>
<tr>
<td>I</td>
<td>Performing and Visual Arts (Excluded are Art &amp; Music Studio, Theatre Production &amp; Technique courses)</td>
<td>3</td>
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<tr>
<td></td>
<td>Art - Music - Speech - Theatre Arts</td>
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<tr>
<td>II</td>
<td>Language and Literature</td>
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<td>Foreign Language - Literature - Philosophy</td>
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<td>III</td>
<td>Social Sciences</td>
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<td>Economics - History - Political Science</td>
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<td>IV</td>
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<td>Anthropology - Psychology - Sociology</td>
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<tr>
<td>V</td>
<td>Mathematics and Sciences</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Biological Sciences - Mathematics &amp; Computer Science - Physical Sciences</td>
<td></td>
</tr>
</tbody>
</table>

**ELECTIVES**—Sufficient to meet required total of 68 credits

Department requirements may be used to satisfy groups I-V requirements.

* Consultation with the Department Advisor is required.

** This program is within the Mathematics and Computer Science Department (pages 191-200).
A.S. ENGINEERING SCIENCE**
Total credits: 69–71

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)................................. 4 credits
ENG 22 ........................................................................................................................................ 4
HPE 12 ........................................................................................................................................ 3
If Required
ENG 03 &/or 04, C1 .......................................................................................................................... 0
MAT M1 & M2 or MAT R2 proficiency............................................................................................. 0

DEPARTMENT REQUIREMENTS+

ALL Engineering Science Majors Must Take:

Technical Drawing (ART 76, pg. 102)............................................................................................ 2 credits
General Chemistry I and II (CHM 11, 12, pg. 219)......................................................................... 8
Calculus, I, II and III, (MAT 15, 16, 21, pg. 199).......................................................................... 12
Differential Equations (MAT 55)..................................................................................................... 3
Advanced General Physics I and II (PHY 13, 14, pg. 225)............................................................ 10

PLUS,...SEQUENCES IN ENGINEERING CONCENTRATIONS

Chemical Engineering
Organic Chemistry I and II (CHM 31, 32)...................................................................................... 10
Introduction to Engineering Thermodynamics (PHY 23)................................................................. 3

Civil Engineering
Modern Physics (PHY 21)................................................................................................................ 4
Physical Geology (GEO 33, pg. 224)............................................................................................... 4
Programming in Fortran (CP 51, pg. 194)...................................................................................... 4
Introduction to Engineering Thermodynamics (PHY 23)................................................................. 3

Electrical Engineering
Modern Physics (PHY 21)................................................................................................................ 4
Linear Algebra (MAT 56)................................................................................................................ 3
Boolean Algebra for Electrical Engineers (MAT 57).......................................................................... 2
Introduction to Pascal (CP 54)........................................................................................................ 4
Introduction to Electrical Engineering (PHY 22)............................................................................... 3

Mechanical Engineering
Modern Physics (PHY 21)................................................................................................................ 4
Linear Algebra (MAT 56)................................................................................................................ 3
Programming in Fortran (CP 51).................................................................................................... 4
Introduction to Engineering Thermodynamics (PHY 23)................................................................. 3
GROUP REQUIREMENTS .............................................................................................................. 12 credits
At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

I. Performing and Visual Arts .......................................................................................... 3 credits
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature ......................................................................................... 3 credits
   Foreign Language - Literature - Philosophy

III. Social Sciences ......................................................................................................... 3 credits
   Economics - History - Political Science

IV. Behavioral Sciences .................................................................................................. 3 credits
   Anthropology - Psychology - Sociology

V. Mathematics and Sciences ......................................................................................... 24 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences
   (Met by Department Requirements)

ELECTIVES—Sufficient to meet required total of .................................................................. 69-71 credits

Department requirements may be used to satisfy groups I-V requirements.
* Consultation with the Department Advisor is required.
** This program is within the Physical Sciences Department (pages 217-228).
A.S. ENVIRONMENTAL HEALTH and SCIENCE**

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)............ 4 credits
ENG 22 .................................................. 4
HPE 12 .......................................................... 3

If Required
ENG 03 &/or 04, C1 ........................................... 0
MAT M1 & M2 or MAT R2 proficiency .......................................... 0

DEPARTMENT REQUIREMENTS+

Preparatory Biology (BIO 10 if required, pg. 121) .................................................. 0 credits
Biology I and II (BIO 13–14) .......................................................... 8
Chemistry I and II (CHM 11–12, pg. 219) OR
Physics I and II (PHY 11–12 or 13–14, pg. 225) ........................................ 8–10
Physical Geology (GEO 33, pg. 224) ......................................................... 4
Analytic Geometry and Pre-Calculus Math (MAT 14, pg. 199) ......................... 4
Introduction to BASIC (ICP 30, pg. 193) ...................................................... 4
Electives+—Biology, Chemistry OR Physics .................................................. 8–10
Public Health I and II (HE 31–32, pg. 167) OR
People and the Environment, BIO Emphasis (BIO 49, pg. 123)
and
People and the Environment—CHM Emphasis (SCI 51, pg. 228) .......... 4–6

GROUP REQUIREMENTS .................................................. 12 credits

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

I. Performing and Visual Arts .......................................................... 3 credits
(Excluded are Art & Music Studio, Theatre Production & Technique courses)
Art - Music - Speech - Theatre Arts

II. Language and Literature ..................................................... 3
Foreign Language - Literature - Philosophy

III. Social Sciences .............................................................. 3
Economics - History - Political Science

IV. Behavioral Sciences ........................................................... 3
Anthropology - Psychology - Sociology

V. Mathematics and Sciences ..................................................... 24 credits
Biological Sciences - Mathematics & Computer Science - Physical Sciences (Met by Department Requirements)

ELECTIVES—Sufficient to meet required total of ........................................ 64–69 credits

Department requirements may be used to satisfy groups I-V requirements.
+ Consultation with the Department Advisor is required.
** This program is within the Biological Sciences (pages 119–126) and
the Physical Sciences Departments (pages 217–228).
A.S. FINE ARTS**
Total credits: 64
Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ............ 4 credits
ENG 22 ........................................................................ 4
HPE 12 ........................................................................... 3
If Required
ENG 03 &/or 04, C1 ......................................................... 0
MAT M1 & M2 or MAT R2 proficiency ................................ 0

DEPARTMENT REQUIREMENTS+

ALL Fine Arts Majors Must Take:
Survey of Art History I and II (ART 33–34, pg. 99) .............................................. 6 credits
Design I (ART 55) ........................................................................ 3
Drawing I (ART 57) ........................................................................ 3
[Fine Arts Majors MUST take ART 33, 55 and/or 57 in the FIRST SEMESTER]

PLUS,...SEQUENCES IN FINE ARTS CONCENTRATIONS

Art History
Modern Art I and II (ART 35–36) ............................................................ 6 credits
African and Primitive Art (ART 37) ....................................................... 3
Renaissance Art (ART 38) ................................................................. 3
Recommended Electives+ ................................................................. 9

Communication Design
Illustration (ART 68) ........................................................................ 3
Publication Layout and Design (ART 73) ............................................ 3
Typography and Lettering (ART 74) .................................................. 2
Introduction to Graphic Skills and Advertising (ART 75) ..................... 4
Recommended Electives+ ................................................................. 9

Drawing and Painting
Drawing II (ART 58) ......................................................................... 3
Painting I and II (ART 59–60) ........................................................... 7
Recommended Electives+ ................................................................. 7–9

Graphics and Design
Photography I (ART 51) ..................................................................... 3
Design II (ART 56) .......................................................................... 3
Printmaking (ART 66) ..................................................................... 3
Recommended Electives+ ................................................................. 8–10

Sculpture
Sculpture I and II (ART 61–62) ........................................................... 7
Figure Modeling (ART 83) ............................................................... 3
Recommended Electives+ ................................................................. 7–9
GROUP REQUIREMENTS................................................................. 12 credits

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

I. Performing and Visual Arts ......................................................... 3 credits
    (Excluded are Art & Music Studio, Theatre Production & Technique courses)
    Art - Music - Speech - Theatre Arts

II. Language and Literature............................................................ 3
    Foreign Language - Literature - Philosophy

III. Social Sciences........................................................................... 3
    Economics - History - Political Science

IV. Behavioral Sciences..................................................................... 3
    Anthropology - Psychology - Sociology

V. Mathematics and Sciences............................................................ 6 credits
    Biological Sciences - Mathematics & Computer Science - Physical Sciences (Met by Department Requirements)

VI. Select from among groups II, III, IV, for additional ....................... 6 credits

ELECTIVES—Sufficient to meet required total of.................................. 64 credits

Department requirements may be used to satisfy groups I-V requirements.
+ Consultation with the Department Advisor is required.
** This program is within the Art Department (pages 97-103).
A.S. MATHEMATICS**

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ........................................................................ 4 credits
ENG 22 ........................................................................................................................................................................ 4 credits
HPE 12 ........................................................................................................................................................................ 3 credits

If Required

ENG 03 &/or 04, C1 ............................................................................................................................................. 0 credits
MAT M1 & M2 or MAT R2 proficiency .................................................................................................................... 0 credits

DEPARTMENT REQUIREMENTS+

Calculus I, II and III (MAT 15, 16, 21, pg. 199) ........................................................................................................... 12 credits
Differential Equations (MAT 55) ................................................................................................................................. 3 credits
Linear Algebra (MAT 56) ........................................................................................................................................... 3 credits
Programming in Fortran IV (CP 51, pg. 194) ................................................................................................................ 4 credits
Mathematics OR, Computer Programming Electives+ .................................................................................................. 8 credits
Laboratory Science ........................................................................................................................................................ 8–10 credits

GROUP REQUIREMENTS

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

I. Performing and Visual Arts ....................................................................................................................................... 3 credits
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature ........................................................................................................................................ 3 credits
    Foreign Language - Literature - Philosophy

III. Social Sciences .......................................................................................................................................................... 3 credits
    Economics - History - Political Science

IV. Behavioral Sciences ................................................................................................................................................... 3 credits
    Anthropology - Psychology - Sociology

V. Mathematics and Sciences ......................................................................................................................................... 24 credits
    Biological Sciences - Mathematics & Computer Science - Physical Sciences (Met by Department Requirements)

ELECTIVES—Sufficient to meet required total of ........................................................................................................ 68 credits

Department requirements may be used to satisfy groups I-V requirements.

+ Consultation with the Department Advisor is required.

** This program is within the Mathematics and Computer Science Department (pages 191–200).
# A.S. MENTAL HEALTH and HUMAN SERVICES**

Requirements for Matriculants

**Total credits: 68**

## COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
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</table>

### If Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04, C1</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

## DEPARTMENT REQUIREMENTS+

+***General Psychology (PSY II, pg. 110)................................................. 3 credits |
+Human Growth and Development (PSY 32)................................. 3 credits |
+Abnormal Psychology (PSY 36)................................................. 3 credits |

### ***Introduction to Sociology (SOC 31, pg. 113).......................... 3 credits

### Choice of TWO from the following for ............................................. 6 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Sociology of the Family (SOC 35)</td>
<td>3</td>
</tr>
<tr>
<td>Minority Groups in the U.S. (SOC 36).........</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Anthropology (SOC 37)........</td>
<td>3</td>
</tr>
</tbody>
</table>

### Introduction to Human Services (MH 11, pg. 117).......................... 3 credits

### Human Services Organizations (MH 30)........................................... 3 credits

### Principles of Interviewing and Group Leadership (MH 31).................. 3 credits

### Activities Therapy (MH 34)......................................................... 3 credits

### Introduction to Gerontology (MH 35)............................................ 3 credits

### Theories and Principles of Psychotherapy (MH 36)............................ 3 credits

### Supervised Instructional Experience in Mental Health 2 semesters (MH 96–97)...... 6 credits

## GERONTOLOGY CONCENTRATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>General Psychology (PSY 11, pg. 110)...........</td>
<td>3</td>
</tr>
<tr>
<td>Abnormal Psychology (PSY 36)....................</td>
<td>3</td>
</tr>
<tr>
<td>Psychological, Behavioral, and Physical Disorders of the Aged (PSY 38)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Sociology (SOC 31, pg. 113)</td>
<td>3</td>
</tr>
<tr>
<td>Sociology of the Family (SOC 35)</td>
<td>3</td>
</tr>
<tr>
<td>Perspectives on Death and Dying (NUR 43, pg. 214)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Human Services (MH 11, pg. 117)</td>
<td>3</td>
</tr>
<tr>
<td>Human Services Organizations (MH 30).........</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Interviewing and Group Leadership (MH 31)</td>
<td>3</td>
</tr>
<tr>
<td>Activities Therapy (MH 34)......................</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Gerontology (MH 35)..........</td>
<td>3</td>
</tr>
<tr>
<td>Theories and Principles of Psychotherapy (MH 36)</td>
<td>3</td>
</tr>
<tr>
<td>Supervised Instructional Experience in Mental Health 2 semesters (MH 96–97)......</td>
<td>6</td>
</tr>
</tbody>
</table>
GROUP REQUIREMENTS ................................................................. 12 credits

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

I. Performing and Visual Arts .................................................. 3 credits
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature ..................................................... 3 credits
    Foreign Language - Literature - Philosophy

III. Social Sciences ............................................................... 3 credits
    Economics - History - Political Science

IV. Behavioral Sciences .......................................................... 3 credits
    Anthropology - Psychology - Sociology

V. Mathematics and Sciences .................................................. 6 credits
    Choice of—BIO 33 or, SCI 37 or, MAT 13
    PLUS
    Choice of—BIO 32 or, 37 or, 49 or, 70 or, SCI 25

ELECTIVES—Sufficient to meet required total of .......................... 68 credits

Department requirements may be used to satisfy groups I-V requirements.

*** Any of these courses may be used to satisfy the Group IV requirement.

‡ Consultation with the Department Advisor is required.

** This program is within the Behavioral Sciences and Human Services Department (pages 105-118).
A.S. MUSIC**
Requirements for Matriculants

Total credits: 64

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)............................ 4 credits
ENG 22 .................................................................................................................. 4
HPE 12 .................................................................................................................. 3

If Required
- ENG 03 &/or 04, C1 ................................................................. 0
- MAT M1 & M2 or MAT R2 proficiency .................................................. 0

DEPARTMENT REQUIREMENTS+

- Theory of Music I, II, III and IV (MUS 32, 33, 34, 35, pg. 204)................................. 12 credits
- Ear Training I, II, III and IV (MUS 36, 37, 38, 39) ................................................. 8
- Music Literature I and II (MUS 51, 52) ................................................................. 6
- Chorus or Band or Orchestra (MUS 91, 92, 93) ...................................................... 3

[One performing group must be taken each semester - 1 credit per semester]

If Required
- Basic Skills: Theory and/or Piano I and II (1 credit each)................................. 1 to 3

GROUP REQUIREMENTS.................................................................................. 12 credits

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

I. Performing and Visual Arts ........................................................................... 3 credits
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature ............................................................................. 3
   Foreign Language - Literature - Philosophy

III. Social Sciences ............................................................................................ 3
   Economics - History - Political Science

IV. Behavioral Sciences ..................................................................................... 3
   Anthropology - Psychology - Sociology

V. Mathematics and Sciences ......................................................................... 6 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences

VI. Select from among groups II, III, IV;* for additional ............................... 6 credits

ELECTIVES—Sufficient to meet required total of .......................................... 64 credits

Department requirements may be used to satisfy groups I-V requirements.

* Consultation with the Department Advisor is required.
** This program is within the Music Department (pages 201-207).
A.S. PHYSICS**

Requirements for Matriculants

Total credits: 64

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .......................... 4 credits
ENG 22 ......................................................................................................................... 4 credits
HPE 12 .......................................................................................................................... 3 credits

If Required
ENG 03 &/or 04, C1 ........................................................................................................ 0 credits
MAT M1 & M2 or MAT R2 proficiency ............................................................ 0 credits

DEPARTMENT REQUIREMENTS+

Advanced General Physics I and II (PHY 13–14, pg. 225) ........................................... 10 credits
Advanced Physics Elective+ .................................................................................. 8 credits
General Chemistry I and II (CHM 11–12, pg. 219) .................................................. 8 credits
Calculus I and II (MAT 15–16, pg. 199) ................................................................. 8 credits

GROUP REQUIREMENTS ................................................................................................................. 12 credits

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

I. Performing and Visual Arts .................................................................................. 3 credits
(Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature ..................................................................................... 3 credits
    Foreign Language - Literature - Philosophy

III. Social Sciences .................................................................................................... 3 credits
    Economics - History - Political Science

IV. Behavioral Sciences ............................................................................................ 3 credits
    Anthropology - Psychology - Sociology

V. Mathematics and Sciences .................................................................................. 24 credits
    Biological Sciences - Mathematics & Computer Science - Physical Sciences (Met by Department
    Requirements)

ELECTIVES—Sufficient to meet required total of ............................................................... 64 credits

Department requirements may be used to satisfy groups I-V requirements.

+ Consultation with the Department Advisor is required.

** This program is within the Physical Sciences Department (pages 217–228):
# A.S. PRE-PHYSICAL THERAPY**

**Requirements for Matriculants**

## COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit(s)</th>
</tr>
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<tr>
<td>ENG C2 or ENG 12</td>
<td>4</td>
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<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td><strong>If Required</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 03 &amp;/or 04, C1</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

## DEPARTMENT REQUIREMENTS+

Preparatory Biology (BIO 10 if required, pg. 121) .................................................. 0 credits
General Biology I and II (BIO 13–14) ........................................................................... 8 credits
General Chemistry I and II (CHM 11, 12, pg. 219) ....................................................... 8 credits
General Physics I and II (PHY 11, 12, pg. 225) ............................................................. 10 credits
Analytic Geometry and Pre-Calculus Math (MAT 14, pg. 199) ........................................... 4 credits
General Psychology (PSY 11, pg. 110) ............................................................................. 3 credits
Human Growth and Development (PSY 32) ............................................................................ 3 credits
Introduction to Sociology (SOC 31, pg. 113) ................................................................. 3 credits

**PLUS** Completion of 50–100 volunteer or paid work hours in approved physical therapy facility

Recommended
- Elements of Statistics (MAT 20) .................................................................................... 3 credits
- First Aid and Personal Safety (HE 35, pg. 167) ............................................................ 2 credits
- Cardiopulmonary Resuscitation (HE 20) ........................................................................ 1 credit

## GROUP REQUIREMENTS

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

<table>
<thead>
<tr>
<th>Group</th>
<th>Course</th>
<th>Credit(s)</th>
</tr>
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<tbody>
<tr>
<td>I.</td>
<td>Performing and Visual Arts (Excluded are Art &amp; Music Studio, Theatre Production &amp; Technique courses)</td>
<td>3</td>
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<tr>
<td></td>
<td>Art - Music - Speech - Theatre Arts</td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>Language and Literature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign Language - Literature - Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>III.</td>
<td>Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Economics - History - Political Science</td>
<td></td>
</tr>
<tr>
<td>IV.</td>
<td>Behavioral Sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Anthropology - Psychology - Sociology</td>
<td></td>
</tr>
<tr>
<td>V.</td>
<td>Mathematics and Sciences</td>
<td>24 credits</td>
</tr>
<tr>
<td></td>
<td>Biological Sciences - Mathematics &amp; Computer Science - Physical Sciences</td>
<td></td>
</tr>
</tbody>
</table>

**ELECTIVES**—Sufficient to meet required total of ...................................................... 64 credits

## NOTE:

Due to limited availability of upper division facilities for training students, completion of the first two years does NOT guarantee admission to a four year program in physical therapy.

Department requirements may be used to satisfy groups I-V requirements.

+ *Consultation with the Department Advisor is required.*

** This program is within the Biological Sciences Department (pages 119–126).
A.S. THEATRE ARTS**

Requirements for Matriculants

Total credits: 64

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ................. 4 credits
ENG 22 .................................................. 4
HPE 12 .................................................. 3
If Required
ENG 03 &/or 04, C1 ........................................ 0
MAT M1 & M2 or MAT R2 proficiency .................................. 0

DEPARTMENT REQUIREMENTS+

All Theatre Arts Majors MUST TAKE:

- Introduction to Theatre Arts (Th.A 50, pg. 247) ................................................... 3 credits
- Play Analysis (Th.A 51) .................................................. 3
- Laboratory/Workshop (Th.A 54) .................................................. 1
- Play Production (Th.A 59) .................................................. 3
- History of the Theatre (Th.A 68) .................................................. 3

PLUS,...FOR CONCENTRATIONS IN:±

**Performance**

Acting I, II and III (Th.A 52, 53, 62) 11 credits
Makeup for the Stage (Th.A 61) .......... 3
Oral Interpretation (SPE 27) ............. 3

**Technical**

Stagecraft (Th.A 55) .................................. 3 credits
Basic Lighting (Th.A 56) ......................... 3
Fundamentals of Costume Design (Th.A 60) 3
Basic Sound Technology (Th.A 63) ........ 3
Scenic Design (Th.A 65) ......................... 3
Workshop ................................................. 1

GROUP REQUIREMENTS

At least three credits selected from EACH group - I thru IV - must be in Basic Courses.

I. Performing and Visual Arts .......................... 3 credits
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature ......................... 3
   Foreign Language - Literature - Philosophy

III. Social Sciences .................................. 3
   Economics - History - Political Science

IV. Behavioral Sciences ................................ 3
   Anthropology - Psychology - Sociology

V. Mathematics and Sciences ........................ 6 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences
   (Met by Department Requirements)

VI. Select from among groups II, III, IV± for an additional ........................................ 6 credits

ELECTIVES—Sufficient to meet required total of .................................................. 64 credits

Department requirements may be used to satisfy groups I-V requirements.

± Consultation with the Department Advisor is required.

** This program is within the Speech and Theatre Department (pages 239-243).
THE ASSOCIATE IN APPLIED
SCIENCE (A.A.S.) DEGREE

The Kingsborough A.A.S. degree programs were specifically designed for students who wish to start a
career on a semi-professional level immediately after graduating from the college. The essential liberal
arts courses are included to equip students with knowledge, understanding and career flexibility
permitting options to continue for further education at any time.

A student must earn at least a “C” grade (2.00 index), and have fulfilled all degree requirements to be
certified for the degree.

CAREER PROGRAMS

Business
- Accounting (with concentration in Tax Accounting)
- Broadcasting Technology and Management
- Business Administration
- Computer Data Processing (with concentrations in Computer Programming
  and Microcomputer Applications)
- Fashion Merchandising
- Fisheries and Marine Technology (with concentrations in Seafood Business Management
  and Vessel Operations)
- Journalism and Print Media
- Marketing Management
- Personnel Management and Labor Relations
- Secretarial/Office Administration (Executive, Legal, Medical, School,
  Word/Information Processing)
- Travel and Tourism

Health and
Social Service
- Early Childhood Education/Child Care
- Education Associate
- Nursing
- Sports, Fitness, and Recreation Leadership
A.A.S. DEGREE PROGRAMS

BUSINESS CAREER PROGRAMS

Accounting
Requirements, page 75
Course Descriptions, page 129

Broadcasting Technology and Management
Requirements, page 77
Course Descriptions, page 241

Business Administration
Requirements, page 78
Course Descriptions, page 131

Computer Data Processing
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Fashion Merchandising
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Education Associate
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A.A.S. ACCOUNTING**
Total credits: 68

Requirements for Matriculants

COLLEGE REQUIREMENTS*
(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ............... 4 credits
ENG 22 .................................................................................................................. 4
HPE 12 .................................................................................................................. 3

If Required
ENG 03 &/or 04, C1 ......................................................................................... 0
MAT M1 & M2 or MAT R2 proficiency ............................................................... 0

DEPARTMENT REQUIREMENTS+

Fundamentals of Accounting I and II (ACC 11-12 pg. 129) ..................................... 8 credits
Intermediate Accounting I and II (ACC 21-22) ..................................................... 6
Cost Accounting I and II (ACC 31-32) ................................................................ 6
Federal Taxation (ACC 41) ............................................................................... 4
Business Management and Organization (BA 11 pg. 131) ................................. 3
Business Law (BA 12) ...................................................................................... 3
Introduction to Computer Concepts (BA 60) ...................................................... 3
Fundamentals of Economics (ECO 12 pg. 134) ................................................... 3
Money and Banking (ECO 14) .......................................................................... 3

Recommended
Advanced Federal Taxation (ACC 42) ................................................................. 3
New York Taxes (ACC 43) ............................................................................... 3

TAX ACCOUNTING CONCENTRATION+

Fundamentals of Accounting I and II (ACC 11-12 pg. 129) ............................... 8 credits
Intermediate Accounting I and II (ACC 21-22) ..................................................... 6
Federal Taxation I and II (ACC 41-42) ................................................................. 7
New York Taxes (ACC 43) ............................................................................... 3
Business Management and Organization (BA 11 pg. 131) ................................. 3
Business Law (BA 12) ...................................................................................... 3
Introduction to Computer Concepts (BA 60) ...................................................... 3
Fundamentals of Economics (ECO 12 pg. 134) ................................................... 3
Money and Banking (ECO 14) .......................................................................... 3
GROUP REQUIREMENTS................................................................. 12 credits

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature
    Foreign Language - Literature - Philosophy

III. Social Sciences (NOTE: ECO12 and 14 MAY NOT BE USED to satisfy Group III)
    Economics - History - Political Science

IV. Behavioral Sciences
    Anthropology - Psychology - Sociology

V. Mathematics and Sciences ................................................... 4 credits
    Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES—Sufficient to meet required total of................................... 68 credits

* Prior to preregistration or registration, consultation with the Department Advisor is required.
** This program is within the Business Department (pages 127–138).
A.A.S. BROADCASTING TECHNOLOGY and MANAGEMENT**

Total credits: 64

Requirements for Matriculants

COLLEGE REQUIREMENTS*

("Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or remedial courses may be required.

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .................. 4 credits
ENG 22 ........................................................................ 4
HPE 12 ........................................................................ 3
If Required
   ENG 03 &/or 04, C1 ......................................................................... 0
   MAT M1 & M2 or MAT R2 proficiency .............................................. 0

DEPARTMENT REQUIREMENTS+ (course descriptions pg. 241)

Introduction to Broadcasting (MCB 35) .................................................... 3 credits
Radio Station Operation (MCB 59) 3 semesters (1 cr. ea.) ......................... 3
Three Program Courses + (3 crs. ea.) ..................................................... 9
Mass Media (MCM 30)
   OR
Communication Development and Application (MCM 42) ...................... 3

NOTE: By selecting specific courses in consultation with a Broadcasting Curriculum Advisor, students may use their electives toward concentrations in:
   Advertising, Engineering, Management, News, Performance, Production.

GROUP REQUIREMENTS ......................................................... 12 credits

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature
   Foreign Language - Literature - Philosophy

III. Social Sciences
   Economics - History - Political Science

IV. Behavioral Sciences
   Anthropology - Psychology - Sociology

V. Mathematics and Sciences ............................................................. 4 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES—Sufficient to meet required total of .................................... 64 credits

Department requirements may be used to satisfy groups I–V requirements where applicable.
+ Consultation with the Department Advisor is required.
** This program is within the Speech and Theatre Department (pages 239–249)
A.A.S. BUSINESS ADMINISTRATION**

Total credits: 64

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .................. 4 credits
ENG 22 ................................................................................................................. 4
HPE 12 .................................................................................................................. 3

If Required

ENG 03 &/or 04, C1 ...................................................................................................... 0
MAT M1 & M2 or MAT R2 proficiency ...................................................................... 0

DEPARTMENT REQUIREMENTS+

Fundamentals of Accounting I and II (ACC 11–12 pg. 129) ........................................ 8 credits
Business Management and Organization (BA 11 pg. 131) ........................................ 3
Business Law (BA 12) .............................................................................................. 3
Principles of Marketing (BA 14) .............................................................................. 3
Personnel Administration (BA 31) ........................................................................... 3
Business Communications (BA 33) ........................................................................ 3
Advertising: Theory and Practice (BA 52) ................................................................. 3
Introduction to Computer Concepts (BA 60) .............................................................. 3
Fundamentals of Economics (ECO 12 pg. 134) ...................................................... 3
Money and Banking (ECO 14) ................................................................................. 3

GROUP REQUIREMENTS .................................................................................. 12 credits

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature
   Foreign Language - Literature - Philosophy

III. Social Sciences (NOTE: ECO 12 and 14 MAY NOT BE USED to satisfy Group III)
   Economics - History - Political Science

IV. Behavioral Sciences
   Anthropology - Psychology - Sociology

V. Mathematics and Sciences ................................................................................. 4 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES—Sufficient to meet required total of .................................................. 64 credits

* Consultation with the Department Advisor is required.
** This program is within the Business Department (pages 127–138).
A.A.S. COMPUTER DATA PROCESSING**

Requirements for Matriculants

Total credits: 64

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .................. 4 credits
ENG 22 ................................................................. 4
HPE 12 ................................................................. 3

If Required
ENG 03 &/or 04, C1 ........................................................................ 0
MAT M1 & M2 or MAT R2 proficiency ........................................... 0

COMPUTER PROGRAMMING CONCENTRATION

Introduction to Data Processing (DP 11 pg. 196) ................................................. 4 credits
   (NOTE: C grade or better required to continue in this concentration)
COBOL Programming (DP 31) .............................................................. 5
Advanced COBOL Programming (DP 32) .................................................. 4
Assembler Language Programming (DP 12) OR,
   Programming in C (DP 59) .................................................................. 5
Fundamentals of Accounting I and II (ACC 11, 12 pg. 129) ...................... 8 credits
Choice: At least TWO of the following: .................................................. 7–9
   (consult with Department Advisor) for
   Microcomputer Applications I (DP 54)
   Microcomputer Applications II (DP 55)
   Microcomputer Applications III (DP 56)
   Using and Programming in UNIX/ZENIX (DP 58)
   Systems Analysis (DP 61)
   Database Programming (DP 63)
   Introduction to PASCAL (CP 54 pg. 194)
   Assembler Language Programming (DP 12)
   OR,
   Programming in C (DP 39)
      (whichever was not taken previously)
Choice: ONE of the following for: ...................................................... 4 credits
   Survey of Mathematics (MAT 13 pg. 199)
   OR,
   Analytic Geometry and Pre-Calculus Math (MAT 14)
### MICROCOMPUTER APPLICATIONS CONCENTRATION

**Office Automation Technology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Data Processing (DP 11 pg. 196)</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to BASIC (CP 30 pg. 193)</td>
<td>4</td>
</tr>
<tr>
<td>Microcomputer Applications I, II, III (DP 54, 55, 56)</td>
<td>12</td>
</tr>
<tr>
<td>Fundamentals of Accounting I and II (ACC 11, 12 pg. 129)</td>
<td>8</td>
</tr>
<tr>
<td>Choice: ONE of the following Programming courses:</td>
<td>3–5</td>
</tr>
<tr>
<td>Assembler Language Programming (DP 12)</td>
<td></td>
</tr>
<tr>
<td>BASIC II (CP 31)</td>
<td></td>
</tr>
<tr>
<td>Introduction to COBOL Programming (CP 52)</td>
<td></td>
</tr>
<tr>
<td>Introduction to PASCAL (CP 54)</td>
<td></td>
</tr>
<tr>
<td>Using and Programming in UNIX/ZENIX (DP 5B)</td>
<td></td>
</tr>
<tr>
<td>Programming in C (DP 59)</td>
<td></td>
</tr>
<tr>
<td>Systems Analysis (DP 61)</td>
<td></td>
</tr>
<tr>
<td>Database Processing (DP 63)</td>
<td></td>
</tr>
<tr>
<td>Choice: ONE of the following Mathematics courses:</td>
<td>4</td>
</tr>
<tr>
<td>Finite Mathematics (MAT 11 pg. 198)</td>
<td></td>
</tr>
<tr>
<td>Survey of Mathematics (MAT 13)</td>
<td></td>
</tr>
<tr>
<td>Analytic Geometry and Pre-Calculus Math (MAT 14)</td>
<td></td>
</tr>
</tbody>
</table>

### GROUP REQUIREMENTS

- 12 credits

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

1. **Performing and Visual Arts**
   - (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   - Art - Music - Speech - Theatre Arts

2. **Language and Literature**
   - Foreign Language - Literature - Philosophy

3. **Social Sciences**
   - Economics - History - Political Science

4. **Behavioral Sciences**
   - Anthropology - Psychology - Sociology

5. **Mathematics and Sciences**
   - Biological Sciences - Mathematics & Computer Science - Physical Sciences

### ELECTIVES—Sufficient to meet required total of

- 64 credits

Department requirements may be used to satisfy groups I–V requirements where applicable.

+ **Consultation with the Department Advisor is required.**

** These programs are within the Mathematics and Computer Science Department (pages 191–200).

---

80
### A.A.S. EARLY CHILDHOOD EDUCATION/CHILD CARE**

Total credits: 68

#### Requirements for Matriculants

**COLLEGE REQUIREMENTS**

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
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**If Required**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04, C1</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

**DEPARTMENT REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Psychology (PSY 11 pg. 110)</td>
<td>3</td>
</tr>
<tr>
<td>Psychological Disorders in Young Children (PSY 24) (ECE 24)</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth and Development (PSY 32)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Sociology (SOC 31 pg. 113)</td>
<td>3</td>
</tr>
<tr>
<td>Urban Sociology (SOC 32) OR, Sociology of the Family (SOC 35) OR, Minority Groups in the U.S. (SOC 36)</td>
<td>3</td>
</tr>
<tr>
<td>Interdisciplinary Approach to Education (ECE 20 pg. 115)</td>
<td>3</td>
</tr>
<tr>
<td>Curriculum in Education (ECE 21)</td>
<td>3</td>
</tr>
<tr>
<td>Art Workshop for Students in Education (ECE 22)</td>
<td>2</td>
</tr>
<tr>
<td>Music and Movement Workshop for Students in Education (ECE 23)</td>
<td>2</td>
</tr>
<tr>
<td>Supervised Instructional Experience in Education I and II (ECE 91 and 93)</td>
<td>6</td>
</tr>
<tr>
<td>Seminar and Practicum in Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**GROUP REQUIREMENTS**

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

**I. Performing and Visual Arts**

(Excluded are Art & Music Studio, Theatre Production & Technique courses)

- Art - Music - Speech - Theatre Arts

**II. Language and Literature**

- Foreign Language - Literature - Philosophy

**III. Social Sciences**

- Economics - History - Political Science

**IV. Behavioral Sciences**

- Anthropology - Psychology - Sociology

**V. Mathematics and Sciences (2 areas)**

- Biological Sciences - Mathematics & Computer Science - Physical Sciences

**ELECTIVES**—Sufficient to meet required total of: 68 credits

Department requirements may be used to satisfy groups I-V requirements where applicable.

* Consultation with the Department Advisor is required.

** This program is within the Behavioral Sciences and Human Services Department (pages 105–118).
A.A.S. EDUCATION ASSOCIATE**  
Total credits: 64

Requirements for Matriculants

COLLEGE REQUIREMENTS*  
(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 1 (based on CUNY Test scores, students may be exempt) .......... 4 credits
ENG 22 .............................................................................. 4
HPE 12 .................................................................................. 3
If Required
ENG 03 &/or 04, C1 ................................................................ 0
MAT M1 & M2 or MAT R2 proficiency ...................................... 0

DEPARTMENT REQUIREMENTS+ (course descriptions pg. 107)

Education in Modern Society (EDU 33) .................................................. 3 credits
Seminar and Practicum in Education and the Behavioral Sciences (EDU 34) .... 4
Seminar and Practicum in Education and Communication Skills (EDU 35) .... 4
Seminar and Practicum in Education and Art Forms (EDU 36) .................. 4
Introduction to Sociology (SOC 31 pg. 113) ......................................... 3
General Psychology (PSY 11 pg. 110) ...................................................... 3
Human Growth and Development (PSY 32) .......................................... 3
Understanding Mathematics: A Practical Approach (MAT 9 pg. 198) ........ 4
Effective Public Speaking (SPE 21 pg. 245) .......................................... 3
Spanish for Students in Career Programs (SPA 40 pg. 162) .................... 3

GROUP REQUIREMENTS. ................................................................... 12 credits

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts  
(Excluded are Art & Music Studio, Theatre Production & Technique courses)
Art - Music - Speech - Theatre Arts

II. Language and Literature
Foreign Language - Literature - Philosophy

III. Social Sciences
Economics - History - Political Science

IV. Behavioral Sciences
Anthropology - Psychology - Sociology

V. Mathematics and Sciences ................................................................. 4 credits
Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES—Sufficient to meet required total of .................................................. 64 credits

Department requirements may be used to satisfy groups I-V requirements where applicable.
+ Consultation with the Department Advisor is required.
** This program is within the Behavioral Sciences and Human Services Department (pages 105–118).
A.A.S. FASHION MERCHANDISING**
Total credits: 68

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores; students may be exempt) ................. 4 credits
ENG 22 ................................................. 4 credits
HPE 12 .................................................. 3 credits
If Required
ENG 03 &/or 04, C1 ..................................... 0 credits
MAT M1 & M2 or MAT R2 proficiency ........................................... 0 credits

DEPARTMENT REQUIREMENTS* (course descriptions pg. 136)

Computer Concepts for Retailers and Fashion Marketers (BA 60 or MM 51) ........................................... 3 credits
Elements of Retail Business Management (MM 31) ........................................... 3 credits
Salesmanship (MM 33) ........................................... 3 credits
Fashion Buying and Merchandising (MM 34) ........................................... 3 credits
Merchandise Information Analysis (MM 35) ........................................... 4 credits
Visual Merchandising and Display (MM 36) ........................................... 3 credits
Introduction to Fashion Marketing (MM 38) ........................................... 3 credits
Fashion Sales Promotion (MM 39) ........................................... 3 credits
Seminar and Field Experience (MM 92) ........................................... 3 credits
Accounting and Entrepreneurship (ACC 50 pg. 130) ........................................... 4 credits
Business Management and Organization (BA 11 pg. 131) ........................................... 3 credits
Business Law (BA 12) ........................................... 3 credits
Principles of Marketing (BA 14) ........................................... 3 credits

GROUP REQUIREMENTS ........................................... 12 credits

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature
   Foreign Language - Literature - Philosophy

III. Social Sciences
   Economics - History - Political Science

IV. Behavioral Sciences
   Anthropology - Psychology - Sociology

V. Mathematics and Sciences ........................................... 4 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES—Sufficient to meet required total of ........................................... 68 credits

* Prior to preregistration or registration consultation with the Department Advisor is required.
** This program is within the Business Department (pages 127–138).
A.A.S. FISHERIES and MARINE TECHNOLOGY**
Requirements for Matriculants

Total credits: 65–66

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .................. 4 credits
ENG 22 ................................................................................................................. 4
HE 36 ................................................................................................................... 3

If Required

ENG 03 &/or 04; C1 .............................................................................................. 0
MAT M1 & M2 or MAT R2 proficiency ................................................................. 0

DEPARTMENT REQUIREMENTS # (course descriptions pg. 221)

ALL Program Majors MUST TAKE:
American Fishing Industry (FMT 11) ................................................................. 3 credits
Commercial Fisheries Science (FMT 12) ............................................................ 4
Introduction to Seafood (FMT 13) ...................................................................... 4

PLUS,...FOR CONCENTRATIONS IN:

Seafood Business Management

Seafood Business Management (FMT 20) ............................................................. 3 credits
Seafood Processing (FMT 21) .............................................................................. 3
Seafood Production Laboratory (FMT 22) ............................................................ 4
Seafood Retailing (FMT 23) ................................................................................ 3
Accounting and Entrepreneurship (ACC 50 pg. 130) .......................................... 4
Business Management and Organizations (BA 11 pg. 131) ................................. 3
Principles of Marketing (BA 14) ......................................................................... 3
Introduction to Computer Concepts (BA 60) ......................................................... 3

Vessel Operations

Seamanship (FMT 30) ......................................................................................... 3 credits
Navigation (FMT 31) .......................................................................................... 3
Vessel Technology I and II (FMT 33, 34) .............................................................. 6
Diesel Technology (FMT 35) ................................................................................ 3
Auxiliary Systems (FMT 37) ................................................................................. 3
Marine Electrical Systems (FMT 41) ................................................................. 2
Marine Electronics (FMT 42) .............................................................................. 2
Marina Operations (FMT 43) ............................................................................. 3
Outboard and Inboard Engines (FMT 44) ......................................................... 3
GROUP REQUIREMENTS

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature
    Foreign Language - Literature - Philosophy

III. Social Sciences
     Economics - History - Political Science

IV. Behavioral Sciences
    Anthropology - Psychology - Sociology

V. Mathematics and Sciences
    Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES—Sufficient to meet required total of

12 credits

65-66 credits

Departmental requirements may be used to satisfy groups I-V requirements where applicable.

+ Consultation with the Department Advisor is required.

** These programs are administered by the Office of the Dean of Marine Education (pages 221-223).
A.A.S. JOURNALISM and PRINT MEDIA**

Total credits: 64

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt).......................... 4 credits
ENG 22 ......................................................................................................................... 4
HPE 12 ........................................................................................................................... 3
If Required
ENG 03 &/or 04, C1 ........................................................................................................ 0
MAT M1 & M2 or MAT R2 proficiency .......................................................................... 0

DEPARTMENT REQUIREMENTS+ (course descriptions pg. 149)

Journalism: Basic and Advanced (IRL 31–32)................................................................. 6 credits
Community Journalism (IRL 41) ....................................................................................... 3
The Critical Review (IRL 43) ............................................................................................ 3
Print Media Production (IRL 71) ...................................................................................... 2
Internship (IRL 92) ......................................................................................................... 3
CHOOSE from the following FIVE courses for............................................................... 6
Investigative and Interpretive Journalism (IRL 42) ......................................................... 3
Independent Study (IRL 81) ............................................................................................ 3
Publication Layout and Design (ART 73 pg. 102) ......................................................... 3
Typography and Lettering (ART 74) .............................................................................. 2
Business of Print Media (BA 70 pg. 132) ........................................................................ 3

PLUS...FOR SPECIALIZATION IN:

Writing and Reporting

OR

Production

Appropriate course to be determined by Department Advisor for.............................. 6

GROUP REQUIREMENTS .................................................................................................... 12 credits

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts
(Excluded are Art & Music Studio, Theatre Production & Technique courses)
Art - Music - Speech - Theatre Arts

II. Language and Literature
Foreign Language - Literature - Philosophy

III. Social Sciences
Economics - History - Political Science

IV. Behavioral Sciences
Anthropology - Psychology - Sociology

V. Mathematics and Sciences ........................................................................................... 4 credits
Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES—Sufficient to meet required total of ................................................................ 64 credits

Department requirements may be used to satisfy groups I–V requirements where applicable.

+ Consultation with the Department Advisor is required.

** This program is within the English Department (pages 149–150).
A.A.S. MARKETING MANAGEMENT**  Total credits: 68

Requirements for Matriculants

COLLEGE REQUIREMENTS*  
(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .................................. 4 credits
ENG 22 ........................................................................................................................................ 4
HPE 12 ........................................................................................................................................... 3
If Required
ENG 03 &/or 04, C1 ...................................................................................................................... 0
MAT M1 & M2 or MAT R2 proficiency .......................................................................................... 0

DEPARTMENT REQUIREMENTS*

Fundamentals of Accounting I and II (ACC 11–12 pg. 129) ...................................................... 8 credits
Business Management and Organization (BA 11 pg. 131) ...................................................... 3
Business Law (BA 12) .................................................................................................................... 3
Principles of Marketing (BA 14) ................................................................................................. 3
Elements of Marketing Management (MM 31 pg. 136) ............................................................. 3
Salesmanship (MM 33) .................................................................................................................. 3
Fashion Buying and Merchandising (MM 34) .............................................................................. 3
Merchandise Information Analysis (MM 35) .............................................................................. 3
Data Processing for Retailers (MM 51) OR,
Introduction to Computer Concepts (BA 60) ................................................................................ 3
Field Experience (MM 92) ............................................................................................................ 3
Fundamentals of Economics (ECO 12 pg. 134) ........................................................................ 3

GROUP REQUIREMENTS ............................................................................................................. 12 credits
From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature
   Foreign Language - Literature - Philosophy

III. Social Sciences (NOTE: ECO 12 and 14 MAY NOT BE USED to satisfy Group III)
   Economics - History - Political Science

IV. Behavioral Sciences
   Anthropology - Psychology - Sociology

V. Mathematics and Sciences ....................................................................................................... 4 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES—Sufficient to meet required total of ................................................................. 68 credits

* Consultation with the Department Advisor is required.

** This program is within the Business Department (pages 127–138).
A.A.S. NURSING**
Total credits: 68

Requirements for Matriculants

**COLLEGE REQUIREMENTS**
(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ................. 4 credits
ENG 22 ................................................................................. 4

If Required
ENG 03 &/or 04, C1 ................................................................ 0
MAT M1 & M2 or MAT R2 proficiency .................................... 0

**DEPARTMENT REQUIREMENTS**+ (course descriptions pg. 213)

*Students in the Pre-Nursing Sequence must complete the five semester-sequences as specified below.*

**First Semester**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Physical Sciences for Allied Health Careers (SCI 25 pg. 227)</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology (PSY 11 pg. 110)</td>
<td>3</td>
</tr>
<tr>
<td>Human Anatomy and Physiology (BIO 11 pg. 121)</td>
<td>4</td>
</tr>
<tr>
<td>English (ENG 12 or ENG C2 pg. 140)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Anatomy and Physiology II (BIO 12)</td>
<td>4</td>
</tr>
<tr>
<td>Human Growth and Development (PSY 32)</td>
<td>3</td>
</tr>
<tr>
<td>Drug Calculations in Nursing (NUR 17)</td>
<td>1</td>
</tr>
<tr>
<td>Fundamentals of Nursing (NUR 18)</td>
<td>7</td>
</tr>
</tbody>
</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microbiology in Health and Disease (BIO 51)</td>
<td>4</td>
</tr>
<tr>
<td>Nursing the III Adult I (NUR 21)</td>
<td>9</td>
</tr>
</tbody>
</table>

**Fourth Semester**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varieties of Expression (ENG 22)</td>
<td>4</td>
</tr>
<tr>
<td>Nursing the Emotionally III (NUR 20)</td>
<td>4</td>
</tr>
<tr>
<td>Nursing the III Adult II (NUR 22)</td>
<td>5</td>
</tr>
</tbody>
</table>

**Fifth Semester**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Sociology (SOC 31 pg. 113)</td>
<td>3</td>
</tr>
<tr>
<td>Family-Centered Maternity Nursing (NUR 19)</td>
<td>4</td>
</tr>
<tr>
<td>Nursing of Children (NUR 23)</td>
<td>5</td>
</tr>
<tr>
<td>Issues in Nursing (NUR 24)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Students requiring remediation based upon College placement test scores may be required to take any or all of the following prior to taking the Pre-Nursing Sequence.**

- Preparatory Biology (BIO 10)
- Remedial Math (M1 and M2, or MAT R2)
- English Skills (ENG 03, 04, or C1)
Those students (not more than 5% of each class) who complete the degree in two years will take the semester-sequences in the following order.

**First Semester**
- Applied Physical Sciences for Allied Health Careers (SCI 25 pg. 227) ........................................ 3 credits
- General Psychology (PSY II pg. 110) ........................................................................................................ 3
- Human Anatomy and Physiology I (BIO II pg. 121) .............................................................................. 4
- Drug Calculations in Nursing (NUR 17) ................................................................................................. 1
- Fundamentals of Nursing (NUR 18) .......................................................................................................... 7

**Winter or Summer Module +**
- Human Anatomy and Physiology II (BIO 12) ......................................................................................... 4

+ Students may elect to take required courses other than nursing courses during the Winter and Summer Modules.

**Second Semester**
- Microbiology in Health and Disease (BIO 51) ......................................................................................... 4
- English (ENG 12 or ENG C2 pg. 140) ...................................................................................................... 4
- Nursing the III Adult (NUR 21) ............................................................................................................. 9

**Third Semester**
- Human Growth and Development (PSY 32 pg. 110) .......................................................................... 3
- Introduction to Sociology (SOC 31 pg. 113) .......................................................................................... 3
- Nursing the Emotionally III (NUR 20) ................................................................................................. 4
- Nursing the III Adult II (NUR 22) ....................................................................................................... 5

**Fourth Semester**
- Varieties of Expression (ENG 22) ......................................................................................................... 4
- Family-Centered Maternity Nursing (NUR 19) ...................................................................................... 4
- Nursing of Children (NUR 23) ............................................................................................................. 5
- Issues in Nursing (NUR 24) .................................................................................................................... 1

* Consultation with the Department Advisor is required.

** This program is within the Nursing Department (pages 209–215).
A.A.S. PERSONNEL MANAGEMENT and LABOR RELATIONS**

Total credits: 64

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ............ 4 credits
ENG 22 .................................................. 4
HPE 12 .................................................... 3
If Required
ENG 03 &/or 04, C1 ...................................... 0
MAT M1 & M2 or MAT R2 proficiency .................. 0

DEPARTMENT REQUIREMENTS+

Fundamentals of Accounting and Entrepreneurship (ACC 50 pg. 130) ....................... 4 credits
Business Management and Organization (BA 11 pg. 131) ..................................... 3
Business Law (BA 12) .......... ........................................ 3
Principles of Marketing (BA 14) ......... ........................................ 3
Personnel Administration (BA 31) .......... ........................................ 3
Introduction to Computer Concepts (BA 60) ........................................... 3
Fundamentals of Economics (ECO 12 pg. 134) ........................................ 3
Industrial and Organizational Psychology (PLM 20 pg. 138) ................. 3
Labor Economics (PLM 21) .................. ........................................ 3
Labor Law and Collective Bargaining (PLM 22) ........................................ 3
Personnel: Selection, Development and Evaluation (PLM 23) .................. 3
Field Experience (PLM 92) ........ 3

GROUP REQUIREMENTS ........................................................................... 12 credits

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts
(Excluded are Art & Music Studio, Theatre Production & Technique courses)
Art - Music - Speech - Theatre Arts

II. Language and Literature
Foreign Language - Literature - Philosophy

III. Social Sciences (NOTE: ECO 12 and 14 MAY NOT BE USED to satisfy Group III)
Economics - History - Political Science

IV. Behavioral Sciences
Anthropology - Psychology - Sociology

V. Mathematics and Sciences .................................................................. 4 credits
Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES—Sufficient to meet required total of ........................................ 64 credits

+ Consultation with the Department Advisor is required.
** This program is within the Business Department (pages 127–138).
A.A.S. SECRETARIAL/OFFICE ADMINISTRATION**

Total credits: 64

Requirements for Matriculants

**COLLEGE REQUIREMENTS**

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
</tbody>
</table>

If Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04, C1</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

**DEPARTMENT REQUIREMENTS** (course descriptions pg. 231)

All Majors MUST TAKE:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Keyboarding (SEC 11)</td>
<td>2</td>
</tr>
<tr>
<td>Intermediate Keyboarding (SEC 12)</td>
<td>2</td>
</tr>
<tr>
<td>*Elementary Shorthand (SEC 15)</td>
<td>3</td>
</tr>
<tr>
<td>*Intermediate Shorthand (SEC 18)</td>
<td>3</td>
</tr>
<tr>
<td>*Advanced Keyboarding (SEC 33)</td>
<td>3</td>
</tr>
<tr>
<td>Secretarial Practice (SEC 34)</td>
<td>2</td>
</tr>
<tr>
<td>Business Communications (SEC 37)</td>
<td>3</td>
</tr>
<tr>
<td>Field Experience (SEC 92)</td>
<td>3</td>
</tr>
</tbody>
</table>

PLUS,... FOR STENOGRAPHIC MAJORS WITH CONCENTRATIONS IN:

Executive

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Shorthand and Transcription (SEC 30)</td>
<td>4</td>
</tr>
</tbody>
</table>

Legal

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Shorthand and Transcription (SEC 30)</td>
<td>4</td>
</tr>
<tr>
<td>Legal Shorthand and Procedures (SEC 51)</td>
<td>3</td>
</tr>
<tr>
<td>Legal Shorthand and Transcription (SEC 52)</td>
<td>4</td>
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</tbody>
</table>

School

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Shorthand and Transcription (SEC 30)</td>
<td>4</td>
</tr>
<tr>
<td>School Secretary I and II (SEC 53, 54)</td>
<td>4</td>
</tr>
<tr>
<td>School Records and Accounts (SEC 55)</td>
<td>2</td>
</tr>
</tbody>
</table>

*Not required of students in the Word/Information Processing Concentration.
OPTIONS FOR:
NON-STENOGRAPHIC MAJORS WITH CONCENTRATIONS IN

WORD/INFORMATION PROCESSING

*Basic Word/Information Processing (SEC 21) ............................................. 3 credits
*Advanced Word/Information Processing (SEC 22) ............................................. 3 credits
*Machine Transcription (SEC 23) ................................................................. 3 credits
Office Systems and Procedures (SEC 24) ................................................. 3 credits
Field Experience (SEC 92) .............................................................................. 3 credits

Recommended
Data Processing for Program Majors (CP 29 pg. 193) ......................................... 4 credits
Office Information Processing Applications (SEC 25) ........................................... 3 credits

*May be taken in lieu of Elementary, Intermediate and Advanced Shorthand courses.

MEDICAL WORD/INFORMATION PROCESSING

Basic Word/Information Processing (SEC 21) ............................................. 3 credits
Advanced Word/Information Processing (SEC 22) ............................................. 3 credits
Machine Transcription (SEC 23) ................................................................. 3 credits
Office Systems and Procedures (SEC 24) ................................................. 3 credits
Office Information Processing Applications (SEC 25) ........................................... 3 credits
Terminology and Electronic Transcription (SEC 61) ............................................. 4 credits
Computer Applications for Medical Office (SEC 62) ............................................. 3 credits

GROUP REQUIREMENTS .............................................................. 12 credits
From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature
   Foreign Language - Literature - Philosophy

III. Social Sciences
   Economics - History - Political Science

IV. Behavioral Sciences
   Anthropology - Psychology - Sociology

V. Mathematics and Sciences ................................................................. 4 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES — Sufficient to meet required total of ............................................. 64 credits

Elementary keyboarding and shorthand required of students who do not meet Department requirements.
Intermediate keyboarding and shorthand may be waived for students who meet Department requirements.

Departmental requirements may be used to satisfy groups I-V requirements where applicable.

* Consultation with the Department Advisor is required.
** These programs are within the Secretarial/Office Administration Department (pages 229-237).
A.A.S. SPORTS, FITNESS and RECREATION LEADERSHIP**
Total credits: 64

Requirements for Matriculants

COLLEGE REQUIREMENTS*
(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)
ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt).................. 4 credits
ENG 22 .................................................................................. 4
HPE 12 .................................................................................. 3
If Required
ENG 03 &/or 04, C1 .................................................................. 0
MAT M1 & M2 or MAT R2 proficiency...................................... 0

DEPARTMENT REQUIREMENTS+ (course descriptions pg. 176)
Introduction to Recreation (REC 11)........................................... 3 credits
Recreation Leadership Principles (REC 12)................................. 3
Recreation for Special Populations (REC 31).............................. 3
Organization of a Recreation Program (REC 32)......................... 3
Field Experience in Sports, Fitness and Recreation I and II (REC 91, 92) .... 3
General Psychology (PSY 11 pg. 110)........................................... 3
Introduction to Sociology (SOC 31 pg. 113)................................. 3
Spanish for Students in Career Programs (SPA 40 pg. 162) ......... 3
(Students with at least 1 year of Foreign Language background are exempt)

Additional courses as recommended by Program Director

PLUS,...FOR CONCENTRATIONS IN:

Sports, Fitness
Commercial and Industrial Recreation (REC 37)........................... 3 credits
Sport and American Society (REC 40) ........................................ 3

Therapeutic Recreation
Methods and Materials in Arts and Crafts (REC 34)...................... 3 credits
Recreation for the Aging and Mentally III (REC 35)...................... 3
GROUP REQUIREMENTS ................................................................. 12 credits

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature
    Foreign Language - Literature - Philosophy

III. Social Sciences
    Economics - History - Political Science

IV. Behavioral Sciences
    Anthropology - Psychology - Sociology

V. Mathematics and Sciences .................................................. 4 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES—Sufficient to meet required total of ........................................ 64 credits
(Specific electives must be discussed in advance with the Department Advisor.)

Departmental requirements may be used to satisfy groups I–V requirements where applicable.

* Consultation with the Department Advisor is required.

** This program is within the Health, Physical Education and Recreation Department (pages 165–178).
A.A.S. TRAVEL and TOURISM**

Requirements for Matriculants

Total credits: 64

COLLEGE REQUIREMENTS*

(*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examination scores or, remedial courses may be required.)

ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ................. 4 credits
ENG 22 .................................................................................................................. 4
HPE 12 .................................................................................................................. 3
If Required
ENG 03 &/or 04, C1 ............................................................................................... 0
MAT M1 & M2 or MAT R2 proficiency ..................................................................... 0

DEPARTMENT REQUIREMENTS+ (course descriptions pg. 253)

Introduction to Travel and Tourism (TAT 1) .......................................................... 3 credits
The Travel Industry I and II (TAT 2, 3) ..................................................................... 6
Computer Reservations Systems (TAT 4) ................................................................ 3
The Travel Agent and Wholesaler (TAT 11, 12) ...................................................... 6
The Hospitality Industry (TAT 21) .......................................................................... 3
Transportation (TAT 31) ........................................................................................ 3
Field Experience Internship (TAT 92) ..................................................................... 3
Accounting and Entrepreneurship (ACC 50 pg. 130) ........................................... 4
Business Management and Organization (BA 11 pg. 131) .................................... 3
Principles of Marketing (BA 14) ............................................................................ 3

GROUP REQUIREMENTS............................................................................................... 12 credits

From at least three different groups - I thru IV - courses selected must be in Basic Courses.

I. Performing and Visual Arts
   (Excluded are Art & Music Studio, Theatre Production & Technique courses)
   Art - Music - Speech - Theatre Arts

II. Language and Literature
   Foreign Language - Literature - Philosophy

III. Social Sciences
   Economics - History - Political Science

IV. Behavioral Sciences
   Anthropology - Psychology - Sociology

V. Mathematics and Sciences.................................................................................... 4 credits
   Biological Sciences - Mathematics & Computer Science - Physical Sciences

ELECTIVES—Sufficient to meet required total of..................................................... 64 credits

Departmental requirements may be used to satisfy groups I–V requirements where applicable.

+ Consultation with the Department Advisor is required.

** This program is within the Travel and Tourism Department (pages 251–254).
ART DEPARTMENT
Room S-155     ext. 5718

Peter E. Hanssen, Associate Professor
Michel Kanter, Associate Professor
Peter Malone, College Laboratory Technician
Thomas I. Nonn, Professor and Chairperson
Anthony Padovano, Associate Professor
Maurice Poirier, Professor
Michael Z. Sherker, Professor
Lilly K. Wei, Senior College Laboratory Technician
ART

+ ART 31 THE VISUAL EXPERIENCE
Introduction to the plastic arts, past and present. Students express their personal and societal attitudes about nature, environment, and art itself. 3 crs. 3 hrs.

+ ART 33 SURVEY of ART HISTORY: from ANCIENT to RENAISSANCE ART
Historical view of Western art designed to survey, in chronological sequence, the evolution of style and form in the major arts from pre-history through the Renaissance. Required of Art Majors in first semester. See Department Advisor. 3 crs. 3 hrs.

+ ART 34 SURVEY of ART HISTORY: from RENAISSANCE to 19th CENTURY ART
Study of Western art, from the Renaissance to the mid-nineteenth century, noting changes and growth in style and form. 3 crs. 3 hrs.

+ ART 35 MODERN ART: from 1880 to 1945
Introduction to the early development of Modern Art. Study provides insight into the aesthetic climate in late nineteenth century France and traces the emergence of various styles and artists through the first decades of the twentieth century. Personal research and visits to New York City museums are integral components of the course. 3 crs. 3 hrs.

+ ART 36 MODERN ART: from 1945 to Present
International and American trends in painting, sculpture and architecture during the second part of the twentieth century, leading to current directions in the visual arts. The interrelationship of art and contemporary culture is discussed in slide lectures supplemented by personal research and visits to New York City art museums and galleries. 3 crs. 3 hrs.

+ ART 37 AFRICAN and PRIMITIVE ART
The structural and stylistic forms of African art and the art of other notable primitive cultures, with emphasis on the cultural basis for those forms. 3 crs. 3 hrs.

+ ART 38 RENAISSANCE ART
History of the development of art from the Gothic to the Humanist movement, including the Renaissance with an analysis of the new concepts of nature, history and man in Italy. 3 crs. 3 hrs.

ART 45 BASIC DESKTOP-PUBLISHING
Develops basic desktop-publishing skills, including placement of text and graphics into a desktop-publishing program, use of painting, drawing and clip-art programs; formatting of text and graphics to produce professional appearing business communications. 3 crs. 4 hrs.

+ ART 51 PHOTOGRAPHY I
Introduction to the rudimentary ideas and techniques of photography. Camera, film, development process and artistic possibilities realized with the photographic print are considered. 3 crs. 4 hrs.

+ Basic Course
ART 52  PHOTOGRAPHY II  
3 crs. 4 hrs.
During this “Professionalism in Photography” course, students are taught to understand the place of photography and how to realize one’s potential through photography in our society; analysis of professional standards and how to mold personal work to attain those standards.
Prerequisite: ART 51

ART 53  PHOTOJOURNALISM I  
3 crs. 4 hrs.
Course covers the dual techniques involved with photography and documentary story-telling. It encompasses the use of written and photographic skills with journalism, and can be used by itself as art, or in conjunction with commercial art.
Prerequisite: ART 52

ART 54  PHOTOJOURNALISM II  
3 crs. 4 hrs.
For students who studied photography and journalism, this advanced course combines the photo essay with spot news reporting. Photojournalism as it applies to daily newspapers, illustrated magazines and photo agencies.
Prerequisite: ART 53

+ ART 55  DESIGN I  
3 crs. 4 hrs.
Supplies the groundwork necessary to all studio courses as the principles of design are introduced. Using basic materials and techniques, the study of line, value, color, shape, and texture in two-dimensional composition, is included.
Required for Art Majors in first semester. See Department Advisor.

ART 56  DESIGN II  
3 crs. 4 hrs.
Color theory and applications in two- and three-dimensional composition. The study of concepts in three-dimensional design includes problems of volume and space.
Prerequisite: ART 55

+ ART 57  DRAWING I  
3 crs. 4 hrs.
Introduction to the basic concepts of drawing. To cultivate the ability to see, create form, and enjoy visual experiences, students draw from still life and live models.
Required for Art Majors in first semester. See Department Advisor.

ART 58  DRAWING II  
3 crs. 4 hrs.
Continued study of various drawing media. The figure model is used to explore traditional and experimental drawing techniques.
Prerequisite: ART 57 or Department permission.

+ ART 59  PAINTING I  
3 crs. 4 hrs.
Studio course in oil and acrylic painting serves as an aesthetic foundation for solutions to expressive problems of representational and abstract form, color and space.

+ Basic Course
ART 60  PAINTING II  
Continuation of ART 59 gives students an opportunity for advanced work in painting, self-expression and creativity.

Prerequisite: ART 59 or Department permission.

+ ART 61  SCULPTURE I  
Study and work in a studio setting. Techniques and aesthetics of modern sculptural concepts emphasized.

ART 62  SCULPTURE II  
Advanced students in creative sculpture explore new techniques including welding and casting.

Prerequisite: ART 61 or Department permission.

+ ART 63  CERAMICS I (BEGINNING CERAMICS)  
An introduction to problems in ceramic design, materials and techniques. Emphasis is on the use of the potter’s wheel, high-fire ware production, glazing and firing.

ART 64  CERAMICS II (INTERMEDIATE CERAMICS)  
Students are involved with solutions to the intermediate problems in ceramic design. Emphasis is on further use of the potter’s wheel, high-fire ware production, glazing and firing of intricate designs and pieces.

Prerequisite: ART 63

ART 65  MIXED MEDIA—MULTI-MEDIA OPEN STUDIO  
Enables students to make use of combinations of drawing, painting and sculpture techniques, new materials, light, sound and phonetic processes.

ART 66  PRINTMAKING I  
Introduction to techniques of intaglio and relief printmaking. Students learn to expand upon drawing experiences by refining visual expression into terms of the original print.

Prerequisite: ART 55, or 57, or Department permission.

ART 67  PRINTMAKING II  
Continuation of intaglio and relief printmaking which allows students to explore the use of multi-color printing, and the time needed for edition printing.

Prerequisite: ART 66

+ ART 68  ILLUSTRATION I  
Basic concepts and skills of illustration drawing and painting. Acquiring various techniques appropriate to communication formats. Analyzing thematic material for visual exposition.

+ ART 70  JEWELRY I  
Introduction to the design and construction of contemporary jewelry. Students receive directed experience in using materials, tools, chemical processes and necessary technology.

+ Basic Course
ART 71  JEWELRY II

During this continuation of jewelry making, students concentrate on a specialized area, and further development of skills in specific areas of interest.
Prerequisite: ART 70

+ ART 73  PUBLICATION LAYOUT and DESIGN

Layout design for publications emphasizing newspapers, magazines, newsletters and pamphlets. Students strive for the greatest artistic and practical effect obtainable from applying the principles of design.

+ ART 74  TYPOGRAPHY and LETTERING

Toward understanding the effect of typography on design, emphasis is on type specification for display, advertising, books, publications, brochures, etc. The actual designing of new letters and alphabets is included.

+ ART 75  INTRODUCTION to GRAPHIC SKILLS and ADVERTISING

Introductory course on the conceptual aspects of problem solving in Graphic Skills and Advertising. The class will be geared toward creating a professional level portfolio.

+ ART 76  TECHNICAL DRAWING

For engineering students, the theory of orthographic projection; freehand sketching, instrument drawing; spatial analysis, visualization and interpretation; auxiliary and sectional views and conventional practices; axonometric drawings; graphical mathematics; basic dimensioning.

Required for Engineering Science Majors (see page 59)

ART 81  INDEPENDENT STUDY

1-3 crs. 1-3 hrs.
Independent study of Art is developed individually between student and faculty member and must be approved by the Department.

ART 82

1-3 crs. 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interest of various student populations. It is offered for a maximum of two semesters.

ART 83  FIGURE MODELING and CARVING

The human figure at rest is studied from the anatomical and compositional points of view. A live model, slides and figurative works, are part of the course. Clay and stone will be used.
Prerequisite: ART 61

Basic Course
ART 84  INTERMEDIATE FIGURE MODELING and CARVING  3 crs. 4 hrs.
Study of the representation of the human figure in motion. Clay and stone will be predominant materials used.
Prerequisite: ART 83

ART 85  LANDSCAPE PAINTING  3 crs. 4 hrs.
Methods of oil and/or acrylic painting in a concentrated approach to the expressive possibilities of the landscape as subject matter.
Prerequisite: ART 59

ART 86  INTERMEDIATE LANDSCAPE PAINTING  3 crs. 4 hrs.
The experimental approach to landscape painting will be extended within a more personally directed context.
Prerequisite: ART 85

ART 87  TRANSPARENT WATERCOLOR PAINTING  3 crs. 4 hrs.
The interactions of brush and color with paper and water and the use of different color-wash techniques.
Prerequisite: ART 59

ART 88  INTERMEDIATE WATERCOLOR PAINTING  3 crs. 4 hrs.
Advanced study of transparent watercolor painting, using wet-into-wet and glazing techniques.
Prerequisite: ART 87

ART 90  INTRODUCTION to WELDED SCULPTURE  3 crs. 4 hrs.
The different processes of joining metals used in the creation of a welded sculpture as various techniques of sculpting in metal are explored.
Prerequisite: ART 61

A. S. Degree
FINE ARTS
Requirements—Page 62
BEHAVIORAL SCIENCES and
HUMAN SERVICES DEPARTMENT
Room D-309B  ext. 5630

Louis Altschul, Professor
Leslie Arberman, Assistant Professor
Elinor Barr, Associate Professor
Myron I. Brender, Professor
William Burger, Professor
    Director, Mental Health and Human Services Program
Geraldine Chapey, Professor
Edwin Cooperman, Associate Professor
Connie Goldfarb, Associate Professor
    Director, Early Childhood Education/Child Care Program
Paul Schmolling, Professor
Marvin I. Shapiro, Assistant Professor
Laurence Simon, Professor
Philip Stander, Professor and Chairperson
Vimla P. Vadhan, Associate Professor
Merrill Youkeles, Professor
ANTHROPOLOGY

ANT 37  INTRODUCTION to ANTHROPOLOGY
(formerly listed as SOC 37)
3 crs. 3 hrs.
A variety of aspects of the human condition, such as evolution and the diversity of primitive societies are approached. The relationship of anthropological concepts with our knowledge of our own civilization and its history are compared.

EDUCATION

EDU 22  ART WORKSHOP in EDUCATION
(also listed as ECE 22)
2 crs. 2 hrs.
Various art media are explored to understand principles, methods, planning and classroom organization necessary to achieve curricular and behavioral objectives of programs in education.
Prerequisites: ECE 21, 30 or Department permission.
Corequisite: ECE 91

EDU 23  MUSIC and MOVEMENT WORKSHOP in EDUCATION
(also listed as ECE 23)
2 crs. 2 hrs.
Musical literature, methods and techniques for utilizing music and dance to achieve the curricular and behavioral objectives of programs in education.
Prerequisites: ECE 22, 92 or Department permission.

EDU 24  PSYCHOLOGICAL DISORDERS in YOUNG CHILDREN •
(also listed as ECE 24 and PSY 24)
3 crs. 3 hrs.
Psychological disorders in young children and the practices required to deal with them in early childhood settings. The problems and needs of gifted children, children who are mentally retarded or minimally brain-damaged, deaf, blind, orthopedic or speech handicapped. Causes, diagnostic, therapeutic and educational procedures and teaching methods are reviewed for each category based upon principles learned in introductory psychology courses. Course includes New York State mandated two-hour session on recognizing and reporting child abuse.
Prerequisite: PSY 11 and 32 or Department permission.

EDU 25  THE EMOTIONALLY DISTURBED and NEUROLOGICALLY IMPAIRED CHILD:
ETIOLOGY, CHARACTERISTICS, and ANALYSIS of LEARNING NEEDS •
3 crs. 3 hrs.
Knowledge and understanding of causes, characteristics, and learning needs of emotionally disturbed and neurologically impaired school children. Emphasis is on their educational needs and problems, methods of identifying and diagnosing them, and the possibilities for treatment and intervention, in a variety of educational settings.
Prerequisite: PSY 24 or Department permission.

• Required for Education Associate Majors
+ Basic Course
EDU 26 METHOD of TEACHING the EMOTIONALLY DISTURBED and NEUROLOGICALLY IMPAIRED CHILD BASED on INDIVIDUAL NEEDS • 3 crs. 3 hrs.
Methods of teaching in programs for the emotionally disturbed and neurologically impaired child. How existing materials may be modified and new original materials and techniques developed will be investigated. Principles of behavior management will be discussed in the context of curriculum planning and teaching methodology. Emphasis will be on implementation of teaching strategies based upon individual assessment of learning needs, the use of resources to ensure the least restrictive environment. A hands-on approach to develop materials.
Prerequisite: PSY 24 or Department permission.

EDU 27 SEMINAR in ADMINISTRATION and SUPERVISION of SPECIAL EDUCATION PROGRAMS • 3 crs. 3 hrs.
This colloquium course provides information relating to the administration and supervision of Special Education programs in New York City Public Schools. Guest lecturers discuss specific aspects of Special Education programs in the area of their expertise.
Prerequisite: PSY 24 or Department permission.

EDU 29 SCIENCE for ELEMENTARY SCHOOL TEACHERS • 4 crs. 4 hrs.
"Science Information" and "Methods-of-Teaching Science" course for Elementary School teachers. Participants explore Physical and Biological Science concepts to enhance their own learnings of these subjects. In alternate sessions they consider methods of adapting these concepts to children in the elementary schools. Stress will be on development of scientific processes and integration of science into the curriculum.
Prerequisite: Elementary School Teacher or Department permission.

EDU 32 HUMAN GROWTH and DEVELOPMENT (also listed as PSY 32) • 3 crs. 3 hrs
Human development from infancy through childhood, adolescence and adulthood, intellectual growth, personal and social adjustment, the relationship between physical and mental development and typical problems in various stages of the life-cycle.
Prerequisite: PSY 11

EDU 33 EDUCATION in MODERN SOCIETY • 3 crs. 3 hrs
Education in relation to contemporary society. Cultural forces and influences as well as institutions which help shape education are analyzed in the light of resulting issues and challenges. The various roles of the school, its personnel and the community are related to accepted theories and current practices.

EDU 34 SEMINAR and PRACTICUM in EDUCATION and BEHAVIORAL SCIENCES • 4 crs. 12 hrs.
The role of the paraprofessional in education. Selected aspects of education foundations, sociology and child psychology provide a base from which the paraprofessional's relationships to students, peers, teachers and supervisors are studied. Ten hours of field work a week is required.
Prerequisites: EDU 33, PSY 11

• Required for Education Associate Majors
+ Basic Course
EDU 35  SEMINAR and PRACTICUM in EDUCATION and COMMUNICATION SKILLS  
The nature of task-oriented and pupil-oriented activities in relation to communication skills. How to help pupils improve and develop special written and spoken communication skills. Ten hours of field work a week is required.
Prerequisites: EDU 34, 2 semesters of English

EDU 36  SEMINAR and PRACTICUM in EDUCATION and ART FORMS  
Students are assisted to develop understanding of the functions of art activities for the young child. The goal is to encourage a child's creative thinking by including art and music into the youngster's world. Ten hours of field work a week is required.
Prerequisites: EDU 35, MUS 31, ART 31

+ EDU 37  HISTORICAL DEVELOPMENT of EDUCATION in the UNITED STATES  
The history, growth and development of education in the United States from colonial times to the present; the manner in which institutions respond to changing social, political and economic currents, the role of education as a major factor in the development of the American character.

+ EDU 40  ORIENTATION for STUDENTS with SPECIAL BACKGROUNDS  
American institutions and society, especially as they exist in New York City, the college community, interethnic relations, services such as consumer information, recreational activities, and the cultural life of New York City. Guest speakers address some sessions.

EDU 41  TEACHING the GIFTED INDIVIDUAL  
Investigation of psychological and educational needs of gifted and talented individuals in school and society. Includes an historical perspective, past and present research studies, identification and implementation of programs.
Prerequisite: PSY 11

EDU 81  INDEPENDENT STUDY  
Independent study of Education is developed individually between student and faculty member and must be approved by the Department.

EDU 82  
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

+ MAT 9  UNDERSTANDING MATHEMATICS  
Primarily designed for Education Associate Program Majors (see page 198)

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EDUCATION ASSOCIATE
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• Required for Education Associate Majors
+ Basic Course
PSYCHOLOGY

+ PSY 11  GENERAL PSYCHOLOGY  3 crs. 3 hrs.
The nature of psychology, its fields and divisions, including individual differences, learning, motivation, perception, and personality.

PSY 12  PRINCIPLES of PARAPSYCHOLOGY  3 crs. 3 hrs.
The interdisciplinary nature of parapsychology, its fields and sub-divisions, such as telepathy, precognition, psychokinesis and clairvoyance. Current theoretical and experimental research.
Prerequisite: PSY 11

PSY 14  EXPERIMENTAL ANALYSIS of BEHAVIOR  3 crs. 3 hrs.
A laboratory course dealing with the experimental analysis of human and animal behavior. Practical applications and ethical implications of the scientific study of humans.
Prerequisite: PSY 11

PSY 15  PSYCHOLOGY of PERSONAL ADJUSTMENT  3 crs. 3 hrs.
Application of psychological principles to problems of personal and social adjustment. Workshop activities such as discussion groups, role-playing and self-awareness exercises.
Prerequisite: PSY 11

PSY 24  PSYCHOLOGICAL DISORDERS in YOUNG CHILDREN  3 crs. 3 hrs.
(also listed as ECE 24 and EDU 24)
Psychological disorders in young children and the practices required to deal with them in early childhood settings. The problems and needs of gifted children, children who are mentally retarded, or minimally brain-damaged, deaf, blind, orthopedic or speech handicapped. Causes, diagnostic, therapeutic and educational procedures and teaching methods are reviewed for each category based upon principles learned in introductory psychology courses. Course includes New York State mandated two-hour session on recognizing and reporting child abuse.
Prerequisites: PSY 11 and 32 or Department permission.

PSY 32  HUMAN GROWTH and DEVELOPMENT  3 crs. 3 hrs.
(also listed as EDU 32)
Human development from infancy through childhood, adolescence, and adulthood. Intellectual growth, personal and social adjustment, the relationship between physical and mental development, and typical problems in various stages of the life-cycle.
Prerequisite: PSY 11

PSY 33  SOCIAL PSYCHOLOGY  3 crs. 3 hrs.
Basic concepts and selected research findings in social psychology, the process of communication, group interaction, leadership, interpersonal perception, attitude and opinion formation.
Prerequisite: PSY 11

+ Basic Course
PSY 34  PSYCHOLOGY of PERSONALITY

3 crs. 3 hrs.
Various personality theories are examined to demonstrate the diverse ways of dealing with basic personality problems.
Prerequisite: PSY 11

PSY 35  EDUCATIONAL PSYCHOLOGY

3 crs. 3 hrs.
Current scientific theory and research relating to formal learning environments include: process of human learning; concept-formation; language affecting acquisition and retention; new approaches to motivate and direct learning; new methods of organizing and transmitting information and knowledge.
Prerequisite: PSY 11

PSY 36  ABNORMAL PSYCHOLOGY

3 crs. 3 hrs.
Concepts of normality and abnormality, and significant theoretical contributions to personality disorganization. Historical factors and current trends in the field of Mental Health and causes of behavioral disorders are discussed in terms of the impact of social, cultural, genetic and other factors. Survey of treatment methods included.
Prerequisite: PSY 11

PSY 37  PSYCHOLOGY of WOMEN

3 crs. 3 hrs.
Study of psychological factors specifically related to women, including the traditional models of femininity in social, occupational, and sex roles. The approach is analytical, beginning with denotive and connotative definitions of terms, analyzing traditional and new female models and identities and some problems these models present in personality integration. Recent psychological research on women is reviewed. Male and female students experiences are used to help support, or refute, theories presented.
Prerequisite: PSY 11

PSY 38  PSYCHOLOGICAL, BEHAVIORAL and PHYSICAL DISORDERS of the AGED

3 crs. 3 hrs.
The psychological, behavioral and physical disorders of the aged with various theoretical positions and review of preventive and treatment modalities.
Prerequisite: PSY 11

PSY 52  INDUSTRIAL and ORGANIZATIONAL PSYCHOLOGY

(also listed as PLM 20)

3 crs. 3 hrs.
Psychological and sociological principles relevant to the work environment of an organization. Concepts such as motivation, leadership, attitudes, testing and test discrimination, moral and organization climate, mental health and growth in the work world, and the problems surrounding selection decisions. Some aspects of applied research included.
Prerequisite: PSY 11
PSY 81  INDEPENDENT STUDY

1-3 hrs. 

Independent study of Psychology is developed individually between student and faculty member and must be approved by the Department.

PSY 82

1-3 hrs. 

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
SOCIOLOGY

+ SOC 31 INTRODUCTION to SOCIOLOGY 3 crs. 3 hrs.
The social dimensions of human existence with stress on social structure and culture as governing factors in the lives of individuals with basic concepts of sociology, major theoretical positions and findings. Designed to meet the needs of those who want an introduction to the field as well as those who wish to undertake further study.

SOC 32 URBAN SOCIOLOGY 3 crs. 3 hrs.
To better understand the effects of urbanization, the inherent contradictions in urban living are reviewed in terms of the multiplicity of problems that currently challenge the city.
Prerequisite: SOC 31

SOC 33 SOCIAL PROBLEMS: INSTITUTIONS in CRISIS 3 crs. 3 hrs.
The social ills currently facing American society. Areas of analysis include the major conflicts and social changes in community institutions. Each problem is approached as a crisis facing a particular institution. Appropriate changes in policy are suggested to resolve the problems.
Prerequisite: SOC 31

SOC 34 URBAN ANTHROPOLOGICAL and SOCIOLOGICAL FIELDWORK: OBSERVATION and ETHNOGRAPHY 3 crs. 4 hrs.
Introduction to observational field work in anthropology and sociology. Students acquire basic anthropological and sociological concepts, become familiar with procedures followed in conducting observational ethnographic studies, select a social situation for study, conduct field work as “participant-observers”. Instructor guidance is included in analysis of the group and completion of the field work project. Students may select non-human primates for field study.
Prerequisite: SOC 31 or 37

SOC 35 SOCIOLOGY of the FAMILY 3 crs. 3 hrs.
The sociology of the family study areas include: definitions; pattern variations; developmental theories; specialized functions and their effect on socialization, courtship, marriage, divorce and the life cycle.
Prerequisite: SOC 31

SOC 36 MINORITY GROUPS in the UNITED STATES 3 crs. 3 hrs.
Selected minority groups in American society are studied. Topics discussed include: nature of prejudice and discrimination; social meaning of minority, annihilation, assimilation, competition, conflict, exploitation; social and cultural change; past and present trends and developments.
Prerequisite: SOC 31
SOC 37 INTRODUCTION to ANTHROPOLOGY
(listed as ANT 37—for course description see page 107) 3 hrs.

SOC 40 ISRAELI SOCIETY 3 hrs.
An integrated exposition and analysis of the dominant social, political and economic aspects of Israeli society to understand the dynamics of the component elements of that society, and insight into the ideas and goals of its people.
Prerequisite: SOC 31 or 37

SOC 81 INDEPENDENT STUDY 1-3 hrs.
Independent study of Sociology is developed individually between student and faculty member and must be approved by the Department.

SOC 82 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

HUM 11 CULTURE as CONTEXT 3 hrs.
A study of those features of contemporary society which make up its cultural context. Political, social, and artistic institutions will be examined to understand their effect upon the average citizen. Attention will be paid to institutions and processes operating within New York City.
Corequisite: ENG CR
EARLY CHILDHOOD EDUCATION/CHILD CARE PROGRAM

Due to the special nature of the Early Childhood Education/Child Care Program, students are evaluated at the end of each semester to determine if it is advisable for them to continue in the Program.

+ ECE 20 INTERDISCIPLINARY APPROACH to EDUCATION
(previously listed as MH 20)

The effects of society, culture and institutions on the developmental needs of children. Students investigate past and present solutions in the context of society's conflicting and changing values and goals. They visit and evaluate schools and related institutions.
For ECE Majors or Department permission.

ECE 21 CURRICULUM in EDUCATION

The objectives of the program in education including the selection, guidance and evaluation of learning experiences. Emphasis is on methods and materials in language arts and story-telling.
Prerequisite: ECE 20

ECE 22 ART WORKSHOP in EDUCATION
(also listed as EDU 22)

Various art media are explored to understand principles, methods, planning and classroom organization needed to achieve curricular and behavioral objectives of programs in education.
Prerequisite: ECE 21, 30, or Department permission.
Corequisite: ECE 91

ECE 23 MUSIC and MOVEMENT WORKSHOP in EDUCATION
(also listed as EDU 23)

Musical literature, methods and techniques for utilizing music and dance to achieve the curricular and behavioral objectives of programs in education.
Prerequisites: ECE 22, 92 or Department permission.

ECE 24 PSYCHOLOGICAL DISORDERS in YOUNG CHILDREN
(also listed as EDU 24 and PSY 24)

Psychological disorders in young children and the practices required to deal with them in early childhood settings. The problems and needs of gifted children, children who are mentally retarded, or minimally brain-damaged, deaf, blind, orthopedic or speech handicapped. Causes, diagnostic, therapeutic and educational procedures and teaching methods are reviewed for each category based upon principles learned in introductory psychology courses. Course includes New York State mandated two-hour session on recognizing and reporting child abuse.
Prerequisite: PSY 11 and 32 or Department permission.

+ Basic Course
ECE 28  TECHNIQUES in MATH, SCIENCE and SOCIAL STUDIES TEACHING for EARLY CHILDHOOD EDUCATION 2 crs. 2 hrs.
Knowledge and understanding of the methods of teaching pre-mathematics, science, and social studies in early childhood classrooms. Hands-on methods that permit young children to learn through discovery, plus theoretical underpinnings of these methods are emphasized.

ECE 30  SEMINAR and PRACTICUM in EARLY CHILDHOOD EDUCATION CURRICULUM 3 crs. 4 hrs.
Working directly with materials students explore and become familiar with the methods and materials used in an Early Childhood Education setting. Developmentally appropriate practice and the integrated approach to education is emphasized.
Prerequisite: ECE 20
Corequisite: ECE 21

ECE 81  INDEPENDENT STUDY 1-3 crs. 1-3 hrs.
Independent study of Early Childhood Education is developed individually between student and faculty member and must be approved by the Department.

FIELD COURSES

ECE 91  SUPERVISED INSTRUCTIONAL EXPERIENCE in EDUCATION I 3 crs. 6 hrs.
Students are assigned to work with children in a specific education center such as a Day Care Center, Nursery School, Kindergarten, School for Exceptional Children or Residential Institution. Students concentrate on objective observations of child behavior in order to help develop skills in understanding children and their learning needs.
For ECE Majors only.
Prerequisite: ECE 21
Corequisite: ECE 22 and passing score on CUNY English Examination

ECE 93  SUPERVISED INSTRUCTIONAL EXPERIENCE in EDUCATION II 3 crs. 6 hrs.
Students are assigned increasing responsibility within the limits of the agency structure. Leadership of group activities is included.
For ECE Majors only.
Prerequisites: ECE 22, 91 and passing score on CUNY Mathematics Examination
Corequisite: ECE 23

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EARLY CHILDHOOD EDUCATION/CHILD CARE Requirements—Page 81
MENTAL HEALTH and HUMAN SERVICES
formerly COMMUNITY MENTAL HEALTH ASSISTANT PROGRAM

The program is designed for students who wish to pursue careers in such human services fields as: rehabilitation, social work, psychology, special education, counseling and mental health. The emphasis is on learning ways of helping people lead satisfying productive lives, and/or preventing the onset of serious emotional or psychological problems.

MH 11 INTRODUCTION to HUMAN SERVICES 3 crs. 3 hrs.
Introduction to the nature and scope of human services in America today. A variety of human services, settings and programs, career options, including occupational therapy, social work, psychology, art and dance therapy, counseling, mental health and gerontology will be described. Prevention efforts, the effect of social policies on provision of needed services, the development of the human services movement will be examined in the light of changing societal values.

MH 30 HUMAN SERVICES ORGANIZATIONS • 3 crs. 3 hrs.
Development, functions, and purposes of human services organizations. Types of human services organizations are described with emphasis on the duties and roles of workers and supervisors and the effects of policies, practices, and pressures of the agency upon the worker.
Prerequisite: MH 11

MH 31 PRINCIPLES of INTERVIEWING and GROUP LEADERSHIP • 3 crs. 3 hrs.
Basic principles of gathering information through the use of interviewing techniques. The nature of group formation, function and leadership, and how they relate to one another. Emphasis is on providing preventative and therapeutic service to the mentally ill with role playing and classroom practice sessions.
Prerequisite: MH 11
Corequisite: MH 96

MH 34 ACTIVITIES THERAPY • 3 crs. 3 hrs.
Theories and principles of using activities as a preventative and/or therapeutic tool. Learning selected basic skills and their use will be emphasized, demonstrated, discussed and practiced.
Prerequisite: MH 11

MH 35 INTRODUCTION to GERONTOLOGY 3 crs. 4 hrs.
Issues and problems pertaining to aging and the aged, the aging process and the roles of older adults in society. Emphasis is on learning methods for the prevention and treatment of mental illness in older people.
Open to all students.

• Required for Mental Health Majors or Department permission.
+ Basic Course
MH 36  THEORIES and PRINCIPLES of PSYCHOTHERAPY •  3 crs. 3 hrs.
The array of treatment modalities for the emotionally disturbed. Theory, methods and historical background of individual and group therapies. Special treatment approaches for out-patients, transitional facilities, and treatment of behavior problems in the school setting. Conditioning therapies, recent innovations in group therapy and self-help groups are reviewed.
Prerequisites: MH 11 and PSY 36

MH 81  INDEPENDENT STUDY  1-3 crs. 1-3 hrs.
Independent study of Mental Health is developed individually between student and faculty member and must be approved by the Department.

FIELD COURSES

MH 96  SUPERVISED INSTRUCTIONAL EXPERIENCE in MENTAL HEALTH 1 •  3 crs. 6 hrs.
Under faculty supervision, students are assigned to work in a Mental Health Agency where the focus is on preventive and therapeutic measures.
Prerequisite: MH 11
Corequisite: MH 31

MH 97  SUPERVISED INSTRUCTIONAL EXPERIENCE in MENTAL HEALTH II •  3 crs. 6 hrs.
Under faculty supervision students are assigned to work with patients afflicted with a variety of emotional disorders.
Prerequisites: MH 11, 96

• Required for Mental Health Majors or Department permission.

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MENTAL HEALTH and HUMAN SERVICES
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BIOLOGICAL SCIENCES DEPARTMENT
Room S-244  ext. 5502

Isaiah A. Benathen, Associate Professor
Carol Biermann, Associate Professor
Rosa M. Bradley, Associate Professor
James C. Goetz, Assistant Professor
I. Ronald Hecht, Associate Professor
Judith Hugo, College Laboratory Technician
Miriam Kittrell, Professor
Barbara Ladman, Senior College Laboratory Technician
Peter A. Lanzetta, Professor
Vincent R. Liguori, Professor
Theodore C. Markus, Associate Professor
Joseph N. Muzio, Professor and Chairperson
Peter Pilchman, Professor
Marion T. Saccardi, Senior College Laboratory Technician
Gary B. Sarinsky, Assistant Professor
Anthea Stavroulakis, Assistant Professor
Arthur N. Zeitlin, Assistant Professor
   Director, Pre-Physical Therapy Program
### BIOLOGY

**BIO 10  PREPARATORY BIOLOGY**

| 0 crs. 4 hrs.          | (4 equated crs.) |

Biology Majors or Allied Health Science students with little or no previous biology course instruction who require background preparation for advanced biology courses. Introduction to fundamental concepts in biology and related physical and chemical processes through demonstrations, “hands-on” experiences, readings, discussions and presentations. Basic skills and procedures related to biological laboratory practices. Students are encouraged to obtain assistance in the college’s reading skills programs.

*Enrollment limited to recommended students based on science background and placement examination scores. Does not fulfill science requirements for any degree. Students who place below the MAT R2 and/or ENG 04 level must successfully complete BIO 10 before enrolling in BIO 11 or BIO 13.

**BIO 11, 12  HUMAN ANATOMY and PHYSIOLOGY I and II**

| 4 crs. 6 hrs.          | (each semester) |

A one-year, two-semester course in human anatomy and physiology. Examines complementary relationships between structure and function; dynamic aspects, integration of organs and organ systems in the maintenance of normal functioning of the whole organism. Dissections and other laboratory experiences.

Recommended for students pursuing careers in allied health fields, physical education, or those interested in knowing more about their own bodies as part of a life-time responsibility for one’s own well-being.

**Prerequisite:** BIO 11 for BIO 12

**BIO 13, 14  GENERAL BIOLOGY I and II**

| 4 crs. 6 hrs.          | (each semester) |

A one-year, two-semester course for students planning to major in the biological sciences, or preparing for a pre-professional program. Classroom and laboratory sessions focus on classical biological topics as they apply to all life, to recent scientific findings and how they advance understanding classical concepts, the interaction of environmental and biological forces to produce life.

**Prerequisites:** BIO 13 for BIO 14; Placement at MAT R2, ENG 04 level or better or, successful completion of MAT 01 or BIO 10, or Department permission.

**Corequisite:** CHM 11 for BIO 14

**BIO 15  KINESIOLOGY**

| 3 crs. 3 hrs.          |

Normal human motion and the ranges of movement in an individual is based on understanding pertinent areas of anatomy, physiology, biomechanics and physics together with such medical modalities as orthopedics, neurology and pathology. Motor dysfunction of the major body regions included to serve workers in rehabilitation of the physically handicapped.

**Prerequisite:** BIO 11

**Corequisite:** BIO 12
BIO 21 COMPARATIVE ANATOMY  
4 crs. 6 hrs.
Form, structure, classification and adaptive modifications of vertebrates, animals with backbones. Through detailed dissections, representative vertebrates, the dogfish and the cat, are studied; the vertebrates' major body systems and the development of various representative structures are compared; relationships between form and function, and the use of certain structure in specific environments.
Prerequisite: BIO 14 or Department permission

BIO 22 EMBRYOLOGY  
4 crs. 6 hrs.
Embryonic development of organisms including the frog (amphibian), chick (aves), pig and human (mammal) and their related processes of reproduction, fertilization, implantation and embryonic support systems. Microscopic studies, films, drawings and models, to understand the major stages of development and the dynamic activities of formation. Various research techniques used in embryological studies introduced. Current research findings are interwoven with more established knowledge of this subject, some embryonic disturbances are considered.
Prerequisite: BIO 14 or Department permission.

+ BIO 28 BIOLOGY of WOMEN •  
3 crs. 3 hrs.
Major biological topics unique to women's development. Understanding normal function augmented by consideration of some female disorders. Discussion and exploration of myths and mysteries that influenced behaviors. Through increased awareness and understanding, students are better able to further the potential and contributions of a woman as an individual.

+ BIO 29 BIOLOGICAL RHYTHMS and INTERNAL CLOCKS •  
3 crs. 3 hrs.
Major physiological processes in animals and plants according to daily, tidal, seasonal and annual rhythms and cycles. These processes, crucial for individuals and the species, are directly related to the organisms' evolution. Rhythmic activities studied are: cosmic rhythms; mating and reproduction; hormone production and control systems; sleep/wakefulness cycles; rhythms of growth; energy and health; disease onsets; illness; human rhythms and internal biological clock mechanisms; effects of jet travel, shift work, stress, space travel, and environmental seasons.

+ BIO 32 HISTORY and PHILOSOPHY of BIOLOGICAL SCIENCE •  
2 crs. 2 hrs.
A survey of the origin and scientific development of mankind from the emergence of the human species to modern times. Major scientific and technological developments are studied within the context of human culture and philosophical ideas. Presented from a biological point of view, the course draws on other disciplines as they have major impact on how humans view themselves and their effect on scientific efforts.

+ BIO 33 INTRODUCTION to MODERN CONCEPTS of BIOLOGY •  
4 crs. 5 hrs.
For non-science and liberal arts majors and those who plan to transfer to senior colleges. Focus is on major biological topics and principles, with emphasis on how biology influences human issues and problems. Lectures, discussions and hands-on laboratory experiences, provide insight into past, present and future aspects of the diversity of life on earth. Topics considered include: genetics, ecology, evolution, and cell biology.

• Open to all students in partial fulfillment of their science requirement.
+ Basic Course
+ BIO 35  INTRODUCTORY HORTICULTURE  
Emphasizes the structure, growth and cultivation of horticultural plants and the physical and biological environmental factors which affect them. Practical applications, including soil improvement techniques, plant identification, gardening and landscaping.

+ BIO 37  HUMAN GENETICS  
Introduces the principles of genetics with applications to human beings. The different systems by which characteristics are inherited, representative human hereditary problems, roles of heredity and environment; an historical approach to genetics research, chromosomal disturbances and some diseases; modern components of genetics in relation to human fertilization, surrogacy and genetic engineering.

+ BIO 39  THE BIOLOGY of AGING  
Biological aspects of the aging process, including: definitions, characteristics and biological theories of aging, recent biological research, effects of disease and prescription drugs; determination of each student’s aging profile, factors which modify the rate of the aging process including nutrition and exercise.

+ BIO 40  INTRODUCTORY FOOD SCIENCE  
Constituent properties of foods; methods of food preservation; major food groups (including handling and processing); current problems such as chemical additions; world feeding needs; interrelationships between chemical and physical properties, processing, and food quality.  
Prerequisite: Non-Biological Science majors need Department permission.

+ BIO 42  CONTEMPORARY TOPICS in BIOLOGY  
Clarifies biological topics relating to the human condition that are of interest to all. Students bring biological matters of concern to the attention of the class for study and discussion and to question the myths and fallacies often associated with the human condition.

+ BIO 43  FIELD BIOLOGY  
Study of living organisms in their environments. Illustrated lectures on a specific world biome vividly illustrating plant and animal interrelationships included. Field trips involve an interdisciplinary approach: fauna, geology and human involvement in each ecosystem visited such as ponds, streams, seashore, marsh and various forest types.  
Prerequisite: Biological Science course or Department permission.

+ BIO 48  FOOD MICROBIOLOGY  
Specific food-borne micro-organisms and diagnostic methods to identify their presence and their appropriate scientific control.  
Prerequisite: Biological Science course or Department permission.

+ BIO 49  PEOPLE and the ENVIRONMENT—BIOLOGICAL EMPHASIS  
To promote understanding of human kind’s interdependence with the environment and to instill responsibility for environmental quality, the biological sciences are emphasized, including pollution control, ecological balance in nature, growth and control of human populations and identifying environmental issues.

- Open to all students in partial fulfillment of their science requirement.

+ Basic Course
BIO 50 GENERAL MICROBIOLOGY
Lecture and laboratory study of the methods of pure culture techniques; growth of micro-organisms; morphological and physiological characteristics of micro-organisms; microbial biochemistry; microbial genetics. Special attention given to water, food and dairy microbiology.
Prerequisites: BIO 14, CHM 11
Recommended: CHM 12

BIO 51 MICROBIOLOGY in HEALTH and DISEASE
Lecture and laboratory study of the principles and practices of microbiology; pure culture techniques; micro-organisms and their environments; physical and chemical factors affecting growth, immunology; epidemiology; relationship between humans and the microbiological world.
Suggested primarily for students in the allied health sciences.
Prerequisites: BIO 12, SCI 25
FOR NURSING STUDENTS ONLY: BIO 51 must be taken BEFORE or WITH NUR 21. Students who withdraw from BIO 51, cannot continue in NUR 21.

BIO 52 MARINE BIOLOGY
Lecture and laboratory study of interrelationships between various environmental factors (physical, chemical and biological) and the distribution and physiology of selected marine organisms. Special attention to ecological techniques and taxonomic methods. Field trips supplement laboratory work.
Prerequisites: BIO 14, CHM 11 or Department permission.

BIO 53 TERRESTRIAL ECOLOGY
Concepts and principles relating to structure and function of populations, communities and ecosystems; energy flow, biogeochemical cycling, community structure, population growth and population interactions, disturbed and undisturbed ecosystems. Designed for science majors, course includes lectures, films, field trips, discussion, research project and report.
Prerequisites: Biological Science course and Department permission.

BIO 54 BIOLOGY of GREEN PLANTS
The basic concepts of green plant biology, their structure, growth and physiology. Laboratory experiences emphasize the growth and study of live specimens. Greenhouse field projects and other special course related projects are included.
Prerequisite: BIO 14 or one semester of college biology with Department permission.

BIO 55 BIOLOGY of the INVERTEBRATES
An introductory survey course. Lectures and laboratories for students who intend to continue in the biological sciences or choose it as their sophomore-level science elective. Invertebrate phyla are studied with particular reference to their physiology and interrelationships. Representative forms will be examined and dissected and experiments performed on particular organisms. Fundamental biological concepts will be stressed.
Prerequisite: BIO 13 or 33
+ **BIO 56 UNDERSTANDING ENVIRONMENTAL POLLUTION**  
3 crs. 3 hrs.
Living organisms—plant and animal—whose environments are constantly being altered and whose continued existence is threatened because of developing technologies. How the chief requirements of living systems—water, oxygen and nutrients—have been affected by specific organic, inorganic and radioactive waste materials resulting in population decline through intrusion upon tissues, organs and organ systems.

**BIO 58 BASIC PRINCIPLES of MOLECULAR BIOLOGY**  
4 crs. 6 hrs.
The structure and function of cells at the biochemical level. A systematic study of the chemistry of carbohydrates, liquids, proteins and nucleic acids. Integration of cell structure and function with the chemistry of the biomolecules previously studied. Study of enzymes and their co-factors. Major metabolic pathways for energy production, to carry out life processes, are considered as an introduction to the enzyme catalyzed reaction and the enzymes synthesis regulation. Laboratory experiments require students to master a variety of commonly used laboratory techniques and to effectively present data from these procedures.  
*Prerequisites: BIO 14, CHM 12*

**BIO 63 LIMNOLOGY**  
4 crs. 6 hrs.
Limnology is the science of inland waters dealing with the physical, chemical and biological characteristics of streams, lakes, and their watersheds. During lectures, in laboratories and in field work, students study the organisms as well as the processes whereby matter and energy are transformed within a lake, pond, river, or stream.  
*Prerequisites: Biological Science course and Department permission.*

+ **BIO 70 THE SCIENCE of NUTRITION**  
3 crs. 3 hrs.
Increased food processing and additional chemical substances in food, makes it important to understand the basic ideas of modern nutrition. This interdisciplinary course, is taught jointly by the Biological Sciences and Physical Sciences Departments. Such concepts as biochemical individuality as related to nutrition for optimum health are integrated with surveys of carbohydrate, protein and fat metabolism; the role of vitamins and minerals in metabolic processes, their still-controversial role in orthomolecular nutrition, food selection, diet during pregnancy and infancy, special diets during illness, safety of the food supply. Students analyze their own diet.

**BIO 71 BIOLOGICAL PHOTOGRAPHY**  
3 crs. 4 hrs.
Basic principles underlying the architecture of living organisms, from the microscopic to the macroscopic levels. Photography is used as an investigative tool for the study of living structure; on the unique ways photography has been an important scientific tool in the past, expanding new photographic techniques. Students experiment with major photographic variables—lighting, filter, films—which reveal aspects of living motion structure and function only previously suspected.  
*Prerequisite: Biological Science course or Department permission.*

**BIO 81 INDEPENDENT STUDY**  
1-3 crs. 1-3 hrs.
Independent study of Biology is developed individually between student and faculty member and must be approved by the Department.

*Open to all students in partial fulfillment of their science requirement.
+ Basic Course*
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

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A.S. Degree

BIOLOGY

Plus—

Transfer Options in

OCCUPATIONAL THERAPY

PHARMACY

Requirements—Page 53

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A.S. Degree

ENVIRONMENTAL HEALTH and SCIENCE

Requirements—Page 61

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A.S. Degree

PRE-PHYSICAL THERAPY

Requirements—Page 69

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A.S. Degree

PRE-PHYSICIAN ASSISTANT

Requirements—Page 54

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SCI 1 ISSUES and ADVENTURES in SCIENCE

3 crs. 3 hrs.

The most recent and important discoveries in the biological and physical sciences are presented, observed, discussed, and experimented with, to acquaint students with the world around them. Brain research, studies of aging, disease, fertility, immunity, and the origin of life are explored. Studies emphasize relations to human's place in the universe, self-explorations and technological achievements.

Prerequisite: Enrollment in the “College Now” Program
M. Victor Alper, Assistant Professor
Susan Aranoff, Associate Professor
Renato Bellu, Associate Professor
George Buchman, Assistant Professor
Joseph Consolo, Instructor
Margaret Conway, Lecturer
Jay Gelbein, Associate Professor
Leonard Goldman, Senior College Laboratory Technician
Gene Goldstein, Associate Professor
Joseph Guardino, Associate Professor
Morton Hirsch, Associate Professor
Nat Hirschfeld, Assistant Professor
Charles Kee, Assistant Professor
Rose Litvack, Assistant Professor
Consolacion Magdangal, Assistant Professor
Edward Martin, Professor and Chairperson
Theresa Mastrianni, Lecturer
Fredric Mayerson, Associate Professor
Andre Montero, Associate Professor
Jacqueline Scerbinski, Lecturer
Gerald van de Vorst, Assistant Professor
Walter Weintraub, Professor
David Zwibel, Assistant Professor
ACCOUNTING

+ ACC 11 FUNDAMENTALS of ACCOUNTING I 4 crs. 4 hrs.
This first half of a year's course introduces the accounting cycle, the fundamental concepts and techniques of accounting for business transactions: business records, journals and ledgers, theory of debit and credit, analysis of business transactions, adjusting and closing entries, worksheets, preparation of financial statements, payroll preparation, taxation, the computer and accounting. Supplemental Laboratory work required.

ACC 12 FUNDAMENTALS of ACCOUNTING II 4 crs. 4 hrs.
The second half of this two-semester course covers partnership, corporation and manufacturing financial transactions (including accounting for long-term debt), financial statement analysis and introduction to cost accounting, the use of accounting data and analysis for managerial decision-making. Supplemental Laboratory work required.
Prerequisite: ACC 11
Corequisite: ACC 41—for Accounting Majors only

ACC 21 INTERMEDIATE ACCOUNTING I 3 crs. 3 hrs.
The worksheet, a fundamental tool of the accountant, is reviewed and underlying accounting principles, concepts and conventions, applied to the corporate organization. Included are: inventory valuation, analysis of working capital, source and application of working capital funds, installment sales, consignments, and other relevant material. Emphasis is on pronouncements of the American Institute of Certified Public Accountants (AICPA), Accounting Principles Board (APB), the new Financial Accounting Standards Board (FASB), and their impact on business management, decision-making and financial statement reporting.
Prerequisite: ACC 12

ACC 22 INTERMEDIATE ACCOUNTING II 3 crs. 3 hrs.
Tangible, intangible, fixed and other non-current assets, home and branch office accounting. Discussion and illustration of the impact of recent accounting developments on financial statements and business management. Accounting Principles Board and Financial Accounting Standards Board pronouncements.
Prerequisite: ACC 21

ACC 31 COST ACCOUNTING I 3 crs. 3 hrs.
Techniques and methods of cost accounting include: cost concepts and analysis of costs; material control; accounting for labor; nature and application of manufacturing overhead (including factory overhead variance analysis); job order cost systems; process cost systems; direct costing.
Prerequisite: ACC 12

ACC 32 COST ACCOUNTING II 3 crs. 3 hrs.
The use of cost accounting principles and practices in managerial planning and control with emphasis on the decision-making role of management. Study of product pricing and production efficiency with the aim of maximizing profits; standard cost systems (including analysis of variances using the 2 variance, 3 variance and 4 variance methods); joint products and by-products costs; profit-volume analysis; capital budgeting, and break-even analysis.
Prerequisite: ACC 31
+ ACC 41 FEDERAL TAXATION

Study of current federal income tax law regulations include: concepts of taxable gross and net income, deductions and exemptions as applied to various classes of individual taxpayers. Preparation of individual income tax returns on actual governmental forms required.
Corequisite: ACC 12—for Accounting Majors only

ACC 42 ADVANCED FEDERAL TAXATION

3 crs. 3 hrs.
Primarily concerned with the federal taxation of business (individual proprietors, partnerships and corporations), gift and estate taxation, course is based on fundamentals of federal taxation mastered in ACC 41 Federal Taxation.
Prerequisites: ACC 12 and 41

ACC 43 NEW YORK TAXES

3 crs. 3 hrs.
Prevailing New York State and New York City income and business tax laws and regulations. Preparation of individual and business tax returns required.
Required for "Tax Accounting Concentration" A. A. S. Accounting Degree Students.
Highly recommended for ALL A. A. S. Accounting Degree Students.
Prerequisite: ACC 41

+ ACC 50 ACCOUNTING and ENTREPRENEURSHIP

4 crs. 4 hrs.
Course integrates a financial analysis perspective with the business decision-making process. The double-entry system, Recording of Business transactions and the interpretation of Financial Statements represents the financial segment. Cash Management, Federal Income Taxes and Measures of Profitability reflect the Management role of Accounting.
Not open to students whose major is in: Accounting, Business Administration, Computer Data Processing, Marketing Management or Personnel and Labor Relations.
Not transferable to any four year college for above listed majors.

ACC 81 INDEPENDENT STUDY

1-3 crs. 1-3 hrs.
Independent study of Accounting is developed individually between student and faculty member and must be approved by the Department.

ACC 82

1-3 crs. 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
BUSINESS ADMINISTRATION

+ BA 11 BUSINESS MANAGEMENT and ORGANIZATION 3 crs. 3 hrs.
The environment and functional requirements of a business firm. Problems of planning, the structure of decision-making for policy and action, strategy and behavior of organizations, flow of authority, delegation and communication, managerial functions, and the leadership role in an integrated framework of principles and concepts.

+ BA 12 BUSINESS LAW I 3 crs. 3 hrs.
The American legal system: problems and consideration of the essential principles of the laws of business contracts and their relationship to typical business situations. Appropriate New York State legal cases and recent decisions.

BA 13 BUSINESS LAW II 3 crs. 3 hrs.
The legal principles of agency, partnership and corporations. Legal problems of corporate and non-corporate forms of organizations, consideration of rights, duties, obligations of employment and other special contractual and business relationships.
Prerequisite: BA 12

BA 14 PRINCIPLES of MARKETING 3 crs. 3 hrs.
Consideration of marketing strategy from a customer’s point of view. Course deals with principles and practices of the distribution process, including product pricing, promotion, distribution channels, market research, governmental regulations.
Prerequisite: BA 11

BA 31 PERSONNEL ADMINISTRATION 3 crs. 3 hrs.
Methods and procedures used by business management in the selection, development, maintenance, and utilization of an efficient work force. Personal relations, job evaluation, wage and salary administration, sources of labor supply, interviewing and counseling, training, testing, transfers, promotions, and union relations.
Prerequisite: BA 11

+ BA 33 BUSINESS COMMUNICATIONS 3 crs. 3 hrs.
The principles of writing effective business communications, including letters, reports, memoranda, directives. Emphasis on organization, language, personal relations and application of business psychology in writing.

+ Basic Course
BA 35  SALES MANAGEMENT  
3 crs. 3 hrs.
Sales management analyzed as a major area of marketing. Focus on major responsibilities of a sales manager in managing a sales force and/or in maintenance of relationships with independent middlemen. The functions of planning and administering the company’s personnel, selling operations, other marketing campaigns. Participation in, and sometimes joint responsibility for making decisions on the product line, pricing, physical distribution, marketing channels, promotion, and brand management. Examination of the sales manager’s job, duties, and responsibilities as an application of the management approach. 
Prerequisite: MM 33 (page 136)

BA 52  ADVERTISING: THEORY and PRACTICE  
3 crs. 3 hrs.
Advertising, its methods and its role in business. An introduction to media, copy, research, layout, production, direct mail, and campaign strategy. 
Prerequisite: BA 14

+ BA 60  INTRODUCTION to COMPUTER CONCEPTS  
3 crs. 4 hrs.
Microcomputers have changed the way managers evaluate data, make decisions, and communicate. This lab-oriented course introduces the business student to the “Big Four” business applications: Electronic Spreadsheets; Data Management; Word Processing; Graphics. Concentrating on actual business software, students learn conceptual and operational skills necessary to successfully compete in the modern microcomputer business environment. 
Prerequisite: BA 60 or equivalent
NOT open to Data Processing Majors. Students who completed CP 11 or DP 11 will NOT receive credit for this course.

BA 61  MICROCOMPUTER APPLICATIONS in BUSINESS  
3 crs. 3 hrs.
Advanced spreadsheet applications in business. An intensive look at electronic spreadsheets in a lab-oriented course. 
Prerequisite: BA 60 or equivalent

+ BA 62  MICROCOMPUTER APPLICATIONS for ACCOUNTANTS  
3 crs. 3 hrs.
Offered to C.P.A’s to introduce terminology and operation of standard business microcomputers. Course will earn full C.P.E. credit to satisfy New York State Department of Education requirements. No previous computer experience required.

BA 70  BUSINESS of PRINT MEDIA  
3 crs. 3 hrs.
General principles and practices of the business management function in the newspaper industry are identified and analyzed with specific emphasis on the importance of planning, organizing, supervising, directing, and controlling. Working definitions are developed within the context of prevailing theoretical models and practical applications for use in the business setting. Students learn about publishing a newspaper through understanding its operations, functions and services. 
Open only to Journalism and Print Media Majors who have NOT taken BA 11.
BA 81  INDEPENDENT STUDY

1-3 crs. 1-3 hrs.

Independent study of Business Administration is developed individually between student and faculty member and must be approved by the Department.

BA 82

1-3 crs. 1-3 hrs.

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

A.A.S. Degree

BUSINESS ADMINISTRATION

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BA 10  BUSINESS ADMINISTRATION: Introduction to Business

3 crs. 3 hrs.

The dynamic world of the business environment. Included are: the business organization, from the sole proprietor (entrepreneur) to the corporate entity; four functions of management (planning, organizing, leading and controlling); four elements of the marketing mix (product, price, promotion and distribution). Practical applications of management and marketing skills in small business, and in large corporations. Additional topics include profit motive as a key feature in the American free enterprise system, legal aspects of operating a business, and the role of computers in business.

Prerequisite: Enrollment in the “College Now” Program.
ECONOMICS

+ ECO 12 FUNDAMENTALS of ECONOMICS •
  3 crs. 3 hrs.
  The nature and methods of economics include: the economizing problem, American capitalism, national goals, basic principles of money and banking. Detailed analysis of supply and demand, the mechanics of prices in different market structures, national income and employment theory, monetary and fiscal policy, problems of economic growth and stability.

+ ECO 14 MONEY and BANKING •
  3 crs. 3 hrs.
  The nature and function of money, monetary systems and monetary standards. Detailed analysis of the organization, policies, and operation of our public and private financial institutions, commercial banking, investment banking, central banking, and other financial intermediaries. The relationships of money and banking to economic activity.
  Prerequisite: ECO 12

+ ECO 24 CONSUMER ECONOMICS
  2 crs. 2 hrs.
  The process of consumer choice. Topics include marginal utility, budget restraint, supply and demand, consumer patterns of buying behavior, money, advertising and consumer protection.

ECO 82
  1-3 crs. 1-3 hrs.
  This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

• ECO 12 and ECO 14 DO NOT meet the Group III requirements for students majoring in Accounting, Business Administration, Fashion Merchandising, Marketing Management or Personnel Management and Labor Relations.

+ Basic Course
INSURANCE

INS 31 PRINCIPLES and PRACTICE of INSURANCE I
4 crs. 4 hrs.
Insurance contracts for fire, automobiles, casualty, fidelity and surety, and burglary are analyzed as students survey insurance laws, risks insured against exclusions and endorsements, types of carriers, claims adjustments and allied subjects.

INS 32 PRINCIPLES and PRACTICE of INSURANCE II
4 crs. 4 hrs.
Various insurance contracts including: inland and ocean marine, public liability and negligence, workers' compensation, accident and health, miscellaneous lines of coverage, duties and responsibilities of agents and brokers.
Prerequisite: INS 31

INS 35 RISK and INSURANCE MANAGEMENT
3 crs. 3 hrs.
Risk and insurance management concepts, objectives of risk management, decision making process, methods of risk control and financing, types of insurers, insurance marketing, underwriting and claims administration.

INS 37 LIFE, ACCIDENT and HEALTH INSURANCE
3 crs. 3 hrs.
Types of insurance (life, accident, health), related area concepts and techniques, a variety of plans, cost factors, types of companies, governmental insurance and regulations. Program coverages and how to enter the profession at all levels (insurer, agent, broker, consultant, corporate).

INS 81 INDEPENDENT STUDY
1-3 crs. 1-3 hrs.
Independent study of Insurance is developed individually between student and faculty member and must be approved by the Department.

INS 82
1-3 crs. 1-3 hrs.
This course is of topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
MARKETING MANAGEMENT

+ MM 31 ELEMENTS of MARKETING MANAGEMENT 3 hrs.
Introduction to management techniques considered essential to the planning, organization, control and operation of retail establishments. The fundamentals underlying modern merchandising practices, recent developments in trading area analysis, shopping centers, consumer relations, warehousing, transportation, stock control, and data processing. Retail case studies and field trips.

+ MM 33 SALESMANSHIP 3 hrs.
Principles of selling based on modern marketing concepts. Consumer needs and desires combined with company objectives, contributions of the behavioral sciences to the study of consumer behavior and buying patterns, organization and control of wholesale, industrial, and retail sales.

MM 34 FASHION BUYING and MERCHANDISING 3 hrs.
Basic merchandising principles to understand the principles of good merchandise planning and decision making. Students acquire the ability to adjust to continually changing conditions in the retailing environment. Topics include: stock planning, market evaluation, fashion forecasting and pricing.
Prerequisite: MM 31

MM 35 MERCHANDISING INFORMATION ANALYSIS 4 hrs.
Fashion fabrics and non-textile merchandise information, including their identification, characteristics, merits, limitations and care. Study of natural and man-made fibers, types of yarns, construction, finishes, coloring of fabrics, sales, leather, rubber, plastic, paint, papers, furs, jewelry, cosmetics, soaps, synthetic detergents, and other non-textile products.
Prerequisite: MM 31

MM 36 VISUAL MERCHANDISING and DISPLAY 3 hrs.
Visual merchandising communicates merchandise information to customers and encourages people to buy. The purpose, value, and methods of display as a part of sales promotion and how it fits into the total marketing picture, designing and building interior window and point-of-purchase merchandise displays.
Prerequisite: MM 31

+ MM 38 INTRODUCTION to FASHION MARKETING 3 hrs.
Introduction to the fashion industry and understanding many different types of career opportunities in the fashion world. Economic and social factors which influenced its history and growth, producers, retailers, and specialized agencies involved in the production and distribution of fashion commodities—their characteristics, activities and relationships. Consumer power and the marketing concepts as they affect products and practices in the fashion business.
MM 39  FASHION SALES PROMOTION 3 crs. 3 hrs.
Fashion activities that promote and stimulate the sale of fashion goods; practical experience in the preparation of special events; sales promotions and publicity similar to those initiated by apparel manufacturers, wholesalers and retailers; criteria to analyze and evaluate these activities.
Prerequisite: MM 38

+ MM 51  DATA PROCESSING for RETAILERS 3 crs. 3 hrs.
Electronic data processing as an aid to retail management includes recording of data at point-of-sale, back-office data recording, inventory control, automatic ordering of staples, perpetual open-to-buy, fashion forecasting, merchandising by classification, sales trends, warehousing, accounts receivable and payable.
For Fashion Merchandising and Marketing Management majors only.

MM 81  INDEPENDENT STUDY 1-3 crs. 1-3 hrs.
Independent study of Marketing Management is developed individually between student and faculty member and must be approved by the Department.

MM 82  1-3 crs. 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interest of various student populations. It is offered for a maximum of two semesters.

MM 92  FIELD EXPERIENCE-MARKETING MANAGEMENT 3 crs. 9 hrs.
Eight hours per week of supervised field experience in marketing management, plus one hour a week devoted to seminar discussion of relevant field experience, is required.
For Fashion Merchandising and Marketing Management seniors only.
PLM 20  INDUSTRIAL and ORGANIZATIONAL PSYCHOLOGY  
(also listed as PSY 52)  
3 crs. 3 hrs.
Psychological and sociological principles relevant to the work environment of an organization. Concepts such as motivation, leadership, attitudes, testing and test discrimination, moral and organization climate, mental health and growth in the work world, and the problems of selection decisions. Some aspects of applied research included.  
Prerequisite: PSY 11

PLM 21  LABOR ECONOMICS  
3 crs. 3 hrs.
Human choices and their effect on labor markets. Topics include: wages, jobs, employment, and their compatibility with other economic goals such as price stability, growth in productivity and industrial peace.  
Pre or Corequisites: BA 31, ECO 12

PLM 22  LABOR LAW and COLLECTIVE BARGAINING  
3 crs. 3 hrs.
Pre or Corequisites: BA 12, BA 31

PLM 23  PERSONNEL: SELECTION, DEVELOPMENT and EVALUATION  
3 crs. 3 hrs.
Design, implementation and evaluation of personnel programs in the procurement, development and utilization of human resources. Job analysis, job requirements, recruitment, selection, training and compensation.  
Pre or Corequisites: BA 31, PLM 20

PLM 92  FIELD EXPERIENCE: PERSONNEL and LABOR MANAGEMENT  
3 crs. 9 hrs.
Supervised field experience in personnel and labor management environments, plus weekly classroom discussions of relevant field experiences.  
Pre or Corequisites: BA 31, PLM 20, 21, 22, 23  
For Personnel Management and Labor Relations seniors only.

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A.A.S. Degree

PERSONNEL MANAGEMENT

and

LABOR RELATIONS

Requirements—Page 90
ENGLISH DEPARTMENT
Room C-309  ext. 5849

Isidor Apertbach, Assistant Professor
Bonne August, Associate Professor
Marcia Babitt, Lecturer
Jocelyn A. Camp, Professor
Domenick Caruso, Professor
Isabella Caruso, Associate Professor
Norah Chase, Assistant Professor
Clara J. Freeman, Assistant Professor
Leonard Green, Assistant Professor
Linda Holman, Assistant Professor
Despoina Ikaris, Professor
Louise Jaffee, Professor
Loretta Kasper, Assistant Professor
David M. Keller, Professor
Ernece Kelly, Associate Professor
John B. Manbeck, Associate Professor
Inez A. Martinez, Professor
Norma Miles, Assistant Professor
Howard Nimchinsky, Professor
G. Curtis Olsen, Associate Professor
Susan O’Malley, Professor
Barbara Petrello, Assistant Professor
Eva H. Richter, Assistant Professor
Robert Singer, Assistant Professor
Dennis Sivack, Assistant Professor
Jack H. Taub, Lecturer
Robert R. Viscount, Assistant Professor
Ronald E. Walcott, Lecturer
Stephen S. Weidenborner, Professor and Chairperson
Jack S. Wolkenfeld, Professor
FRESHMAN ENGLISH PROGRAM

The City University of New York mandates that students pass the CUNY Reading Assessment Test and the CUNY Writing Assessment Test in order to advance from the sophomore to the junior year.

Kingsborough's approach to remediation emphasizes a full grounding in the reading, writing, and study skills that students need to cope successfully with their academic and career training programs. Such skills, appropriately taught at various levels, also improve student potential for passing the mandatory CUNY Tests. Students may fulfill their remediation requirements by passing the remedial/compensatory courses required of them through initial placement. CUNY retests are offered as supplementary components of ENG 04, ENG C1, and ENG C2 and, in some circumstances, are used to help determine student progress.

READING

In order to transfer from KCC into the junior year of a CUNY senior college, KCC students are required to meet the passing score on the CUNY Reading Assessment Test. KCC offers courses in remedial reading, ENG 03 and ENG 04, to help students overcome reading deficiencies and to prepare them for college-level reading assignments.

Students placed in remedial reading may complete their freshman English requirement and graduate from the college after they pass ENG 04. The concentrated instruction and practice in the full range of reading skills offered by this course should also lead to improved performance on the CUNY Reading Assessment Test.

WRITING

Students are placed in the introductory writing courses on the basis of their score achieved on the CUNY Writing Assessment Test. If the controlling score is 4, the proper English course is ENG 12. If the controlling score is 3, the required course is ENG C2 (the compensatory equivalent of ENG 12). The required course which follows both ENG 12 and ENG C2 is ENG 22. If the controlling score is 2 or 1, the non-credit required course is ENG C1 or, if the student is also deficient in reading, ENG R1.

Only those students who, on entrance to the college, score 5 or 6 on the CUNY Writing Assessment Test and pass the CUNY Reading Assessment Test at the Kingsborough cut-off score, are exempt from ENG 12. They need to take only ENG 22 to complete the Freshman English requirement.

Kingsborough's Freshman English requirement is either 4 or 8 credits. Students who are exempt from ENG 12 take ENG 22 for 4 credits. All other students need to take 8 credits of required English courses.

Prerequisite: ENG 12, or ENG C2 for all English courses numbered 30-78.

Pre or Corequisite: ENG 22 for ENG 49.

+ Basic Course

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ENG LI SH

ENG CR DEVELOPMENTAL LANGUAGE SKILLS

0 crs. 6 hrs.
(6 equated crs.)
Preliminary course in reading, writing, and academic survival skills for students whose scores fall substantially below CUNY passing grades. Emphasis is on individual assessment and development of skills in a workshop setting, with additional support services. Small group sessions are required. For students who scored one (1) or two (2), on the CUNY Writing Assessment Test and at the ENG 03 level on the CUNY Reading Assessment Test.

ENG W CORRECTIVE WRITING SKILLS *

0 crs. 2 hrs.
(2 equated crs.)
Elective course for students who scored 3-3 on the CUNY Writing Assessment Test. Offering intensive instruction in grammar, syntax, and usage, this course is designed to help students eliminate persistent errors in composition in order to enable them to pass the CUNY Writing Assessment Test. ENG W may be repeated, but only once in a 12-week semester. Students may take ENG W along with ENG C2, and they must take ENG W before or along with ENG 22 if they pass ENG C2 but have not passed the CUNY Writing Assessment Test.

ENG R1 BASIC READING and WRITING *

0 crs. 8 hrs.
(8 equated crs.)
Reading, writing, and critical thinking for students who need developmental work. Required of students who score 2-2 on the CUNY Writing Assessment Test, with a reading score below passing on the CUNY Reading Assessment Test. Requirements can be met by taking ENG 04 and ENG C1.

ENG C1 BASIC WRITING SKILLS *

0 crs. 5 hrs.
(5 equated crs.)
Introductory course in writing skills which deals with the basic elements of sentences, paragraphs, and essays in order to enable students to write college-level themes and essays. The course also develops and refines college-level reading skills. Required of students who scored two (2) on the CUNY Writing Assessment Test and either passed the CUNY Reading Assessment Test or scored at the ENG 04 level.

ENG C2 FRESHMAN ENGLISH SKILLS *

4 crs. 5 hrs.
(1 equated cr.)
Introductory reading and writing skills course emphasizing organization of paragraphs and essays. Develops understanding of how language functions in communication of facts, ideas, and attitudes. One hour per week is devoted to eliminating problems with basic elements of writing. Required of students who scored 3-3 on the CUNY Writing Assessment Test and either passed the CUNY Reading Assessment Test or passed ENG 04. Students required to take ENG 03 or ENG 04 may not take ENG C2 until the reading requirement has been met.

* Individual and small group instruction in the appropriate Skills Center, one hour a week.
+ Basic Course
ENG 03 BASIC READING SKILLS *

0 crs. 3 hrs.  
(3 equated crs.)

Helps students improve skills in reading through guided instruction and intensive practice in basic vocabulary, comprehension, and study skills.

Required of students who fail to attain the equivalent of the 8.5 grade level on the CUNY Reading Assessment Test.

ENG 04 ANALYTICAL READING *

0 crs. 4 hrs.  
(4 equated crs.)

Helps students improve reading proficiency through guided instruction and intensive practice in basic and specialized vocabulary, comprehension, and study skills development. Students read and analyze specially selected interdisciplinary materials, both in and out of class, to help them prepare for the required readings in their regular academic courses.

Required of students who fail to pass the CUNY Reading Assessment Test but have either scored above the ENG 03 level or have passed ENG 03. Students who pass ENG 04 are permitted to complete the Freshman English sequence.

* Individual and small group instruction in the appropriate Skills Center one hour a week.

ENG 12 FRESHMAN ENGLISH

4 crs. 4 hrs.

Introductory course in reading and writing skills emphasizing organization in paragraphs and essays and understanding how language functions in communication of facts, ideas, and attitudes. After passing ENG 12 students must take ENG 22.

Required of students who scored 4-4 on the CUNY Writing Assessment Test. Students who are required to take ENG 03 or ENG 04 may not take ENG 12 until they pass ENG 04 or pass the CUNY Reading Assessment Test. Students who on entrance score at least 5-5 on the CUNY Writing Assessment Test and pass the CUNY Reading Assessment Test are not required to take ENG 12 and need only ENG 22 to fulfill the KCC Freshman English requirement.

ENG 15 through 17

Designed for students in the Bilingual Studies Program. See page 147 for course descriptions.

ENG 22 VARIETIES of EXPRESSION

4 crs. 4 hrs.

Intensive study of the various types of writing students encounter in college. ENG 22 is a reading and writing skills course, using readings drawn from various subject areas as the basis for writing assignments and class discussions. These readings are organized around a unifying theme. Writing assignments build to increasingly greater length and complexity and include a research paper.

Prerequisite: ENG C2 or ENG 12

Students who are exempt from ENG 12 on admission to the College may take ENG 22.

ENG 30 INTRODUCTION to LITERATURE ●

3 crs. 3 hrs.

For students who wish a general introduction to literature. Literary genres in their cultural context, literary terms and major movements in literature.

Prerequisite: ENG 12 or ENG C2

ENG 31 CLASSICAL and BIBLICAL LITERATURE ●

3 crs. 3 hrs.

Readings in classic Western literature, including the Bible, Homer, Greek dramatists, Plato, Aristotle and Virgil.

Prerequisite: ENG 12 or ENG C2

● Appropriate writing assignments.

+ Basic Course
+ **ENG 32 WORLD LITERATURE** •

Readings, primarily from the time of Dante to the 19th century. Authors such as Dante, Austen, Cervantes, Voltaire, Goethe, Flaubert, Balzac will be included.
*Prerequisite:* ENG 12 or ENG C2

+ **ENG 35 MODERN EUROPEAN LITERATURE** •

Significant European literary works from the 19th century to the present includes authors such as Ibsen, Chekhov, Kafka, Hesse, Mann, DeBeauvoir, Duras, Woolf and Mansfield.
*Prerequisite:* ENG 12 or ENG C2

+ **ENG 40 SHORT FICTION**

Examples of short fiction including such writers as Poe, Gogol, Hemingway, Salinger, Chekhov, Ellison and Oates. Focus is on the unique position of the short story in literature.
*Prerequisite:* ENG 12 or ENG C2

+ **ENG 41 THE NOVEL** •

Introduction to the novel, including analysis of its components and themes, and study of its historical development.
*Prerequisite:* ENG 12 or ENG C2

+ **ENG 42 POETRY** •

Introduction to poetry including the different styles, forms, and themes, with attention given to their purpose and effect.
*Prerequisite:* ENG 12 or ENG C2

+ **ENG 43 DRAMA** •

An analysis of dramatic structure and a study of plays representing major dramatic styles.
*Prerequisite:* ENG 12 or ENG C2

+ **ENG 44 THE TRAGIC VISION** •

Tragic literature, from ancient times until the present is studied in an attempt to understand the patterns and changing concepts in various literary genres.
*Prerequisite:* ENG 12 or ENG C2

+ **ENG 45 THE COMIC SPIRIT** •

Comedy in prose and verse, its meaning, use, and techniques.
*Prerequisite:* ENG 12 or ENG C2

+ **ENG 46 SATIRE** •

Study of satire—the art of ridiculing human weaknesses as exhibited in their social and political activities.
*Prerequisite:* ENG 12 or ENG C2

*Appropriate writing assignments.*

*Basic Course*
ENG 49 SCIENCE FICTION

3 crs. 3 hrs.
Study of significant themes in some contemporary works in this genre. Attempt to discover non-traditional meanings of reality while relating science fiction to the literary tradition.
Prerequisite: ENG 12 or ENG C2

ENG 54 ADVANCED COMPOSITION

3 crs. 3 hrs.
This advanced course offers students the opportunity to achieve the precision, sophistication, and logical rigor associated with sound and mature written expression. Analysis and writing of extended essays based upon traditional, contemporary, and experimental rhetorical modes.
Prerequisite: ENG 22
Course does NOT satisfy Group II “Literature” requirement.

ENG 56 CREATIVE WRITING: FICTION

3 crs. 3 hrs.
Instruction and practice in the forms and types of fiction. Analysis of peer writing on a workshop basis to assist students develop mastery of the form of fiction best suited for them.
Prerequisite: ENG 12 or ENG C2
Course does NOT satisfy Group II “Literature” requirement.

ENG 57 CREATIVE WRITING: POETRY

3 crs. 3 hrs.
Instruction and practice in writing traditional and new forms of poetry.
Prerequisite: ENG 12 or ENG C2
Course does NOT satisfy Group II “Literature” requirement.

ENG 61 SEMINAR: THE HISTORY of LITERARY THEMES •

3 crs. 3 hrs.
Intensive study of how significant ideas and themes are transmitted in literature. Each semester one major theme is chosen for examination.
Prerequisite: ENG 12 or ENG C2

ENG 63 SHAKESPEARE •

3 crs. 3 hrs.
Survey of Shakespeare’s work, emphasizing his plays. Includes some consideration of his non-dramatic verse.
Prerequisite: ENG 12 or ENG C2

ENG 65 LITERATURE and FILM •

3 crs. 3 hrs.
Study of novels, plays, screenplays and films made from them. Emphasis is on different aesthetic problems facing writer and filmmaker. Time is scheduled for film viewing.
Prerequisite: ENG 12 or ENG C2

ENG 67 WOMEN in LITERATURE

3 crs. 3 hrs.
The treatment of women in various genres and eras. Consideration is given to women as writers, using sociological, psychological, mythic, and formal literary critical methods.
Prerequisite: ENG 12 or ENG C2

• Appropriate writing assignments.
+ Basic Course
+ ENG 68 GOTHIC and HORROR FICTION •

Study of major works of horror fiction, includes short stories, novels, some narrative poetry, dealing primarily with the evocation of horror, plus, attempts to trace a narrative pattern common to much horror fiction. Analysis of gothic trappings and such psychosexual creatures as vampires and werewolves, as they appear in literature.

Prerequisite: ENG 12 or ENG C2

+ ENG 71 ENGLISH LITERATURE: MEDIEVAL to NEO-CLASSICAL •

Readings in selected major works of English literature from Chaucer to Swift.

Prerequisite: ENG 12 or ENG C2

+ ENG 72 ENGLISH LITERATURE: ROMANTIC to EDWARDIAN •

Study of significant works from the time of Swift up to World War I.

Prerequisite: ENG 12 or ENG C2

+ ENG 73 AMERICAN LITERATURE: PURITANISM to ROMANTICISM •

Readings in selected major works of American literature from colonial writers to Whitman.

Prerequisite: ENG 12 or ENG C2

+ ENG 74 AMERICAN LITERATURE: THE AGE of REALISM •

Readings in selected major works of American literature from Mark Twain to World War I.

Prerequisite: ENG 12 or ENG C2

+ ENG 75 MODERN BRITISH and AMERICAN LITERATURE •

Study of English and American poetry, fiction, and drama from World War I to the present. Authors such as Yeats, Eliot, Lawrence, Faulkner, Ellison, Oates, Woolf are included.

Prerequisite: ENG 12 or ENG C2

+ ENG 77 THE ROOTS of BLACK LITERATURE •

Analysis and study of black literature in the United States and study of its history and development to 1950.

Prerequisite: ENG 12 or ENG C2

+ ENG 78 CONTEMPORARY BLACK LITERATURE •

Development and study of black literature in the United States from 1950 to the present.

Prerequisite: ENG 12 or ENG C2

ENG 81 INDEPENDENT STUDY

Independent study of English is developed individually between student and faculty member and must be approved by the Department.

ENG 82

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

• Appropriate writing assignments.
+ Basic Course
English Courses open only to students who are non-native speakers of English. Students are placed into the following English as a Second Language (ESL) courses on the basis of their performance on English skills proficiency tests.

- ESL 03 BASIC READING SKILLS for STUDENTS LEARNING ENGLISH as a SECOND LANGUAGE  
  0 crs. 3 hrs.  
  (3 equated crs.)
To help speakers of other languages improve their reading skills through guided instruction and intensive practice in basic vocabulary, comprehension, and study skills. ESL 03 is usually offered together with ESL 08.

- ESL 04 ANALYTICAL READING for STUDENTS LEARNING ENGLISH as a SECOND LANGUAGE  
  0 crs. 4 hrs.  
  (4 equated crs.)
Speakers of other languages improve reading proficiency through guided instruction and intensive practice in basic and specialized vocabulary, comprehension, and study skills development. To help prepare for required readings in regular academic courses, students are required to read and analyze specially selected interdisciplinary materials.
Required of students who fail to attain the CUNY mandated passing score on the CUNY Reading Assessment Test but have either scored above the ESL 03 level or have passed ESL 03.

- ESL 06 BEGINNING DEVELOPMENTAL ENGLISH LANGUAGE SKILLS for STUDENTS LEARNING ENGLISH as a SECOND LANGUAGE  
  0 crs. 9 hrs.  
  (9 equated crs.)
For students who have very limited English language skills proficiency, course focuses on all four language skills: listening, speaking, reading and writing. Appropriate teaching materials and ESL methodology are used in intensive units of study.

- ESL 07 BASIC LANGUAGE SKILLS for STUDENTS LEARNING ENGLISH as a SECOND LANGUAGE  
  0 crs. 9 hrs.  
  (9 equated crs.)
For non-native English speakers who demonstrate, on a battery of diagnostic tests, that they are not fluent in the use of the language, this one-semester course consists of various activities to improve English language communication skills, emphasizing correctness in structure, grammar, and vocabulary. Small group activities reinforce the skills introduced in the classroom and allow intensive, individualized practice under supervision.

- ESL 08 READING and WRITING SKILLS IMPROVEMENT for STUDENTS LEARNING ENGLISH as a SECOND LANGUAGE  
  0 crs. 6 hrs.  
  (6 equated crs.)
For non-native English speakers who demonstrate on a battery of diagnostic tests that they are not fluent readers or writers of the language, this one-semester course consists of various activities to improve those English language skills, emphasizing correctness of structure, grammar, and vocabulary. Small group activities reinforce the skills being introduced in the classroom and allow intensive, individualized practice under supervision.

- Studies are supplemented each week by required English Skills Center instruction.  
  □ Remedial Course
☐ ESL R1 BASIC READING and WRITING • 0 hrs. 8 hrs.
(8 equated hrs.)
Reading, writing, and critical thinking for students who need developmental work. Required of students who score 2-2 on the CUNY Writing Assessment Test, with a reading score below passing on the CUNY Reading Assessment Test. Requirements can be met by taking ESL 04 and ESL C1 separately.

☐ ESL C1 BASIC WRITING SKILLS • 0 hrs. 5 hrs.
(5 equated hrs.)
An introductory course in writing skills which deals with the basic elements of sentences, paragraphs, and essays (in order to enable students to write college-level themes and essays). The course continues to develop and refine college-level reading skills.
Required of students who scored two (2) on the CUNY Writing Assessment Test, and either passed the CUNY reading Assessment Test or scored at the ESL 04 level.

English Courses open only to students in the Bilingual Studies Program. Students are placed into the following English as a Second Language (ESL) courses on the basis of their performance on a series of English skills proficiency tests.

☐ + ESL 15 ENGLISH for STUDENTS whose NATIVE LANGUAGE is SPANISH 2 hrs. 12 hrs.
(10 equated hrs.)
Intensive work on the basic structures and grammar of English with development of elementary reading and writing skills. Small group sessions are required.

☐ + ESL 16 ENGLISH II for STUDENTS whose NATIVE LANGUAGE is SPANISH 2 hrs. 10 hrs.
(8 equated hrs.)
Intermediate English grammar and structure with increasing emphasis on reading and writing skills. Small group sessions are required.

☐ + ESL 17 ENGLISH III for STUDENTS whose NATIVE LANGUAGE is SPANISH 2 hrs. 8 hrs.
(6 equated hrs.)
Intensive practice in advanced reading and writing skills. Small group sessions are required.

+ SPE 23 SPEECH for FOREIGN-SPEAKING STUDENTS 3 hrs. 3 hrs.
For course description see page 245.

+ SPE 28 LANGUAGE and SPEECH for ESL STUDENTS 3 hrs. 3 hrs.
For course description see page 245.

● Studies are supplemented each week by required English Skills Center instruction.
+ Basic Course ☐ Remedial Course
ENG BW: FOUNDATIONS for COLLEGE-LEVEL WRITING  
0 hrs. 4 hrs.
Develop ability to write in a logical and coherent style with emphasis on how to prepare well organized material that says what the writer wants to say.  
Prerequisite: Enrollment in “College Now” Program.

ENG BR: FOUNDATIONS for COLLEGE-LEVEL READING  
0 hrs. 4 hrs.
Helps students increase ability to read, outline, summarize and draw conclusions from their readings.
Prerequisite: Enrollment in “College Now” Program.
**JOURNALISM**

**+ JRL 31 BASIC JOURNALISM**  
(Formerly ENG 50)  
3 crs. 3 hrs.  
Introductory course on the history of journalism: writing leads, rewrites, reporting, hard news stories, covering beats, copy preparation, research, operation of a campus newspaper, special interests. May not be taken by students who completed ENG 50 or ENG 52.  
Prerequisite: ENG C2  
Pre or Co-requisite: ENG 12

**JRL 32 ADVANCED JOURNALISM**  
(Formerly ENG 52)  
3 crs. 3 hrs.  
Further study of newspaper techniques: advanced research, in-depth coverage, interviews, sidebars, profiles, basic reviews, writing styles, headlines and typefaces, copyreading and proofreading, editorials, freedom of the press, legalities.  
Prerequisite: JRL 31

**JRL 41 COMMUNITY JOURNALISM**  
3 crs. 3 hrs.  
A practical course focusing on local concerns: community standards, problems, economics, political influences and pressures, techniques of covering local stories.  
Prerequisite: JRL 31

**JRL 42 INVESTIGATIVE and INTERPRETIVE JOURNALISM**  
3 crs. 3 hrs.  
Developing techniques of interviews, research and analysis. Students select an issue to investigate, then prepare one or more major stories researching and interpreting the information.  
Prerequisite: JRL 31

**JRL 43 THE CRITICAL REVIEW**  
3 crs. 3 hrs.  
Journalistic criticism of the arts including: literature, film, theater, architecture, art and related fields. Students read and analyze examples of criticism and write original critiques.  
Prerequisite: JRL 31

**JRL 44 FEATURE and MAGAZINE WRITING**  
3 crs. 3 hrs.  
The techniques of writing feature news stories that require understanding basic news writing combined with the ability to utilize the creative approach contained in human interest stories.
JRL 71 PRINT MEDIA PRODUCTION
2 crs. 4 hrs.
Practical course on techniques of producing a newspaper, literary magazine or yearbook. Students participate in workshops in two or more departments and handle materials at several stages of the publication. At the end of the course, students will have portfolios for presentation to potential employers.
Prerequisite: JRL 31 of Department permission.

JRL 81 INDEPENDENT STUDY
1-3 crs. 1-3 hrs.
Independent study of journalism is developed individually between student and faculty member and must be approved by the Department.

JRL 92 JOURNALISM INTERNSHIP
3 crs. 9 hrs.
Students will be placed on community newspapers or in community-relations offices for practical work in the operations of a community publication.
Prerequisite: JRL 41

A.A.S. Degree
JOURNALISM and PRINT MEDIA
Requirements—Page 86
FOREIGN LANGUAGES DEPARTMENT
Room E-309A ext. 5403

Elio Alba, Professor
Ellen Fine, Professor
Alfonso García-Osuna, Assistant Professor
Margaret R. Kibbee, Professor
Joyce Miller, Associate Professor
Julio Hernández-Miyares, Professor and Chairperson
Ronald Schwartz, Professor
FRENCH

+ FR 1 ELEMENTARY FRENCH I

4 hrs. 4 crs.

A one-year course for students with no previous training in the language, or, as indicated by the Language Placement Examination score. Emphasis on correct pronunciation through intensive oral practice, use of the language laboratory and audio-visual materials, acquisition of basic vocabulary and the elements of grammar for conversation, comprehension, reading and writing.

+ FR 2 ELEMENTARY FRENCH II

4 hrs. 4 crs.

Further development of language skills, comprehension, speaking, reading and writing. 
Prerequisite: FR 1 or acceptable Language Placement Examination score.

+ FR 3 INTERMEDIATE FRENCH I

3 hrs. 3 crs.

Progressive development of language skills, based on foundations established in elementary French. Grammar review supplemented by readings of modern French literature. 
Prerequisite: FR 2 or acceptable Language Placement Examination score.

FR 4 INTERMEDIATE FRENCH II

3 hrs. 3 crs.

Advanced grammar, composition and reading of modern French authors. 
Prerequisite: FR 3 or acceptable Language Placement Examination score.

+ FR 17 INTENSIVE REVIEW of FRENCH GRAMMAR

3 hrs. 4 crs. (4 equated hrs.)

For students who had three or more years of high school French but have not studied the language for a substantial period of time. 
Prerequisite: Acceptable Language Placement Examination score

FR 18 READINGS in MODERN FRENCH

3 hrs. 3 crs.

Rapid reading, composition and discussion in French. Readings include contemporary short stories, essays, poetry, newspaper and magazine articles and reviews. 
Prerequisite: FR 4 or equivalent or acceptable Language Placement Examination score

+ FR 22 FRENCH CONVERSATION

3 hrs. 3 crs.

Practice in conversational patterns and basic vocabulary leading to fluency in everyday situations. 
Prerequisite: FR 1 or acceptable Language Placement Examination score.

+ FR 30 FRENCH MASTERPIECES in TRANSLATION I

3 hrs. 3 crs.

For non-French speaking students, course stresses important novels, poetry and plays of 19th century French literature. Works of Balzac, Stendhal, Flaubert, as well as the Romantic and Symbolist poets are read and discussed in English.

FR 31 FRENCH MASTERPIECES in TRANSLATION II

3 hrs. 3 crs.

For non-French speaking students, course focuses on major novelists, essayists, dramatists and poets of the 20th century. Works of Gide, Proust, Malraux, Celine, Cocteau, Apollinaire, Ionesco, Sartre, Camus, Robbe-Grillet, Beckett, and others, are read and discussed in English.

+ Basic Course

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FR 51  SURVEY of FRENCH LITERATURE  
3 crs. 3 hrs.  
French literature from selected writings of representative authors from the Middle Ages through the 18th century. Instruction is in French.  
Prerequisite: FR 4 or Department permission.  

FR 53  FRENCH LITERATURE of the 20TH CENTURY  
3 crs. 3 hrs.  
Survey course of 20th century literature focuses on major poets, playwrights and novelists. Conducted entirely in French on an advanced level. Explanation of text, composition and discussion.  
Prerequisite: FR 4 or Department permission.  

FR 55  HISTORY and CIVILIZATION of FRANCE  
3 crs. 3 hrs.  
Chronological study of major French historical trends and developments up to the present. Political, literary and artistic movements highlight important individuals, ideas and periods. Selected texts representative of each period are read.  
Prerequisite: FR 4 or equivalent or Department permission.  

FR 56  ADVANCED FRENCH GRAMMAR and COMPOSITION  
3 crs. 3 hrs.  
For students who wish further French language study at an advanced level through analysis of grammar, reading and composition. Emphasis is on developing written linguistic ability.  
Prerequisite: FR 4 or equivalent or Department permission.  

FR 57  HAITIAN CULTURE and CIVILIZATION  
3 crs. 3 hrs.  
Chronological study of major trends and developments in Haitian culture and civilization from Columbus to the present. Political, literary and artistic movements, significant historical and intellectual figures and various areas of Haiti included. Instruction is in English.  

FR 71  BLACK FRENCH LITERATURE I  
3 crs. 3 hrs.  
The first period of Black French Literature (Period of Assimilation—1804-1920) and the second period (Period of Negritude—1920-1959), includes analysis of both periods, especially the major works of Dr. Price-Mars, Carl Brouard, Jacques Roumain, Leon Damas, Leon Laleau, Aime Cesaire, Paul Niger, Guy Tirolien, Leopold Sedar Senghor, Frantz Fanon.  
Prerequisite: FR 4 or equivalent or Department permission.  

FR 72  BLACK FRENCH LITERATURE II  
3 crs. 3 hrs.  
The contemporary period devoted to analysis of major works of gifted black French writers of West Indies, Africa, as Rene Depestre, Camara Laye, Bernard Dadie, Jacques S. Alexis, Mongo Beti.  
Prerequisite: FR 4 or 71 or equivalent or Department permission.  

FR 81  INDEPENDENT STUDY  
1-3 crs. 1-3 hrs.  
Independent study of French is developed individually between student and faculty member and must be approved by the Department.  

FR 82  
1-3 crs. 1-3 hrs.  
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
GERMAN

+ GER 1 ELEMENTARY GERMAN I

4 crs. 4 hrs.
One-year course, for students with no previous training in the language, or, as indicated by the Language Placement Examination score. Emphasis on correct pronunciation through intensive oral practice, use of the language laboratory and audio-visual materials, acquisition of basic vocabulary and the elements of grammar for conversation, comprehension, reading and writing.

+ GER 2 ELEMENTARY GERMAN II

4 crs. 4 hrs.
Further development of language skills, comprehension, speaking, reading and writing.
Prerequisite: GER 1 or acceptable Language Placement Examination score

+ GER 22 GERMAN CONVERSATION

2 crs. 2 hrs.
Practice in conversational patterns, basic vocabulary, leading to fluency in everyday situations.
Prerequisite: GER 1 or acceptable Language Placement Examination score

GER 51 SURVEY of GERMAN LITERATURE

3 crs. 3 hrs.
German literature with selected writings of representative authors. Analysis of literary values and movements included. Instruction is in German.
Prerequisite: Department permission.

GER 81 INDEPENDENT STUDY

1-3 crs. 1-3 hrs.
Independent study of German is developed individually between student and faculty member and must be approved by the Department.

GER 82

1-3 crs. 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semester.
HEBREW

+ HEB 1 ELEMENTARY HEBREW I

4 crs. 4 hrs.
A one-year course for students with no previous training in the language, or, as indicated by the Language Placement Examination score. Emphasis on correct pronunciation through intensive oral practice, use of language laboratory and audio-visual materials, acquisition of basic vocabulary and the elements of grammar for conversation comprehension, reading and writing.

+ HEB 2 ELEMENTARY HEBREW II

4 crs. 4 hrs.
Further development of language skills, comprehension, speaking, reading, and writing.
Prerequisite: HEB 1 or acceptable Language Placement Examination score

+ HEB 3 INTERMEDIATE HEBREW I

3 crs. 3 hrs.
Progressive development of language skills, based on the foundations established in elementary Hebrew. Grammar review supplemented by readings of modern Hebrew literature.
Prerequisite: HEB 2 or acceptable Language Placement Examination score

HEB 4 INTERMEDIATE HEBREW II

3 crs. 3 hrs.
Advanced grammar, composition and readings of modern Hebrew literature.
Prerequisite: HEB 3 or acceptable Language Placement Examination score

+ HEB 30 HEBREW LITERATURE in TRANSLATION I

3 crs. 3 hrs.
Designed for non-Hebrew speaking students, course stresses reading and analysis of Hebrew classics in cultural and historical context. All readings and discussions in English.

+ HEB 31 HEBREW LITERATURE in TRANSLATION II

3 crs. 3 hrs.
For non-Hebrew speaking students, consideration is on the emergence of Hebraic writers in the modern world. Emphasis on main literary personalities and their major contributions. All readings and discussions in English.

HEB 51 SURVEY of HEBREW LITERATURE

3 crs. 3 hrs.
Survey of modern Hebrew literature from selected writings of representative authors includes analysis of Hebraic values as reflected in their writing. Instruction is in Hebrew.
Prerequisite: HEB 4 or equivalent or Department permission.

HEB 53 HEBRAIC LITERARY MASTERPIECES

3 crs. 3 hrs.
The works of two great authors of Hebrew fiction are studied in their historical and cultural context in this comprehensive course.
Prerequisite: HEB 4 or equivalent or Department permission
HEB 54  READINGS in HEBRAIC THOUGHT

The Hebrew writings of a medieval and a modern Jewish thinker are given intensive study. Emphasis is on the linguistic and ideological aspects of these writings.

Prerequisite: HEB 4 or equivalent or Department permission

HEB 56  THE HEBREW BIBLE

Selections from the prose and poetry of the Old Testament in Hebrew. Emphasis on language, culture and the unique Hebraic values contained in these selections.

Prerequisite: HEB 4 or equivalent or Department permission

HEB 81  INDEPENDENT STUDY

Independent study of Hebrew is developed individually between student and faculty member and must be approved by the Department.

HEB 82  INDEPENDENT STUDY

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
ITALIAN

+ IT 1 ELEMENTARY ITALIAN I

A one-year course for students with no previous training in the language, or, as indicated by the Language Placement Examination score. Emphasis on correct pronunciation through intensive oral practice, use of the language laboratory and audio-visual materials, acquisition of basic vocabulary and the elements of grammar for conversation, comprehension, reading and writing.

+ IT 2 ELEMENTARY ITALIAN II

Further development of language skills, comprehension, speaking, reading and writing.

Prerequisite: IT 1 or acceptable Language Placement Examination score

+ IT 3 INTERMEDIATE ITALIAN I

Progressive development of language skills, based on foundations established in elementary Italian. Grammar review supplemented by readings of modern Italian literature.

Prerequisite: IT 2 or acceptable Language Placement Examination score

IT 4 INTERMEDIATE ITALIAN II

Advanced grammar, composition and reading of modern Italian authors.

Prerequisite: IT 3 or acceptable Language Placement Examination score

IT 18 READINGS in MODERN ITALIAN

Readings selected from contemporary short stories, novels, plays, magazine and newspaper articles, theater and cinema reviews. Rapid reading, composition and discussion in Italian.

Prerequisite: IT 4 or equivalent

+ IT 22 ITALIAN CONVERSATION

Practice in conversation on an elementary level. Emphasis on the vocabulary and idioms of everyday usage.

Prerequisite: IT 1 or equivalent

+ IT 30 LITERATURE in TRANSLATION

For non-Italian speaking students, course includes reading and analysis of representative works of Italian literature in their cultural and historical context. Reading and discussion in English.

Prerequisite: ENG 12 (see page 142)

IT 51 SURVEY of ITALIAN LITERATURE

Italian literature from selected writings of representative authors from the Renaissance to the twentieth century. Instruction is in Italian.

Prerequisite: IT 4 or Department permission.

+ Basic Course
IT 52  ITALIAN LITERATURE of the RENAISSANCE

Principal Italian authors of the Renaissance and their relation to the intellectual currents of the time. Contributions of the Italian Renaissance to Western civilization in the fields of literature, art, politics, science and education. Instruction is in Italian.
Prerequisite: IT 4 or Department permission.

IT 53  LIFE and WORKS OF DANTE ALIGHIERI

Selected readings from La Vita Nuova and La Divina Commedia, are studied within the social, political and cultural context of Dante's time. Instruction is in Italian.
Prerequisite: IT 4 or Department permission.

IT 54  READINGS in the TWENTIETH CENTURY ITALIAN NOVEL

Selected passages of novels from contemporary representative Italian authors. Class discussion includes lectures on their cultural and literary backgrounds. Instruction is in Italian.
Prerequisite: IT 4 or Department permission.

IT 70  ITALIAN CINEMA

History of Italian Cinema from the silent era and Fascist period to the present, with emphasis on postwar neorealism and the major directors of the sixties and seventies. Films in Italian with English subtitles. Instruction is in English.
Prerequisite: ENG 12 or ENG C2 (see page 141, 142)

IT 81  INDEPENDENT STUDY

Independent study of Italian is developed individually between student and faculty member and must be approved by the Department.

IT 82 1-3 hrs.

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
SPANISH

+ SPA 1 ELEMENTARY SPANISH I

One-year course designed for students with no previous training in the language, or, as indicated by the Language Placement Examination score. Emphasis on correct pronunciation through intensive oral practice, use of language laboratory and audio-visual materials; acquisition of basic vocabulary and the elements of grammar for conversation, comprehension, reading and writing.

4 crs. 4 hrs.

+ SPA 2 ELEMENTARY SPANISH II

Further development language skills, comprehension, speaking, reading and writing.
Prerequisite: SPA 1 or acceptable Language Placement Examination score

4 crs. 4 hrs.

+ SPA 3 INTERMEDIATE SPANISH

Progressive development of language skills, based on foundations established in elementary Spanish. Grammar review is supplemented by readings of modern Spanish literature.
Prerequisite: SPA 2 or acceptable Language Placement Examination score

3 crs. 3 hrs.

SPA 4 READINGS in HISPANIC LITERATURE

Advanced grammar and composition through selected readings in Hispanic literature.
Prerequisite: SPA 3 or acceptable Language Placement Examination score

3 crs. 3 hrs.

+ SPA 11 SPANISH for TEACHERS I

Teachers are introduced to Spanish language fundamentals. Development of basic conversational ability, grammar patterns, understanding writing and reading through intensive practice in the classroom. Language lab drills use computer software, audio-visual and musical materials. Different approaches for teaching Spanish to children.
OPEN to TEACHERS ONLY or Department permission.

4 crs. 4 hrs.

SPA 12 SPANISH for TEACHERS II

Further development of Spanish language skills for teachers includes: study of basic grammatical patterns; development and acquisition of new vocabulary; ample utilization of language lab and classroom drills; use of computer software, audio-visual and musical materials. Various approaches for teaching Spanish to children.
OPEN to TEACHERS ONLY or Department permission.
Prerequisite: SPA 11 or equivalent

4 crs. 4 hrs.

SPA 16 SPANISH PHONETICS

Sound system and patterns of intonation with organized development of vocabulary and idiomatic expressions. Course aims to improve pronunciation, the ability to understand and use the spoken language with fluency.
Prerequisite: SPA 4 and acceptable Language Placement Examination score

3 crs. 3 hrs.

+ Basic Course
+ SPA 17 INTENSIVE REVIEW of SPANISH GRAMMAR  
3 crs. 4 hrs. 
(4 equated crs.) 
For students who have had three or more years of high school Spanish but have not studied the language for a substantial period of time, or for Spanish native speakers with limited formal training in the language. 
Prerequisite: Acceptable Language Placement Examination score

+ SPA 18 PROPER MODELS of SPANISH GRAMMAR and CONVERSATION for NATIVE SPEAKERS  
3 crs. 3 hrs. 
For Spanish-speaking students, stress on improvement of reading and writing skills. 
Prerequisite: Native conversational ability, acceptable Language Placement Examination score and Department permission.

+ SPA 22 ELEMENTARY SPANISH CONVERSION  
3 crs. 3 hrs. 
Basic conversational skills for students who wish to use spanish language to communicate with spanish-speaking people. 
Prerequisite: SPA 2 or three years of high school Spanish or Department permission.

+ SPA 31 READINGS in SPANISH—AMERICAN LITERATURE in TRANSLATION  
3 crs. 3 hrs. 
For students who wish to explore the high points of Spanish-American literature. Instruction is in English. Open to all students.

+ SPA 32 READINGS in PUERTO RICAN HISTORY and LITERATURE  
3 crs. 3 hrs. 
For students who want to gain insight into Puerto Rican literature and culture. Depending on Spanish proficiency, students may register in either the English or Spanish sections. 
Prerequisite: SPA 4 or equivalent or Department permission.

+ SPA 33 INTERMEDIATE SPANISH CONVERSATION  
3 crs. 3 hrs. 
Intensive practice in spoken Spanish for students who wish to use the language to communicate with Spanish-speaking people, and students of Spanish in familiar situations. 
Prerequisite: SPA 2, 22 or Department permission.

+ SPA 34 SPANISH AMERICA: CULTURE, ART and MUSIC  
3 crs. 3 hrs. 
Outstanding facets of Spanish-American culture, includes all important historic, political, literary and artistic movements, individuals, ideas and periods. Grammar, literature and composition emphasized through reading selected representative authors and works of each period. Instruction is in both Spanish and English. 
Prerequisite: SPA 4 or 18 or Department permission.

+ SPA 36 SPANISH SYNTAX and COMPOSITION  
3 crs. 3 hrs. 
To improve and reinforce student skills, orthography, vocabulary, syntax, analytical writing and stylistics are stressed. 
Prerequisite: SPA 18 or acceptable Language Placement Examination score

+ Basic Course
+ SPA 40 SPANISH for STUDENTS in CAREER PROGRAMS

Introduction to fundamentals of Spanish language specifically prepared for Education Associate, Early Childhood Education, Nursing, Sports, Fitness and Recreation Leadership students. This course is not intended for native Spanish speakers.
Prerequisite: Major Program Advisor Permission.

SPA 44 ADVANCED SPANISH CONVERSATION

For students who wish to speak fluently and correctly in current idiom: Intensive practice and group discussions on general and cultural topics. Through study of selected short fiction, brief plays and journalistic materials from well known authors, students enlarge vocabulary, knowledge of native idiomatic expressions; and literary concept.
Prerequisite: SPA 3 or Department permission.

SPA 47 SPANISH BUSINESS WRITING I •

Two-semester sequence for students in the Bilingual Secretary track (see page 237). Designed to reinforce and improve writing skills stressing orthography, and development of an ample commercial and business vocabulary. Preparation, composition, transcription and editing various business letters and documents. Instruction is in Spanish.
Open to students in the Bilingual Program only.
Prerequisite: SPA 36 or acceptable Language Placement Examination score or Department permission.

• NOTE: To receive credit for SPA 47, students must complete SPA 48

SPA 48 SPANISH BUSINESS WRITING II

The second half of a two-semester sequence for students in the Bilingual Secretary track. Instruction is in Spanish. Required for students who wish to receive credit for SPA 47.
Open to students in the Bilingual Program only.
Prerequisite: SPA 47

SPA 51 SURVEY of SPANISH LITERATURE

Advanced course considers selected writings of representative authors, with analysis of literary values. Instruction is in Spanish.
Prerequisite: SPA 4 or equivalent or Department permission

SPA 52 THE LITERATURE of the GENERATION of 1898 and THEREAFTER

The literature of the period from the Generation of 1898 to 1925, including works of Garcia Lorca, Unamuno, Jimenez, and Ganivet, with emphasis on specific full-length works.
Prerequisite: SPA 4 or equivalent or Department permission.

SPA 53 SPANISH-AMERICAN LITERATURE

Survey of the significant literary production of Spanish America from colonial beginnings to the present, with special attention to major authors of the 20th century. Instruction is in Spanish.
Prerequisite: SPA 4 or equivalent or Department permission.

+ Basic Course
SPA 54  ADVANCED SPANISH GRAMMAR  3 crs. 3 hrs.
Development of skill and facility in Spanish grammar, composition and oral communication.
Prerequisite: SPA 4 or equivalent or Department permission.

SPA 55  HISTORY and CIVILIZATION of SPAIN  3 crs. 3 hrs.
Chronological study of major Spanish historical trends and developments to the present. Political, literary and artistic movements, highlight important individuals, ideas and periods are examined as selected texts representative of each period are read. Instruction is in Spanish and English.
Prerequisite: SPA 4 or equivalent or Department permission.

SPA 57  SPANISH LITERATURE SINCE the CIVIL WAR  3 crs. 3 hrs.
Main developments in Spanish literature since the outbreak of the Civil War in 1936 to date. Develop major thematic concerns of Spain’s chief novelists, essayists and poets with special emphasis on Spain’s New Wave writers who emerged after 1950. Instruction is in Spanish and English.
Prerequisite: SPA 4 or equivalent or Department permission.

SPA 70  SPANISH CINEMA  3 crs. 3 hrs.
Study of the best films and film scripts in the Spanish cinema. Instruction is in English with a view toward developing appreciation of the history, art and aesthetics of the Spanish cinema and increasing Spanish language experience.

SPA 71  PUERTO RICAN FOLKLORE  3 crs. 3 hrs.
Study of folkloric compositions of the Puerto Rican people in all forms—literary, musical, superstitions, etc; their sources and formation as influenced by all three cultural groups in Puerto Rican history: Indian, Spanish, and Black, and how they influence the Puerto Rican of today. Instruction is in Spanish and English.
Prerequisite: SPA 4 or equivalent; passing of Placement Examination to be administered

SPA 81  INDEPENDENT STUDY  1-3 crs. 1-3 hrs.
Independent study of Spanish is developed individually between student and faculty member and must be approved by the Department.

SPA 82  1-3 crs. 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
+ YID 1 ELEMENTARY YIDDISH I

4 crs. 4 hrs.

One-year course designed for students with no previous training in the language, or, as indicated by the Language Placement Examination score. Emphasis on correct pronunciation through intensive oral practice, use of language laboratory and audio-visual materials, acquisition of basic vocabulary and the elements of grammar for conversation, comprehension, reading and writing.

YID 2 ELEMENTARY YIDDISH II

4 crs. 4 hrs.

Further development of language skills, comprehension, speaking, reading, and writing.

Prerequisite: YID 1 or Department permission

LIT 1 INTERNATIONAL PERSPECTIVES in LITERATURE

3 crs. 3 hrs.

Selected works of French, Spanish and Italian literature studied in English translations. Emphasis is on national traditions, cultures and linguistic heritage, language and style of the original text. Taught, in English, by three instructors. Four weeks are devoted to each of the literature areas.

Prerequisite: ENG 12

LIT 2 LITERATURE of the HOLOCAUST

3 crs. 3 hrs.

Study of literary responses to the Nazi Holocaust. Readings selected from a variety of genres including diaries, memoirs, eye-witness testimonies, novels, plays and poetry. Emphasis on interpretation of a major historical event from both human and artistic points of view. Aspects of the Holocaust to be examined are: roles of victim, perpetrator, bystander and witness; life in the ghetto; concentration camp experiences; resistance; post-war survival and world reaction. Films and visits by survivors supplement readings.

Prerequisite: ENG 12

+ Basic Course
HEALTH, PHYSICAL EDUCATION and RECREATION DEPARTMENT
Room G-201 ext. 5696

Pat Amedure, Senior College Laboratory Technician
Le Ciardiello, Lecturer
Catherine A. Dachtera, Senior College Laboratory Technician
Ronald Gerwin, Professor
Barbara Ginsberg, Professor
   Director "My Turn" Program
Rachelle Goldsmith, Professor
   Assistant Director, "College Now" Program
Stanley J. Gross, Assistant Professor
Sherry H. Harris, Assistant Professor
Patricia Hazlewood, Lecturer
   Director, Community Health Program
Richard Kamen, Assistant Professor
Richard Kaye, Associate Professor
   Director, Sports, Fitness and Recreation Leadership Program
Judith A. Perez, Associate Professor
   Coordinator, HELM Program
Samuel Scherek, Professor and Chairperson
Louis Shor, Assistant Professor
Nikola Zlatar, Assistant Professor
Olympic-size swimming pool, one of the many outstanding sports and recreational facilities in the Health and Physical Education building.
HEALTH EDUCATION

+ HPE 12 FOUNDATIONS of HEALTH and PHYSICAL EDUCATION* 3 hrs. 3 hrs.
This fundamental course, covers a broad spectrum of health-related topics to make students aware of the causes of mental and physical illnesses and their prevention, and demonstrates how lifestyle, perceptions, and decisions affect health. Guidelines and criteria presented to determine good mental, emotional, and physical health. Opportunities for personal assessment.
*HPE 12 REQUIRED OF ALL students except students majoring in Nursing (see page 45, 88 and in Vessel Operations (see page 45, 84.).

+ HE 20 CARDIOPULMONARY RESUSCITATION 1 hr. 1 hr.
Skills required to perform cardiopulmonary resuscitation (external cardiac massage and mouth-to-mouth resuscitation). Students successfully completing the course receive American Red Cross certificates.

+ HE 31 ENVIRONMENTAL PUBLIC HEALTH 3 hrs. 3 hrs.
Public health operations in urban society including: epidemiology, radiation hazards, waste disposal, water supply protection and treatment, pesticide control, air pollution, consumer protection, swimming facilities protection, food sanitation, safety, accident prevention.

+ HE 32 PRINCIPLES of PUBLIC HEALTH 3 hrs. 3 hrs.
Public health services including organization and nature of public health programs, public health laws, patterns of medical care, health career opportunities, methods of public health education and communication techniques in working with the public.

+ HE 33 STRESS MANAGEMENT 2 hrs. 2 hrs.
To help students understand and cope more effectively with stress in their daily lives, course topics include: causes, components and consequences of stress; how to measure stress; strategies/techniques to control stress.

+ HE 35 FIRST AID and PERSONAL SAFETY 2 hrs. 2 hrs.
Principles for first aid and personal safety in terms of theory and practice of first aid procedures. Qualified students receive American Red Cross Certification. Course fulfills the safety and first aid requirement for those contemplating a teaching career.

+ HE 36 MARINE SAFETY and FIRST AID* 3 hrs. 4 hrs.
Provides knowledge and skills necessary to meet emergency medical situations and implement appropriate safety measures in a marine environment. Course completion can qualify students for American Red Cross Certification in cardiopulmonary resuscitation and first aid.
*Required of Vessel Operations Majors (see page 84).
Prerequisite: Department permission.
+ HE 40 DRUGS: the INDIVIDUAL and SOCIETY

Provides students with the opportunity to gain a deeper perspective into the psychology of the dependent personality, reasons for drug use, misuse, abuse, and possible solutions.

+ HE 52 HUMAN SEXUALITY

Information on the biological basis of sex, sexual behavior, sexual problems, sex therapy, and the social aspects of sexuality in an atmosphere conducive to free expression and inquiry.

HE 82

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

+ THE SCIENCE of NUTRITION

For course description see BIO 70 page 125 or SCI 70 page 228
PHYSICAL EDUCATION

Course Information
All Physical Education courses include the fundamental development of specifically related rules and history, skills and techniques, strategy and game experience. Fitness and lifetime carry-over values are inherent within course content. No credit will be given for repeating a course previously passed. Students should not ordinarily carry more than one Physical Education course per semester.

Medical Clearance
Neither the College nor the Department assumes any responsibility for students' participation in physical education or in athletics. Students, faculty and staff participate at their own risk. All Physical Education, athletic and recreation participants are strongly advised to have a medical check-up before participating in physical activities, and to follow the advice of their own physicians. Medical report forms are available in the Health Services Office—Room A-108.

Co-educational Activities

+ PEC 6 PHYSIOLOGICAL FITNESS and DEVELOPMENT: TRAINING with WEIGHTS
2 hrs. 3 hrs.
To increase muscle strength, endurance and cardio-respiratory efficiency, students learn to create individualized exercise prescriptions based on specific physiological needs. The anatomy and kinesiology of the systems and muscles unique to weight training are discussed. Students who completed PEC 4 will not receive credit for this course.
All the following PEC courses meet for 2 hours a week and earn 1 credit each semester.

+ PEC 2 WALK, JOG, RUN
Introduction to the principles and practices for assessing and improving cardiovascular fitness.

+ PEC 3 MODIFIED PHYSICAL EDUCATION
To meet the needs of students who have medical restrictions on the extent of physical activity permitted, the modified program includes general and specific conditioning, individual and dual activities, team sports, rhythmic activities and outdoor recreation.
Prerequisite: Open only to selected students screened by the Health Service Office, course advisors and the College physician.

+ PEC 4 TRAINING with WEIGHTS
Study of weight training techniques to increase muscle strength and endurance in relation to various sports activities and to improve physical appearance.

+ PEC 5 BODY BUILDING
Increases knowledge and appreciation of the physical attributes involved in body building. Course covers beginning, intermediate and advanced training techniques to increase muscular strength, muscular endurance and flexibility, and improve physical appearance as desired.

+ PEC 11 BEGINNING TENNIS
Basic tennis skills develop appreciation of tennis as a lifetime sport. Students learn forehand and backhand drives, Beginner's Serve, service return, net volley, rules of the singles and doubles game and understanding integration of fundamental techniques and basic strategies.
(Students must supply their own rackets and tennis balls).

+ Basic Course
PEC 12  INTERMEDIATE TENNIS
Introduction to intermediate tennis skills; the lob, mid-court volley, flat and slice serves, ball spin, and use of offensive strategy in competition. (Students must supply their own rackets and tennis balls). Prerequisite: PEC 11 or Department permission.

+ PEC 14  ARCHERY
The competitive and recreational aspects of archery, skill development and safety.

+ PEC 15  BADMINTON
Basic skills play, knowledge of rules, offensive and defensive strategy.

+ PEC 17  BASIC VOLLEYBALL
Beginner-intermediate level: Rules, basic individual skills, offensive/defensive systems, team coordination, training, conditioning, prevention of injury, evaluation of performance.

+ PEC 18  FENCING
History, skills, and theory for effective participation and appreciation of fencing. Emphasis on body mobility and weapon control for effective performance in competition.

+ PEC 19  AEROBIC DANCE
A fitness program that combines vigorous calisthenics exercises with dance steps to music for improved cardiovascular endurance, muscle toning and flexibility.

+ PEC 20  BEGINNER'S BALLET
Introduction to principles and techniques include exercises and movement combinations to develop body alignment, endurance, strength, and fluidity of movement.

+ PEC 21  JAZZ DANCE
Introduction to basic jazz techniques includes explanation of percussive movements and combinations of movements based on the forms which lead to various styles.

+ PEC 22  BASIC INTERNATIONAL FOLK DANCING
This course should be taken for pleasure, for exercise benefits typical of dancing, and as a preparation for participation in dance as an on-going, lifetime recreational activity. As the dances are learned, steps and patterns, rhythms, movements and music are introduced.

+ PEC 23  BOWLING
Basic skills for optimum performance and pleasure. Instruction for beginners will be emphasized. Experienced bowlers get helpful hints to correct faults, and improve game for competitive bowling. (Costs for activity must be paid by student.)

+ PEC 24  SKIING
The basic concepts of skiing: cross country, downhill, ski equipment purchase and maintenance, costs of skiing, conditioning exercises and places to ski. The course includes a ski trip to a local ski area. (Costs for activity must be paid by student.)

+ PEC 25  TAI CHI CHUAN
The Short Form (Yang Style) of Tai Chi Chuan—a slow, precise, non-strenuous rhythmical movement pattern for exercise, meditation, and self-defense. Appropriate for all ages.

+ Basic Course
PEC 26 GOLF
Emphasis is on mechanics of movement involved in the performance of the following basic fundamental skills: Basic Swing, Short and Long Irons, Woods, and Putting.

PEC 27 BEGINNING KARATE and SELF-DEFENSE
Introduction to formal Karate and practical self-defense techniques. History and background, fundamental stances, blocks, punches, kicks, conditioning, safety, methods of avoidance and personal self-defense movements, oriental tradition (Karate costumes, respect and Buddhist philosophy).

PEC 28 INTERMEDIATE KARATE and SELF-DEFENSE
Advanced stances, blocks, punches, kicks, conditioning, stretching exercises; advanced self-defense techniques, semi and pre-arranged and free style fighting technique, includes introduction into formal competition.
Prerequisite: PEC 27

PEC 29 INTRODUCTION to HATHA YOGA
Principles and practices for beginners, slow motion stretching, deep breathing, relaxation.

PEC 30 SWIMMING for NON-SWIMMERS and BEGINNERS
Basic skills to swim properly. Special attention given to non-swimmers who learn in shallow water. At the end of the course students will be able to jump or dive into the water, swim in a prone position and on the back.

PEC 31 LIFE GUARDING
The knowledge and skills necessary to safely assist, and/or effect water rescues, and supervise swimmers in a safe environment. At the conclusion of the course, students will be able to pass both written examination and skills test.
Prerequisite: Swimming skills equivalent to American Red Cross Swimmer Course

PEC 32 WATER SAFETY INSTRUCTOR
The skills necessary to teach swimming and water safety courses as offered by the American Red Cross. At the conclusion students will be able to pass both a written examination and a skills test.
Prerequisites: Valid American Red Cross Advanced Lifesaving Certificate and either an American Red Cross Swimmer Certificate or the ability to perform skills in the swimmer course

PEC 33 SWIMMING for FITNESS
An opportunity to improve cardiovascular fitness. Emphasis is on swimming efficiently and on swimming long distances.
Prerequisite: PEC 41 or Deep-Water Swimming Skill

PEC 34 FUNDAMENTALS of CANOEING and KAYAKING
Skills to safely paddle the canoe and/or kayak on lakes and slow-moving rivers. Emphasis on skills and safety afloat.
Prerequisite: Swimming proficiency at the American Red Cross Intermediate level

PEC 35 SNORKELING and SCUBA DIVING TECHNIQUES
Explicit step-by-step instruction for proficiency in snorkeling and scuba diving. Special emphasis on safety.
Prerequisite: Swimming proficiency at the American Red Cross Swimmer level

PEC 36 SAILING
Skills to sail aboard most common sailing vessels: leaving a mooring, coming about, jibbing, and mooring, safety skills afloat.
PEC 36  SAILBOARDING
A certified course in handling a sailboard (windsurfer). Sailing, theory, safety and physical conditioning, tacking, jibbing, self-rescue techniques. Certificate awarded on completion.

PEC 37  INTERMEDIATE SAILING
More advanced techniques of sailing include basic navigation and racing skills.
Prerequisite: PEC 36

+ PEC 38  MODERN DANCE TECHNIQUES
The fundamental principles of various schools of modern dance, includes analysis of movement, conditioning techniques, and basic combinations.

+ PEC 39  MODERN DANCE COMPOSITION
Ideas and movement forms; systematic creativity through improvisation studies, formal compositions, and critical appraisal presented through experimentations with time, space, rhythm and correlations to art, poetry and music.

+ PEC 40  PHYSICAL EDUCATION for MATURE ADULTS
For individuals who have not exercised in years and would like to start again. How to get started and what to do.

PEC 41  INTERMEDIATE SWIMMING
The elements of good swimming and a variety of skills are taught. Students practice parts of strokes as well as whole stroking movements.
Prerequisite: Ability to swim safely in deep water

+ PEC 42  SQUARE DANCE
A one-semester foundation program for learning the basic program of American Square Dancing as specified by CALLERLAB and the International Association of Square Dance Callers.

+ PEC 50  DANCE PRODUCTION
Workshops, choreography and performance. To enhance their primary focus students also give time and effort in technical theatre production and publicity. Students can earn up to a total of four credits (one each semester) for successful contribution in a particular area of the dance production.

PEC 51  INTERMEDIATE AEROBIC DANCE
For students with prior aerobic dance experience who wish to work at moderate/strenuous levels of intensity.
Prerequisite: PEC 19 or permission of instructor

PEC 52  BASIC GREEK-ROMANIAN FOLK DANCE
For those who wish to learn the numerous dances of Greece and Romania, basic steps and dances of these nations will be taught.
Prerequisite: PEC 22, or, previous folk dance experience or, permission of the instructor

PEC 53  INTERMEDIATE GREEK-ROMANIAN FOLK DANCE
More intricate steps and dances of Greece and Romania.
Not for beginner Folk Dancers.
Prerequisite: PEC 22, or, PEC 52, or previous folk dance experience, or permission of instructor

+ PEC 54  ISRAELI FOLK DANCE
For those who wish to learn the steps and numerous dances of Israel.
Prerequisite: PEC 2, or previous folk dance experience, or permission of instructor

+ Basic Course
PEC 55  INTERMEDIATE ISRAELI FOLK DANCE
For those who wish to master more intricate steps and dances of Israel.
Prerequisite: PEC 22, or PEC 54, or previous folk dance experience, or permission of instructor

PEC 59  DANCE PRODUCTION
In addition to participating in workshops, choreography and performance, students give time and effort in technical theatre production and publicity to enhance their primary focus. Up to a total of four credits (one each semester) for successful contribution in a particular area of dance production.

PEC 64  COMPETITIVE SWIMMING
For students with advanced swimming skills who wish to improve or apply them at the competitive level.
Prerequisite: PEC 41, or permission of instructor

PEC 65  AQUA EXERCISE
An overview of the scope of fitness attainable from a regulated program of exercising in water. Development of muscular strength, flexibility and increased aerobic capacity (endurance) is stressed in aqua aerobics and water exercise.

PEC 66  INTERMEDIATE HATHA YOGA
For students with prior Hatha Yoga experience, techniques for deepening practice of classical yoga postures. The relationship between yoga and health, nutrition, sports and the arts are explored.
Prerequisite: PEC 29 or permission of instructor

PEC 68  COMPETITIVE TENNIS
For students who possess advanced tennis skills and wish to improve or apply them in varsity-level competition.
Prerequisite: PEC 12, or permission of instructor

PEC 82

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a minimum of two semesters.
Following PEM and PEW courses meet for 2 hours a week and earn 1 credit each semester.

Men's Activities

+ PEM 2  BASEBALL
  Spring
  To develop individual and team techniques involved in “College Baseball.” Conditioning, sportsmanship, team play, appreciation of the game and its rules, and other benefits.

+ PEM 3  TOUCH FOOTBALL
  Fall
  History, rules and regulations of football. Individual and team skills and strategies.

+ PEM 5  BASKETBALL TECHNIQUES
  Various aspects of basketball include: basic skills, practice drills, individual and team responsibilities in man-to-man and zone defenses, offenses against man-to-man and zone defenses, coaching techniques and basketball strategy.

+ PEM 6  SOFTBALL
  Spring
  Individual and team skills developed to successfully compete is emphasized. Concomitant values include: conditioning, appreciation of team play and sportsmanship, knowledge of history and rules.

+ PEM 7  SOCCER TECHNIQUES
  Fall
  Soccer, the fastest growing team sport in the country, can be played by both sexes and all ages. Technical development, tactical understanding and appreciation of the popular sport.

+ PEM 19  BEGINNING GYMNASTICS
  Basic elements of gymnastic activity. Inherent fitness components include: strength, stamina, coordination, agility, and flexibility. Skills on the mat, parallel bars, high bar, side horse, trampoline, buck, vaulting box, long horse and rings.

  PEM 82
  1-3 crs. 1-3 hrs.
  This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

Women's Activities

+ PEW 1  SLIMNASTICS
  Each student is guided to self-appraisal of her body shape, body function and ability to relax. Exercise programs help attain desired goals for improving or maintaining a positive self-image.

+ PEW 2  BASKETBALL
  Learn about Basketball, develop individual skills required to participate successfully and learn strategies necessary for team play.

+ PEW 6  SOFTBALL
  Throwing, catching, batting and running skills are developed so the game of softball can be played with enjoyment and satisfaction. Strategies of play and rules of the game.

+ PEW 7  POWER VOLLEYBALL
  Introduction to the techniques of a highly skilled game of volleyball called power volleyball. Including history, rules, scoring, terminology, general conditioning, individual volleyball skills, team play elements, specific offense and defense tactics.

+ PEW 10  BEGINNING GYMNASIACS
  Basic elements of gymnastic activity for total body development. Strength, flexibility, balance, grace, poise, coordination, agility, timing, control, and stamina. Skills on the balance beam, trampoline, uneven parallel bars, side vaulting horse, the mats, and floor exercise.

+ Basic Course
COMMUNITY HEALTH

+ COH 11 INTRODUCTION TO COMMUNITY HEALTH SERVICES 3 crs. 3 hrs.
The determinants of health and the relationship between health and human behavior, including cultural, social, psychological and ethical issues are analyzed for their impact on illness behavior and quality of life.

+ COH 12 CRITICAL ISSUES in COMMUNITY HEALTH 3 crs. 3 hrs.
Ethical, social, legal and scientific issues underlying today's health problems. Students evaluate and relate basic health facts and concepts to critical health issues.

+ COH 13 EPIDEMIOLOGY 3 crs. 3 hrs.
Introduction to factors which determine occurrence of disease in populations. Applies basic principles to disease prevention and health promotion at institution and community levels.
Prerequisite: MAT 20 (see page 199)

COH 14 PRINCIPLES of COMMUNITY HEALTH EDUCATION 3 crs. 3 hrs.
The concepts and principles underlying present approaches to Community Health Education. Evaluation of various forms of health education intervention, identification of factors which contribute to successful small groups, community organizing efforts and supervised health education practice.
Prerequisite: COH 11

COH 20 HELPING SKILLS for COMMUNITY HEALTH MAJORS 3 crs. 3 hrs.
To teach community health students intervention strategies needed to improve the quality of their interaction within the community.
Prerequisite COH 11, PSY 11, SOC 31
SPORTS, FITNESS and RECREATION LEADERSHIP

+ REC 11  INTRODUCTION to RECREATION  
3 crs. 3 hrs.  
The historical and philosophical foundations of recreation and leisure, the study of institutions providing recreation services, and the socio-economic factors which influence the growth and development of recreation.  
For Program Majors only

REC 12  PRINCIPLES of SPORTS, FITNESS and RECREATION LEADERSHIP  
3 crs. 3 hrs.  
The importance of obtaining knowledge of human dynamics, leadership abilities and related techniques for teaching recreational skills, personnel practices, policies and supervision techniques.  
Pre or Corequisite: REC.11

+ REC 13  SOCIAL RECREATION  
3 crs. 3 hrs.  
How to conduct, plan and program social recreation activities in camps, centers, clubs, institutions and playgrounds. Under supervision, leadership is developed and performance evaluated.  
Pre or Corequisite: REC 11

+ REC 14  OUTDOOR RECREATION  
2 crs. 2 hrs.  
Trends in outdoor recreation, place of recreation leader in outdoor programs, scope and extent of programs in conservation, camping, aquatics and nature. Weekend camping trip required.

+ REC 15  SUMMER CAMP LEADERSHIP  
2 crs. 2 hrs.  
To prepare as future camp counselors, students examine basic camping philosophy, camping objectives, problems in the camping field, acquire skills and leadership essential in camp life. Weekend camping trip required.

REC 16  METHODS and MATERIALS for TEACHING FOLK and SQUARE DANCE  
2 crs. 2 hrs.  
Basic dance movements, dance positions, dance etiquette, dance terminology, and how to teach and direct folk and square dances in various forms.  
For Program Majors only

REC 31  RECREATION for SPECIAL POPULATIONS  
3 crs. 3 hrs.  
The philosophy and history of therapeutic recreation, considers areas of disability, physical development, psychological and emotional problems and social adjustment. Attitudes toward the disabled are examined and attempts made to rectify those founded on myth and misinformation. Medical terms, the role of therapeutic recreation as part of the rehabilitation team’s efforts, how to plan recreation programs to fit the needs and capabilities of specific disabilities. Two off-campus class trips to therapeutic agencies required.  
Prerequisite: REC 12

+ Basic Course
REC 32  ORGANIZATION and ADMINISTRATION of RECREATION PROGRAMS  
3 crs. 3 hrs.  
Underlying principles for effective recreation programming. Considers operation of recreation facilities, including budget, public relations, records, reports, equipment and evaluation.  
For Program Majors only.  
Prerequisites: REC 12, 31, 91

+ REC 33  SKILLS in ARTS and CRAFTS  
2 crs. 2 hrs.  
Opportunities to learn skills with various materials and to teach the use of clay, paper, paint, yarn, wire, soap and wood. Encourages creativity and provides enjoyment for all ages and special groups.

REC 34  METHODS and MATERIALS in ARTS and CRAFTS  
3 crs. 3 hrs.  
Develop maximum skill levels in arts and crafts projects. Recreational values in different programs, different techniques necessary for proper presentation of arts and crafts programs to groups of different ages and physical abilities; different methods of teaching the developed skills to special groups.  
For Program Majors only.

REC 35  RECREATION for the AGING and MENTALLY ILL  
3 crs. 3 hrs.  
Course deals with two special populations—aging and the mentally ill.  
In the area of aging, biological, psychological, and sociological aspects of aging are examined to understand the aging process, the problems affecting the aged, and gain aware of their recreational and leisure needs.  
Mental illness is a complex form of human disorder. Course approaches mental health in the framework of personal adjustment, personality integration, personal maturity and growth and social involvement. Guidelines developed enables students to prepare recreation analysis, develop leadership techniques and plan recreation programs for the mentally ill.  
For Program Majors only.  
Prerequisite: REC 31

REC 37  COMMERCIAL and INDUSTRIAL RECREATION  
3 crs. 3 hrs.  
Trends, programs and special skills involved in commercial and industrial recreation settings. Focus on history, development, administrative patterns and programs in these areas.  
Prerequisite: REC 12

REC 40  SPORT and AMERICAN SOCIETY  
3 crs. 3 hrs.  
Development of selected sports in America and of the numerous controversial contemporary issues in sport.

REC 45  ADVANCED ARTS and CRAFTS  
2 crs. 2 hrs.  
Advanced skills including macrame, enameling, weaving, stained glass and silk screen printing.  
Pre or Co-requisite: REC 33 or 34

+ Basic Course
REC 70 METHODS of COACHING TEAM SPORTS and FITNESS

Develops techniques, methods, philosophy, and skills in coaching basketball, baseball, soccer and fitness.

REC 71 METHODS of COACHING RACQUET SPORTS and SWIMMING

Developes the technical and tactical aspects of teaching and coaching tennis, racquetball, badminton and swimming.
Prerequisite: REC 70

REC 72 EXPLORING LEISURE

An examination of leisure across culture and time to help students improve their use of leisure and guide them in making decisions concerning how they use their leisure time.

REC 82

1-3 crs. 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

Field Courses

REC 91 FIELD EXPERIENCE in SPORTS, FITNESS and RECREATION I

3 crs. 6 hrs.
Students are assigned to supervised field work in a variety of community recreation agency settings. One hour seminar, field reports and class discussions of the experiences included.
For Program Majors only.
Prerequisites: REC 12, 13, 16, 34

REC 92 FIELD EXPERIENCE in SPORTS, FITNESS and RECREATION II

3 crs. 6 hrs.
Advanced field experience involves increased participation in the assigned recreation agencies, assignment to a second type of agency for varied experience, and one hour seminar.
For Program Majors only.
Prerequisite: REC 91

A.A.S. Degree
SPORTS, FITNESS and
RECREATION LEADERSHIP
Requirements—Page 93
HISTORY, PHILOSOPHY and
SOCIAL SCIENCES DEPARTMENT
Room D-309A  ext. 5417

Patrick J. Abbazia, Professor
Betty Caroli, Professor
Voorhees E. Dunn, Assistant Professor
Norman Hanover, Assistant Professor
Robert A. Hecht, Professor
Sidney Helfant, Professor
Alphonse Homeha, Assistant Professor
Bernard Klein, Professor and Chairperson
Francis Kraljic, Professor
Mitchell Okum, Professor
Arnold E. Perlmutter, Assistant Professor
Stuart Suss, Professor
   Director, "College Now" Program
Morton Wagman, Professor
AMERICAN HISTORY

+ HIS 11 AMERICAN CIVILIZATION I

3 crs. 3 hrs.
History of the American people from colonial times to the Civil War, includes: the birth and development of American society; the American Revolution; the rise of the common man; conquest of the frontier, slavery and the Old South.

+ HIS 12 AMERICAN CIVILIZATION II

3 crs. 3 hrs.
American people from the Civil War to the present includes: reuniting the country after the Civil War; the role of the Black in American society; growth of American business; immigration; the rise of the United States as a world power; American Society in the 20th century.

HIS 13 AMERICAN COLONIAL HISTORY: 1492 to 1763

3 crs. 3 hrs.
Foundations of American civilization from its European origins to the French and Indian Wars includes: the expansion of Europe; the Indian’s struggle for survival; origins of American slavery and the roots of prejudice; Puritan impact on American culture; structure and basis of American politics.

HIS 15 ERA of the CIVIL WAR: 1828 to 1877

3 crs. 3 hrs.
America, from the age of Jackson to Reconstruction, the growth of a national society, reform movements, the problem of slavery and race, sectionalism and nationalism, the Civil War and the triumph of American capitalism.

+ HIS 20 THE IMMIGRANT in AMERICAN SOCIETY

3 crs. 3 hrs.
Changing immigration pattern from the 17th century to the present. Immigrants, their motives and ambitions (background, role in American society, and contributions to American life).

+ HIS 21 POPULAR CULTURE in AMERICA

3 crs. 3 hrs.
Development of sports, fads, and folklore in America including additional significant aspects of American society from the colonial era to the present.

HIS 23 THE AMERICAN FRONTIER

3 crs. 3 hrs.
The American frontier from colonial times to the 20th century. Discussion includes the impact of the frontier on the settler, confrontation between Indian and settler, the settler’s efforts to tame the American wilderness, the cotton and cattle kingdoms, the problem of law and order in the West, and the continuing legacy of the frontier in American society and culture.

+ HIS 41 THE INDIAN in AMERICAN HISTORY

3 crs. 3 hrs.
History of the American Indian from Columbus to the present. Indian culture, its place in Indian history, Indian-white conflict, Indian problems in contemporary American society.

+ Basic Course
+ HIS 50  THE BLACK in AMERICAN HISTORY  
Study of Black Americans within the context of American civilization. Their role in the growth of the nation is examined to understand their contributions, their problems and the attitudes of all Americans, black and white, on the issue of race.

+ HIS 55  HISTORY of ITALIAN AMERICANS  
The circumstances of Italian immigration to the United States from the colonial period to the present. The Italians’ contributions to American culture, their treatment in American literature, and the changes they experienced in their own lives, as a result of living in the United States.

HIS 58  AMERICAN REVOLUTION and the EARLY NATIONAL PERIOD: 1763 to 1828  
The unique nature of American colonial society and the forces that led to the American Revolution, the process of nation building, the problems facing an underdeveloped country, the birth of the two party system, and the struggle for national sovereignty.

+ HIS 59  MODERN AMERICA: 1920 to PRESENT  
Development of the United States from 1920 to the present. The Jazz Age, the Great Depression, the New Deal, World War II, the Cold War, the Civil Rights Revolution, and the protest movements of the 1960’s.

+ HIS 60  HISTORY of AMERICAN THOUGHT  
Development of American thought from the colonial period to the present. The ideas and values which influenced and directed American society.

+ HIS 62  HISTORY of NEW YORK CITY  
The history of the City of New York from its founding to the present. New York City’s development; its history; its origin as a Dutch trading post; position in colonial culture and society; role in the American Revolution and the founding of the American Republic; growth as a great commercial, transportation, manufacturing, and banking center; citizens’ attitude toward slavery and race relations; importance as the center of immigration; growth and expansion into neighboring communities; and its problems and difficulties as a modern megalopolis.

+ HIS 68  WOMEN in AMERICAN HISTORY  
Examination of the status of women in the United States from colonial times to the present, the European precedents for the treatment of American women, the attempts to alter women’s opportunities and rights, and the nature of reform movements in America.

HIS 69  AMERICAN JEWISH HISTORY  
Study of Jews within the context of American History, with emphasis on the settlement of America as part of the Diasporic experience. The historical causes for the unique aspects of American Judaism, economic and geographical mobility, the Jewish labor movement, the radical intellectuals of the ‘30’s, and contemporary issues.
WORLD HISTORY

+ HIS 31 EUROPE: NAPOLEON to HITLER, 1789 to 1945 3 crs. 3 hrs.
A social, cultural, political, and economic approach to the development of European civilization from the French Revolution to the 20th century. Emphasis is on industrialism, nationalism, imperialism, world wars, and totalitarianism.

+ HIS 32 MODERN CHINA 3 crs. 3 hrs.
The reshaping of China and its revolutionary role in the modern world.

+ HIS 33 AFRICA: PAST and PRESENT 3 crs. 3 hrs.
The historical development of Africa with emphasis on the cultural interchange, colonialism and the nationalist revolts, new governments and the problem of modernization, conflicts of interest of the great powers, and 20th century nationalistic rivalries.

HIS 34 MILITARY HISTORY 3 crs. 3 hrs.
Study of modern military history, the strategic, tactical, and technological factors relating to warfare including: classic warfare; the age of limited war, modern nationalism and total war, modern guerrilla and contemporary warfare.

HIS 35 UTOPIAN DREAMERS and the WESTERN WORLDS 3 crs. 3 hrs.
Examination of Utopian thinkers and thought as a significant expression of Western culture. The major works in the Utopian tradition and the historical backgrounds in which they were produced.

+ HIS 36 EUROPE in the TWENTIETH CENTURY 3 crs. 3 hrs.
The transformation of European society in the 20th century. The political, military, economic and cultural factors as well as the social and technological changes which gave the 20th century its unique character.

+ HIS 37 THE MIDDLE EAST: WORLD WAR I to the PRESENT 3 crs. 3 hrs.
Analysis of the major political, social, religious, economic and cultural developments in the Near East: attempts of Islamic society to adjust to the Western way of life; the rise of nationalism, the emergence of the State of Israel and the role of oil in world diplomacy.

HIS 38 REVOLUTION and POLITICAL PROTEST in AFRICA: 1860 to the PRESENT 3 crs. 3 hrs.
Historical causes for political protest and revolution in sub-Sahara Africa as well as the prospects for non-violent political change. Emphasis is on the anti-colonial reactions, insurrections and the role of the military in shaping African society.

+ Basic Course
HIS 42  THE CARIBBEAN: 1492 to the PRESENT

Development of the Caribbean Islands from 1492 to the present, including pre-Columbian cultures, European colonization and rivalries, slavery, and the development of modern Caribbean culture.

HIS 43  THE HISTORY of the PUERTO RICAN IMMIGRANT

The history of Puerto Rico from pre-Columbian times to the modern era. Focus will be on the nature of and reasons for Puerto Rican immigration to the mainland, the development of Puerto Rican communities in North American urban centers, and the migration back to Puerto Rico.

HIS 44  THE NAZI HOLOCAUST

The rise of Nazism and its legislative, political, and destructive machinery; the internal life of the Jew in the Ghettos and Concentration Camps; the Jewish Councils and Resistance movements; the attitude of the “Free World,” the Allies, the Church; negotiations for rescue; the scope of the Final Solution, and the literature of the holocaust.

HIS 51  THE ANCIENT WORLD

Origins of civilization and the emergence of the great cultures of the Near East. The religious, social, economic, and political ideas and institutions of Egypt, Mesopotamia, the Hebrews, Greece, and Rome, which shaped Western civilization.

HIS 52  WESTERN CIVILIZATION: MIDDLE AGES to the 18th CENTURY

The main themes of Western civilization from the Middle Ages to the 18th century. The nature of medieval society, birth of modern capitalism, expansion of Europe, the Renaissance, religious revolution of the 16th century, emergence of modern science, and the Age of Reason.

HIS 53  RUSSIAN HISTORY: 1860 to the PRESENT

Reform and revolution in Russia and the establishment of the Soviet regime, analysis and evaluation of the U.S.S.R. under its several leaders.

HIS 56  WITCHCRAFT—AN HISTORICAL STUDY

History of witchcraft from its beginning in the ancient Near East to the great witch-hunts in Europe and America and its decline in the age of skepticism, the 17th and 18th centuries.

HIS 57  LATIN AMERICAN HISTORY

The development of Latin America from colonial times to the present, the intermingling of cultures, ideas, and the formation of a Latin American civilization.

HIS 64  MODERN JEWISH HISTORY

History of the Jewish people from the mid-17th century to the present. Topics include: the Messianic and Hassidic movements, enlightenment, emancipation and assimilation, the rise of new religious forms, the great migrations, nationalism, anti-semitism, the growth of Hebrew and Yiddish literature, the emergence of Zionism and the establishment of the State of Israel.
HIS 65 MODERN RADICAL MOVEMENTS in WESTERN CIVILIZATION
3 crs. 3 hrs.
The ideological basis of industrialism, laissez-faire, doctrines of reform and transformation, the correlated movements in the 19th and 20th centuries. Topics include: emergence of post-democratic totalitarianism in Russia, Italy, and Germany, contemporary expressions of Socialism, Marxism-Leninism, and revisionist views of liberalism and democracy.

+ HIS 67 JEWISH HISTORY: POST-BIBLICAL TIMES to the ENLIGHTENMENT
3 crs. 3 hrs.
High points of Jewish development from the Babylonian exile to the mid-17th century. Topics include: the role of the exile, Ezra and Nehemiah, the political, social and religious developments during the Second Commonwealth, the Talmud and its influence, the relationship with Christianity and Islam and the communal institutions developed in the various parts of the Diaspora.

+ HIS 70 HISTORICAL GEOGRAPHY
3 crs. 3 hrs.
Geographic sources, their interpretation and evaluation and development of student’s geographical sense to gain greater insight and understanding in learning history, or any other liberal arts discipline. A survey of the history, methodology and various theoretical approaches to geography, practical training in map reading skills, interpretation and library organization and utilization.

HIS 81 INDEPENDENT STUDY
1-3 crs. 1-3 hrs.
Independent study of History is developed individually between student and faculty member and must be approved by the Department.

HIS 82
1-3 crs. 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
PHILOSOPHY

+ PHI 71  HISTORY of PHILOSOPHY: THE CLASSICAL PHILOSOPHERS  3 crs. 3 hrs.
Philosophical thought and its influence on modern man with emphasis on classical Greece, India, and China. Focus is on the work of Plato, Aristotle, Confucius, Lao Tsu.

+ PHI 72  HISTORY of PHILOSOPHY: THE MODERN PHILOSOPHERS  3 crs. 3 hrs.
Philosophical thought from the Renaissance to the present with emphasis on Cartesian thought, natural religion, skepticism, idealism and existentialism. Focus is on the work of Descartes, Spinoza, Hume, Nietzsche, Kierkegaard.

PHI 73  LOGIC: THEORIES of ARGUMENTATION  3 crs. 3 hrs.
Introduction to the basic theories of argumentation in their evolution from Plato and Aristotle to contemporary theories. Principles of logic, scientific method, and their application.

PHI 74  ETHICS: A STUDY of ETHICAL PROBLEMS  3 crs. 3 hrs.
Ethical and moral theories from the Greek philosophers to the present. Problems which are constant in human history will be examined against the background of various classical and modern writers.

PHI 75  AESTHETICS: THEORIES of the BEAUTIFUL  3 crs. 3 hrs.
Study of the aesthetic experience in the philosophies of Plato, Aristotle, Schopenhauer, Nietzsche and Kierkegaard. Examination of the criteria of the theories of beauty with reference to art, literature and music.

PHI 81  INDEPENDENT STUDY  1-3 crs. 1-3 hrs.
Independent study of Philosophy is developed individually between student and faculty member and must be approved by the Department.

PHI 82  1-3 crs. 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
POLITICAL SCIENCE

+ POL 50 CLASH of POLITICAL IDEAS: INTRODUCTION to POLITICAL THEORY 3 crs. 3 hrs.
Selected major political philosophers from Plato to Machiavelli from Locke and Rousseau to Hegel and Marx. What are the bases for political leadership, political obligation, majority rule and minority rights?

+ POL 51 AMERICAN GOVERNMENT and POLITICS 3 crs. 3 hrs.
Structure of the national government and the way it operates includes discussion of our democratic system, the three branches of government (executive, legislative and judicial), political parties, pressure groups, and current legislation.

+ POL 52 COMPARATIVE GOVERNMENT 3 crs. 3 hrs.
The major types of political systems in selected foreign countries includes study of the role of ideology, economics, elite groups, political institutions, comparison of Western and non-Western systems, with emphasis on Britain, France, Germany, Italy, the Soviet Union and selected African, Asian, and Latin American countries.

+ POL 53 STATE and LOCAL GOVERNMENTS and POLITICS 3 crs. 3 hrs.
The role of state and local governments in the American Political system particularly New York State, New York City and representative urban problems. Governmental structure is presented as the permanent yet changing framework within which urban-centered political action takes place.

+ POL 54 THE AMERICAN PRESIDENCY 3 crs. 3 hrs.
Description and analysis of the Presidency as a post-World War II political institution. An historical introduction to the role of the President, the growth of the Presidency from 1789 to the present, and the factors currently affecting presidential elections, and presidential powers.

+ POL 55 PUBLIC OPINION 3 crs. 3 hrs.
Mass media’s impact on the political process and the public’s impact through the polling technique, public opinion and propaganda, the contribution of the mass media and polling, the linkages of public opinion, decision-making, political socialization and the problem of political analysis.

+ POL 56 URBAN COMMUNITY RELATIONS 3 crs. 3 hrs.
Course involves the political nature of our society; the concerns of the man on the street as he relates to government; the ways the community initiates political action and responds to policies and services received from the government. Urban Community Politics grow from the ethnic, racial, religious, economic and geographic neighborhoods. Majority-minority groups increasingly function as political blocs within and outside of political party lines. The average citizen, seeking social and economic goals through political activity, is more concerned about public services than political structures.
POL 57 THE POLITICS of ECONOMICS: INTRODUCTION to POLITICAL ECONOMY 3 crs. 3 hrs.
Political economy within a social, political and historical context and the problems of recession, inflation and resource insufficiency. "Getting and spending" and their concomitant politico-economic costs and benefits are dealt with in discussions and readings which are institutionally oriented rather than theoretically contrived. Attention is on existing and emerging public agencies and their constituencies, and on the nature of policy making and administration.

POL 58 WORK EXPERIENCE SEMINAR 3 crs. 3 hrs.
Combination of work experience in political/social/governmental activity with study of the structural and functional role of selected offices in our political system. Theoretical understanding of the role of public officials/agencies serves as the basis for class reports. Work experience must total a minimum of 90 hours.
Prerequisites: POL 51, 53, 56, 61 or Department permission.

POL 59 INTERNATIONAL RELATIONS 3 crs. 3 hrs.
Analysis of the role of America in international relations with emphasis on sovereignty, state power, colonialism, imperialism, nationalism and ideologies, the role of international organizations and law, collective security and regionalism in the maintenance of international order.

POL 61 PRINCIPLES of PUBLIC ADMINISTRATION and PUBLIC AGENCIES 3 crs. 3 hrs.
The practice of American public administration emphasizing the role of bureaucracy in the American political system, political environment of public-sector administrative units, process of policy-making and policy implementation in the American political context, policy-making function of administrators and their relationships with other factors in the political process.
Prerequisite: POL 51 or 53 or Department permission.

POL 63 INTRODUCTION to CRIMINAL JUSTICE 3 crs. 3 hrs.
Introduction to the criminal justice system in the United States, includes study of crime and the three elements which comprise the criminal justice system: police, courts and corrections. Attention is given to civil liberties issues which involve the procedural due process rights of persons accused of crime.

POL 65 CIVIL RIGHTS and LIBERTIES 3 crs. 3 hrs.
The central American heritage issues of freedom and equality of opportunity, the development of freedom of speech, press, religion, guarantees of assembly and petition, civil rights, women's rights, and affirmative action.
**POL 81 INDEPENDENT STUDY**

1-3 crs. 1-3 hrs.

Independent study of Political Science is developed individually between student and faculty member and must be approved by the Department.

**POL 82**

1-3 crs. 1-3 hrs.

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semester.

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**BSS 1 BEHAVIORAL and SOCIAL SCIENCE:**

THE INDIVIDUAL & HIS/HER WORLD

3 crs. 3 hrs.

*The concepts and methodologies of sociology, psychology, economics, political science and history helps students understand issues of current significance.*

*Prerequisite: Enrollment in "College Now" Program.*
# COMPUTER PROGRAMMING

COMPANY PROGRAMMING courses are offered as electives to all students.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
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<tbody>
<tr>
<td>+ CP 11</td>
<td>INTRODUCTION to COMPUTERS and COMPUTER APPLICATIONS</td>
<td>4</td>
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<td></td>
<td>Computer literacy course introducing uses of computers in society; components</td>
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<td>of a computer system; input/output devices; flowcharting and programming in</td>
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<td>BASIC, and other programming languages. Computer Applications includes word</td>
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<td>processing, spreadsheets, graphics, and database management systems; computer</td>
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<td>concepts and information processing, as an area of general knowledge for the</td>
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<td></td>
<td>informed individual and how the computer can be used as a tool at home and at</td>
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<td></td>
<td>Computer Data Processing Majors and students who completed BA 60 or DP 11</td>
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<td>WILL NOT receive credit for this course.</td>
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<td>Prerequisite: Passing Score on CUNY Mathematics Examination Test</td>
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<td>+ CP 28</td>
<td>MICROCOMPUTER APPLICATIONS in EDUCATION</td>
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<td>Introduction to computers through software teaching, mathematics and the</td>
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<td>sciences, and the elements of the language LOGO. Participants develop their</td>
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<td>own skills and explore methods of presenting these concepts to children.</td>
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<td></td>
<td>Prerequisites: Intermediate Algebra, MAT 03 or Department permission.</td>
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<tr>
<td>+ CP 29</td>
<td>INTRODUCTION to COMPUTER PROGRAMMING for SECRETARIAL/OFFICE ADMINISTRATION</td>
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<td>STUDENTS</td>
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<tr>
<td></td>
<td>Programming in the BASIC language with more emphasis on string and character</td>
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<td>manipulation and less on mathematical programming. Hands-on experience using</td>
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<td></td>
<td>IBM microcomputer, disk operations and proper use of a printer for producing</td>
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<td>hard copy.</td>
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<td></td>
<td>Open to Secretarial Word/Information Processing Majors only.</td>
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<td></td>
<td>Prerequisite: Elementary Algebra or MAT R2, or score of 25 or higher on Math</td>
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<td>Placement Examination</td>
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<tr>
<td>+ CP 30</td>
<td>INTRODUCTION to BASIC</td>
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<td>BASIC, a general-purpose computer language used in conversational mode and</td>
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<td>time-sharing computer centers. A simple and natural language requiring</td>
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<td>minimum programming skills, brings an appreciation of the power of a computer</td>
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<td>This hands-on course, with direct interaction between students and the</td>
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<td>computer, problems in mathematics, sciences and social sciences awakens and</td>
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<td>augments student interest in problem areas of today's civilization.</td>
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<td>Prerequisite: MAT 03 or equivalent</td>
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<tr>
<td>+ CP 31</td>
<td>BASIC II</td>
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<td>A second course in computer programming using the language BASIC, includes</td>
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<td>arrays, matrix manipulation, introduction to file and data management,</td>
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<td>sequential and direct access files with various applications, computer</td>
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<td>graphics and games.</td>
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<td>Prerequisites: CP30 and MAT 03 or equivalent</td>
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</table>

+ Basic Course

192
CP 32 APPLICATIONS of BASIC to COMPOSITION

3 crs. 3 hrs.

Computer programming concepts which relate to the working musician. The theoretical basis behind the use of the microcomputer in synthesized music and, using IBM BASIC, practical musical applications are attempted.

Prerequisites: A music theory course at the level of MUS 12 or 32 (see page 203 or 205) and completion of mathematics remediation as mandated by the CUNY Skills Assessment Test.

+ CP 35 INTRODUCTION to APL

4 crs. 4 hrs.

APL, a powerful computer language developed in the early 1960's for application to math and science has broadened its capability to include applications in Business, Computer Assisted Instruction, text analysis and statistical analysis. Students have "hands-on" experience at APL terminals for programming practice and assignments.

Prerequisite: MAT 03 or equivalent

+ CP 51 PROGRAMMING in FORTRAN

4 crs. 4 hrs.

Flow-charting using the FORTRAN program language for business and scientific applications. Programs written by students will be run on the remote job entry communication network connected to the University Computer Center.

Prerequisite: MAT 03 or equivalent

+ CP 52 INTRODUCTION to COBOL PROGRAMMING

4 crs. 4 hrs.

Programming in COBOL (COMMON BUSINESS ORIENTED LANGUAGE), considers typical business applications. Programs written by students will be run on the remote job entry communication network connected to the University Computer Center. Recommended elective for students to learn to program a computer using a language oriented to the solution of business problems. Students who completed DP 31 will NOT receive credit for this course.

Prerequisite: MAT 01, or Elementary Algebra, or MAT R2

+ CP 54 INTRODUCTION to PASCAL

4 crs. 4 hrs.

Programming in PASCAL. Students write and run several scientific and commercial programs. Course serves as preparation for other higher-level languages. Recommended as an elective for Computer Data Processing Majors.

Prerequisites: Familiarity with at least one programming language and MAT 03 or equivalent. Students who completed CS 12 will NOT receive credit for this course.

CP 66 COMPUTER GRAPHICS and DESIGN

4 crs. 4 hrs.

The concepts and structures of modern computer graphics and computer aided design. Applications for presentation and business graphics, computer-aided design and drafting, engineering graphics. Hands-on experience with computers for programming practice and assignments.

Prerequisite: DP 54 or CP 11 or BA 60 or Department permission.
CS 12  INTRODUCTION to COMPUTING with PASCAL  4 crs. 4 hrs.
Algorithms, programs, data representation, debugging and verification of programs. Numeric and non-numeric programming applications include searching and sorting algorithms, function and procedures, and number theory problems. Programming is done in the PASCAL language and structured program design is stressed.
Students who completed GP 54 will NOT receive credit for this course.
Corequisite: MAT 14

CS 14  COMPUTERS and ASSEMBLER LANGUAGE PROGRAMMING  5 crs. 5 hrs.
Computer structure, machine language and assembler language programming. Digital representation of data; addressing techniques; macro, machine and assembler instruction sets. Emphasis on computing techniques for numerical applications is supplemented by several computer projects. The computer projects will be run on the remote job entry communication network connected to the University Computer Center.
Prerequisite: CS 12

CS 35  DISCRETE STRUCTURES  5 crs. 5 hrs.
Sets, Matrices, Relations and Digraphs, Functions, Order Relations and Structures, Trees and Languages, Semigroups and Groups, Finite-State Machines and Languages.
Prerequisite: MAT 56

CS 37  PROGRAM DESIGN and ANALYSIS  4 crs. 4 hrs.
Introduction to data structures using PASCAL. Topics include: structures, arrays, stream files, stacks, recursive processes, recursive procedures and elementary simulation techniques.
Prerequisite: CS 12

CS 81  INDEPENDENT STUDY  1-3 crs. 1-3 hrs.
Independent study of Computer Science is developed individually between student and faculty member and must be approved by the Department.

CS 82  1-3 crs. 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

A.S. Degree
COMPUTER SCIENCE
Requirements—Page 58
DATA PROCESSING

DATA PROCESSING courses do not satisfy Group V requirements.

+ DP 11 INTRODUCTION to DATA PROCESSING

4 hrs. 4 crs.
Introduction to the concepts, structure, and operation of electronic data processing systems including: components of a computer system; input/output devices; principles of arithmetical operation, decimal, binary and hexadecimal; coding representations of information in computers; flowcharting and coding of problems; machine language and assembler language programming; introduction to procedure-oriented languages such as BASIC and COBOL, and to IBM assembler language programming.
Not open to students who are required to take MAT M1
Prerequisite: MAT 01 or Elementary Algebra

DP 12 ASSEMBLER LANGUAGE PROGRAMMING

5 hrs. 5 crs.
Assembler language programming and typical business applications. Programs written by students will be run on the remote job entry communication network connected to the University Computer Center.
Prerequisites: TWO of the following: DP 31, 55; CP 30, 51, 54

DP 13 ADVANCED ASSEMBLER LANGUAGE PROGRAMMING

4 hrs. 4 crs.
Advanced assembler language programming techniques and sophisticated applications. Programs written by students will be run on the remote job entry communication network connected to the University Computer Center.
Prerequisite: DP 12

DP 31 COBOL PROGRAMMING

5 hrs. 5 crs.
Structured COBOL programming and typical business applications. Programs written by students will be run on the remote job entry communication network connected to the University Computer Center.
Prerequisite: DP 11

DP 32 ADVANCED COBOL PROGRAMMING

4 hrs. 4 crs.
Magnetic tape and disk programming in COBOL. Introduction to operating systems including: system control and system service programs such as the Supervisor, Job Control, and the Linkage Editor; interaction of the control program and the problem program within the systems environment; Job Control Language; program libraries; channels and interrupts; data management and IOCS; Sequential Access Method; Indexed Sequential Access Method; Direct Access Method; utility programs; multiprogramming considerations; introduction to Virtual Storage; Paging; Virtual Storage Access Method.
Prerequisite: DP 31

+ DP 54 MICROCOMPUTER APPLICATIONS I

4 hrs. 4 crs.
Introduction to microcomputer applications used in data processing environments including: microcomputer hardware, microcomputer operating systems, word processing systems, and electronic spreadsheets.
Prerequisite: DP 11 or BA 60 or "C" grade or better in CP 11

+ Basic Course
DP 55  MICROCOMPUTER APPLICATIONS II

Microcomputer applications used in a data processing environment. Introduction to database management systems, and integrated software systems and packages.
Prerequisite: DP 11 or BA 60 or "C" grade or better in CP 11

DP 56  MICROCOMPUTER APPLICATIONS III

Microcomputer applications used in a data processing environment including: microcomputer operating systems, graphics, microcomputer architecture and hardware, telecommunications, connecting personal computers via a local area network, and other selected topics.
Prerequisite: DP 55

DP 58  USING and PROGRAMMING in UNIX/XENIX

Introduction to the UNIX operating system and to programming using its functions and subprograms including: file structures, directories, security, utility programs, pointers, functions, screen handling with termcap definitions and interfaces to languages and data bases.
Prerequisites: DP 56 PLUS one of the following: CP 51, 54, DP 31, 55

DP 59  PROGRAMMING in C

Introduction to Programming in the C language including: variables, definitions, pointers, functions, loops, arrays, screen handling and interfaces to UNIX and other languages.
Prerequisites: TWO of the following: CP 30, 51, 54, DP 31, 55

DP 61  SYSTEMS ANALYSIS

3 hrs. 3 hrs.

Tools and methods used by management to develop systems for computer applications including: system investigation, input design, output design, file design, documentation, system testing, system implementation, hardware and software.
Prerequisite: ONE of the following: DP 12, 31, 55

DP 63  DATABASE PROCESSING

4 hrs. 4 hrs.

Introduction to concepts and structures necessary to design and implement a Database Management System (DBMS) using FOCUS, a Fourth Generation computer language. Students prepare reports, describe external files, describe and maintain FOCUS files, Batch and online processing, interactive programming techniques, design user friendly screen formats, work in a mainframe CMS environment, learn basic VM/CMS commands and use the editor, XEDIT.
Prerequisite: DP 55

DP 81  INDEPENDENT STUDY

1-3 hrs. 1-3 hrs.

Independent study of Data Processing is developed individually between student and faculty member and must be approved by the Department.

DP 82

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
MATHEMATICS

MAT M1 BASIC MATHEMATICS
0 crs. 4 hrs.
(4 equated hrs.)
Arithmetic stressing quantification and manipulative skills and applications for students who are deficient in that subject.
NOTE: Students may attempt the CUNY Math Skills Exam at terms end. Students who pass this course, but do not pass the CUNY Exam, then take MAT M2.
Required of all students who score 14 or less on the CUNY Math Skills Exam.

MAT M2 ALGEBRA
0 crs. 4 hrs.
(4 equated hrs.)
Introductory algebra for students who completed MAT M1 but have not passed the CUNY Math Skills Exam. Course stresses solution of elementary algebraic equations, word problems and applications.

MAT R2 INTRODUCTORY MATHEMATICS
0 crs. 5 hrs.
(5 equated hrs.)
Introductory algebra for students whose skills do not meet the CUNY Math Skills Exam standards. Course stresses elementary solution of algebraic equations, word problems and applications.
NOTE: Required of all students who score between 15 and 19 on the CUNY Math Skills Exam. During their first semester, freshmen who scored between 21 and 24 on the mathematics test should use the tutoring services, and the skills material in the Media Center and the Math Skills Center, to upgrade their skills.

MAT B3 IMMERSION PROGRAM
0 crs. ½ hr.
(½ equated hr.)
Intensive review of arithmetic and elementary algebra for students who failed the CUNY Math Skills Exam with a score of 20 to 24. Course ends with administration of the CUNY Exam.

MAT 01 ELEMENTARY ALGEBRA
0 crs. 4 hrs.
(4 equated hrs.)
Comprehensive treatment of the topics outlined for the Ninth Year course by the University of the State of New York and some topics in geometry.
Not open to students who have taken MAT 05 or equivalent.

MAT 03 ELEVENTH YEAR MATHEMATICS
0 crs. 4 hrs.
(4 equated hrs.)
Same course as Eleventh Year Mathematics in high school.
Prerequisite: MAT 01, R2, M2 or Elementary Algebra

MAT 3 BUSINESS and CONSUMER MATHEMATICS
3 crs. 3 hrs.
Credit cards; insurance (automobile, life, health and property insurance); compound interest; savings plans; mortgages; checkbook records; taxes and income tax forms. Recommended to non-transfer students.
Not open to students who have taken MAT 03 or equivalent.
Prerequisite: Competence in Mathematics Placement Examination
MAT 6  MATHEMATICS of FINANCE
4 crs. 4 hrs.
Mathematical concepts readily applicable to business situations including: logarithms, progressions, simple and compound interest, equations of equivalence, nominal and effect rates, simple annuities, ordinary general annuities, amortization, depreciation, sinking funds, stocks and bonds, introduction to life insurance and graphic presentation of data.
Prerequisite: MAT 03 or equivalent

MAT 7  PRINCIPLES of MATHEMATICS
4 crs. 4 hrs
A basic course in mathematical discovery. Students participate in the development and investigation of topics such as: number sequences, calculating devices, extrapolation, mathematical mosaics and curves, probability and topology.
Not open to students who have taken a mathematics course number 11 or higher or Intermediate Algebra or MAT 03.
Prerequisite: MAT 01, R2, or Ninth Year Mathematics

MAT 9  UNDERSTANDING MATHEMATICS: A PRACTICAL APPROACH
4 crs. 4 hrs.
Primarily for Education Associate Program students, mathematics laboratory equipment is used to gain insight into basic mathematics concepts and principles which are further developed through formal discussions and the completion of a required term project.
Prerequisite: MAT 01 or R2

MAT 10  COLLEGE TRIGONOMETRY
3 crs. 3 hrs.
Functions, graphing techniques, angle measurement, functions of right angles, linear interpolation, inverse functions, laws of Sines and Cosines, circular functions, formulas, identities, waves and conditional equations.
Open to students who have had intermediate algebra, but not trigonometry. It can be taken with, or before, MAT 14. Taken with MAT 14, will adequately prepare students for MAT 15.

MAT 11  FINITE MATHEMATICS
4 crs. 4 hrs.
Analysis of polls, linear programming by graph, introduction to probability, games and game theory, Markov chains, growth and decay problems, savings plans, annuities, amortization and other problems in the mathematics of management, such as PERT, simulation and forecasting. Calculators and/or minicomputers are used to do calculations. Designed as an elective for liberal arts or business students interested in some practical problems solved by mathematics.
Prerequisite: MAT 03 or equivalent

MAT 12  CONCEPTS of MODERN MATHEMATICS I
4 crs. 4 hrs.
Introduction to the spirit of mathematical investigation and mathematical logic including: the prime numbers, the Fundamental Theorem of Arithmetic, the rational and irrational numbers, tiling, congruence and number bases. Students may take MAT 12 and/or MAT 13 during the same or different semesters in either order.
Prerequisite: MAT 03 or equivalent

Basic Course
MAT 13 SURVEY of MATHEMATICS and COMPUTER CONCEPTS
4 crs. 4 hrs.
To introduce A.A. and A.A.S. students to several branches of mathematics, topics include: probability and statistics, computer programming, logic, the real number system, and linear programming. Students may take MAT 12 and/or MAT 13 during the same or different semesters in either order.
Prerequisite: MAT 03 or equivalent or "A" grade in MAT 7

MAT 14 ANALYTIC GEOMETRY and PRE-CALCULUS MATHEMATICS
4 crs. 4 hrs.
This pre-calculus course stresses real numbers, fields, open sentences, functions and relations, and serves as an introduction to analytic geometry and to probability.
Recommended for students planning to continue with calculus and/or mathematics electives. Not open to students who completed Advanced Algebra or MATH 12A in high school.
Prerequisite: MAT 03 or equivalent

MAT 15 CALCULUS I
4 crs. 4 hrs.
The first part of a three-semester integrated course in the elements of coordinate geometry, differential and integral calculus, with applications. Algebraic functions of a single variable, the derivative, differentiation formulas, and application to geometry, physics and maximization.
Not open to students who completed at least one term of calculus in high school.
Prerequisites: Advanced Algebra, 12th yr. high school math or MAT 14, PLUS passing grade on 11th yr. Regent's Math Exam or MAT 10

MAT 16 CALCULUS II
4 crs. 4 hrs.
Continuation of MAT 15, with emphasis on transcendental functions, special methods of integration, and hyperbolic functions.
Prerequisite: One term of high school calculus or MAT 15

MAT 20 ELEMENTS of STATISTICS
3 crs. 3 hrs.
Introduction to probability and statistics including: tabulation and graphing of distributions, central and dispersion tendencies, comparison techniques, correlations and predictive techniques. Instruction and practice in the use of desk calculators and the basic language.
Recommended for students planning careers in economics, education, psychology, sociology, data processing and environmental technology.
Prerequisites: Intermediate Algebra, MAT 03

MAT 21 CALCULUS III
4 crs. 4 hrs.
Continuation of MAT 16 with emphasis on partial differentiation, polar coordinates, multiple integration, solid geometry, vectors, and hyperbolic functions.
Prerequisite: MAT 16 with "C" grade or better

MAT 23 HISTORY of MATHEMATICS
4 crs. 4 hrs.
History of mathematics from Babylonian and Egyptian civilizations to the present. Emphasis is on mathematics as a cultural force in the development of Western civilization.
Recommended for prospective teachers of junior high school and secondary school mathematics.
Prerequisite: MAT 11 or higher

+ Basic Course
MAT 24  INTRODUCTION to the THEORY of NUMBERS
3 crs. 3 hrs.
The classical number theory, and such related topics as divisibility, congruences, quadratic residues, continued fractions, Diophantine equations, prime and perfect numbers.
Prerequisite: MAT 11 or higher

MAT 25  COLLEGE GEOMETRY
4 crs. 4 hrs.
Geometry is presented as a branch of contemporary mathematics involving the interrelated study of Euclidean plane and solid geometry with an introduction to non-Euclidean geometrical systems.
Prerequisite: MAT 03 or Intermediate Algebra

MAT 55  DIFFERENTIAL EQUATIONS
3 crs. 4 hrs.
The solution of ordinary linear differential equations, operational techniques, solution by series, numerical solutions, Laplace transforms, and applications in engineering and the sciences.
Prerequisite: MAT 16 with "C" grade or better

MAT 56  LINEAR ALGEBRA
3 crs. 4 hrs.
Study of vector spaces, matrix algebra transformation, and vector analysis.
Prerequisite: MAT 15 with "C" grade or better

MAT 57  BOOLEAN ALGEBRA for ELECTRICAL ENGINEERS
2 crs. 2 hrs.
Introduction to Boolean Algebra and switching theory for electrical engineers. Boolean postulates, definitions, principles and theorems; applications, special forms of Boolean expressions. Logic circuits and diagrams; tabular, consensus and map methods of minimization.
Prerequisite: MAT 16

MAT 81  INDEPENDENT STUDY
1-3 crs. 1-3 hrs.
Independent study of Mathematics is developed individually between student and faculty member and must be approved by the Department.

MAT 82
1-3 crs., 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

A.S. Degree
MATHEMATICS
Requirements—Page 64
MUSIC DEPARTMENT
Room T-8206 ext. 5528

Eleanor Cory, Assistant Professor
Monroe Couper, Assistant Professor
Marta Ghezzo, Professor
Charles Jacobs, Distinguished Professor
Kwatei Jones-Quarley, College Laboratory Technician
Simeon Loring, Professor and Chairperson
William B. McKinney, Professor
Edward Rohrlich, College Laboratory Technician
MUSIC

Courses required for Music Majors may be open to other students with Department permission.

+ MUS 1  BASIC SKILLS: THEORY
  1 cr. 2 hrs.
  Review of basic skills in Music Theory and Ear Training.

+ MUS 2  BASIC SKILLS: PIANO I
  1 cr. 1 hr.
  Beginning piano course for music majors.
  Prerequisite: MUS 30 or equivalent

+ MUS 3  BASIC SKILLS: PIANO II
  1 cr. 1 hr.
  Second piano course in this sequence for music majors.
  Prerequisite: MUS 30 or equivalent
  MUS 1, 2, and 3 required of Music majors who have not demonstrated competency in these areas.

+ MUS 4  PIANO I *
  1 cr. 1 hr.
  Beginning course for music majors in the Special Music Program (Local 802).
  Prerequisite: MUS 30 or equivalent

MUS 5 PIANO II *
  1 cr. 1 hr.
  The second course in this sequence for music majors in the Special Music Program (Local 802).
  Prerequisite: MUS 30 or equivalent

+ MUS 12  HARMONY I *
  3 crs. 3 hrs.
  Introduction to traditional harmony: chords, functions, voice leading, inversions, figured bass.
  Beginning analysis. Basic exercises in composition and copywork.
  Prerequisite: MUS 1, or equivalent or Department permission.
  Corequisite; MUS 16

MUS 13  HARMONY II *
  3 crs. 3 hrs.
  Prerequisite: MUS 12
  Corequisite: MUS 17

MUS 14  CHROMATIC HARMONY and COUNTERPOINT I *
  3 crs. 3 hrs.
  Seventh chords; chromatic harmony including secondary dominants, borrowed chords and augmented-sixth chords; beginning modulation. Introduction to 18th-century counterpoint. Appropriate analysis, composition and copywork.
  Prerequisite: MUS 13
  Corequisite: MUS 18

* Open ONLY to students in the Special Music Program (Local 802)
+ Basic Course
MUS 15 CHROMATIC HARMONY and COUNTERPOINT II *

Chromatic harmony including Neapolitan sixth and diminished seventh chords, altered mediants, ninth, eleventh and thirteenth chords; further studies in modulation. 18th-century counterpoint: studies in small binary forms and two-part inventions. Appropriate analysis, composition and copywork.
Prerequisite: MUS 14
Corequisite: MUS 19

MUS 16 EAR TRAINING I *

2 hrs.
plus supplemental laboratory assignment
Training for aural perception of music. Concentration on accurate recreation/identification of rhythms and diatonic melodies (in major and minor keys) through sightsinging and dictation. Musicanship and aesthetic aspects of sightsinging emphasized.
Corequisite: MUS 12

MUS 17 EAR TRAINING II *

2 hrs.
plus supplemental laboratory assignment
Prerequisite: MUS 16
Corequisite: MUS 13

MUS 18 EAR TRAINING III *

2 hrs.
plus supplemental laboratory assignment
Continuation of MUS 17. Advanced melodic and harmonic chromaticism, complex rhythmic patterns, recognition of all intervals, introduction of two-part dictation progressing to four-part dictation of primary triads.
Prerequisite: MUS 17
Corequisite: MUS 14

MUS 19 EAR TRAINING IV *

2 hrs.
plus supplemental laboratory assignment
Continuation of MUS 18. Increasingly complex rhythmic and chromatic problems, leading to metrically ambiguous atonal melodies. Four-part choral dictation will conclude with complete settings of Bach chorales.
Prerequisite: MUS 18
Corequisite: MUS 15

+ MUS 21 INTRODUCTION to JAZZ

3 hrs.
Historical approach to the jazz idiom through readings and guided listening. Topics include: the roots of jazz music, New Orleans jazz, Chicago style, Kansas City style, swing, bebop, new wave, and progressive jazz.

* Open ONLY to students in the Special Music Program (Local 802)
+ Basic Course
+ **MUS 22 MUSIC of the TWENTIETH CENTURY**
3 crs. 3 hrs.
Introduction to the varied sounds of 20th century music. Emphasis on major musical achievements of the century by European and American composers, including Stravinsky, Bartok, Schonberg, Gershwin, Bernstein, Copland and Cage.

+ **MUS 23 INTRODUCTION to SONGWRITING**
3 crs. 3 hrs.
Song composition for beginners. Music notation, melody writing, chord choice, song forms, setting words to music, score and lead sheet preparation.
Prerequisites: ENG C2 or ENG 12 (see page 141 or 143) and Department permission.

+ **MUS 24 OPERA**
3 crs. 3 hrs.
Development of Opera, its sociological and political aspects, and its rich and varied literature in the Baroque, Classic, Romantic, and Modern Eras. Renowned operatic masterworks included.

+ **MUS 27 MUSIC of the WORLD’S PEOPLE**
3 crs. 3 hrs.
A listening survey of various folk and ethnic music forms performed and practiced worldwide by various social groups. Songs and dances associated with love, war, and rites of passage; evocative forms; drumming, chanting; instruments and languages as related to the musical forms; social, geographic, historical elements and their musical relevance.

+ **MUS 30 RUDIMENTS of THEORY**
3 crs. 3 hrs.
A first course in music theory for students with no previous musical training, but an interest in acquiring basic skills in music reading, writing, and performance. Topics include: note reading and writing in treble and bass clef, major and minor scales, intervals and chords.

+ **MUS 31 THE MUSICAL EXPERIENCE**
3 crs. 3 hrs.
Development of perceptive awareness of music through guided listening. Materials and forms of music and their use in musical literature.

**MUS 32 THEORY of MUSIC I •**
3 crs. 3 hrs.
Prerequisite: MUS 1 or Department permission
Corequisite: MUS 36

**MUS 33 THEORY of MUSIC II •**
3 crs. 3 hrs.
Voice leading, inversions, phrase structure and cadences. Exercises in analysis, composition and copywork.
Prerequisite: MUS 32
Corequisite:MUS 37

- Required for MUSIC MAJORS or Department permission.
+ Basic Course
MUS 34 THEORY of MUSIC III ●
Principles of harmonic progression, harmonization, non-harmonic tones. Exercises in analysis, composition and copywork.
Prerequisite: MUS 33
Corequisite: MUS 38

MUS 35 THEORY of MUSIC IV ●
Seventh chords, secondary dominants, borrowed chords; beginning modulation. Exercises in analysis, compositions and copywork.
Prerequisite: MUS 34
Corequisite: MUS 39

MUS 36 EAR TRAINING I ●
Study of elementary sight-singing and dictation in conjunction with fundamental musicianship; notation, rhythms, key signatures, and expressive musical elements. Develops aural perception and ability to sight-sing melodies and rhythms.
Prerequisite: MUS 1 or Department permission.
Corequisite: MUS 32

MUS 37 EAR TRAINING II ●
Sight-singing and dictation of melodies (major and minor modes), rhythms, intervals; two-part dictation; elements of expression as integral part of sight-singing.
Prerequisite: MUS 36
Corequisite: MUS 33

MUS 38 EAR TRAINING III ●
Syncopation, modulation, compound time signatures, chord recognition (triads and seventh chords), chromatic elements, introduction to harmonic dictation.
Prerequisite: MUS 37
Corequisite: MUS 34

MUS 39 EAR TRAINING IV ●
Harmonic dictation; the chromatic and modal systems, application of all previous training.
Prerequisite: MUS 38
Corequisite: MUS 35

● Required for MUSIC MAJORS or Department permission.
MUS 40 MIDI (Musical Instrument Digital Interface) STUDIO OPERATIONS
1 cr. 1 hr.
Hands-on study of interaction and operation of electronic instruments found in a typical commercial MIDI studio; drum machine, multi-channel synthesizer, intelligent MIDI switch box, special effects processor. Equipment is used with an IBM P.C. to produce a stereo cassette recording.
Prerequisite: MUS 12 or 30

MUS 41 SEQUENCING
2 crs. 2 hrs.
Hands-on introduction to the operation of music sequencing software for the IBM P.C. Students use the sequencer programs to create original music.
Prerequisite: MUS 12 or 30

MUS 42 SOUND SYNTHESIS
3 crs. 3 hrs.
Introduction to state-of-the-art micro-computer applications in music composition. Topics include: MIDI Protocol, Digital Sound Synthesis, MIDI driven Sequencer, Patch Librarian Software.
Prerequisite: MUS 12 or 30

MUS 45 THE MUSIC WORKSTATION
1 cr. 2 hrs.
Study and operation of the music workstation, a multi-function electronic unit containing synthesizer, drum machine, and special effects processor. Students use the Korg MI workstation, a music-industry standard.
Prerequisite: One previous electronic music course

MUS 51 MUSIC LITERATURE •
3 crs. 3 hrs.
Study of the form and content of standard Western art-music repertoire through scores and records; biographical overview of famous composers and, use of expressive terminology. Formal/analytic concepts (cadence, phrase structure, binary, ternary, variation, rondo, sonata-allegro, etc.). Stylistic characteristics of the major Western musical epochs are examined.
Prerequisite: MUS 30

MUS 52 MUSIC LITERATURE II •
3 crs. 3 hrs.
Examines form and content of famous cantatas, oratorios, operatic literature, overtures, concertos, and symphonies by the world’s great composers.

MUS 61, 62, 63, 64 PERFORMANCE and PRACTICE •

MUS 65, 66, 67, 68 PERFORMANCE and PRACTICE •
3 crs. 3 hrs.
A four-semester sequence. In addition to required participation in music department performing ensembles, students receive 7 1/2 hours (scheduled on a weekly basis) of individual instruction. Acceptance into the course is based on an audition to demonstrate readiness to begin on the literature of the first semester. At the end of each semester students perform before a jury. Students who fail this examination may not continue the course sequence. Under special circumstances, petition for a new audition will be considered.
Courses in the sequences described may not be repeated.

* Required for students in the Special Music Program (Local 802)
• Required for MUSIC MAJORS or Department permission
MUS 91 CHORUS *•
(Spring and Fall)
1 cr. 3 hrs.

MUS 92 BAND *•
(Spring and Fall)
Concert Band; Stage Band; Guitar Ensemble or Percussion Ensemble.
1 cr. 3 hrs.

MUS 93 ORCHESTRA *•
(Spring and Fall)
1 cr. 3 hrs.

MUS 94 CHORUS
(Winter and Summer)
½ cr. 1½ hrs.

MUS 95 BAND
(Winter and Summer)
½ cr. 1½ hrs.

MUS 96 ORCHESTRA
(Winter and Summer)
½ cr. ½ hrs.

* Music Majors MUST be in one of these Performing groups EACH semester. Students may participate in more than one of the above performing groups each semester. However, credit is allowed for only one activity.

* Required for students in the Special Music Program (Local 802)
• Required for MUSIC MAJORS or Department permission

A.S. Degree

MUSIC

Requirements—Page 67

HUM 1 HUMANITIES: FREEDOM and CONTROL: CULTURE in the 20th CENTURY
3 crs. 3 hrs.
Course explores literature, drama, art, and music in today's world. Attempts are made to place 20th century developments into an historical context and illustrate the continuity of culture.
Prerequisite: Enrollment in "College Now" Program
NURSING DEPARTMENT
Room M-401 ext. 5522

Patricia Bartley-Daniele, Assistant Professor
Laura DiCapua, Senior College Laboratory Technician,
   Adjunct Lecturer
Valerie Gill, Assistant Professor
Barbara Gurski, Professor
Gloria P. Hartman, Associate Professor
Joanne Lavin, Assistant Professor
Pamela Mahon, Instructor
Sylvia F. Martin, Professor
Marjorie McDonough, Assistant Professor
Susan Piva, Assistant Professor
Theresa M. Rodin, Assistant Professor
Dolores Shrimpton, Assistant Professor
Delores Washington, Associate Professor and Chairperson
NURSING

To matriculate for the Nursing A.A.S. degree, students MUST first complete the Pre-Nursing Curriculum Sequence of the College. With few exceptions, no student will be permitted to enter the Nursing Program from any but the Pre-Nursing curriculum sequence.

Up to 5% of the students who are admitted to the Nursing Program may be allowed directly into the first Nursing course and can thus complete the program in four semesters. These students are selected on the basis of their high school admission average, CUNY Placement Scores and Nursing Department approval.

Students who are admitted to the Pre-Nursing Curriculum sequence must comply with the following:

a.) Complete any required remediation prior to completion of the four courses in the Pre-Nursing sequence;

b.) Complete the Pre-Nursing sequence of four courses: ENG C2, 12, or 22 (if exempt from ENG 12); PSY 11; BIO 11; SCI 25;

c.) Complete these four courses with either a 2.5 grade point average of 2 B’s (one of which must be in SCI 25 or BIO 11) and 2 C’s;

d.) Students who repeat courses in the Pre-Nursing sequence, due to unsatisfactory initial grades, must achieve a minimal index of 2.5 in the sequence. The unsatisfactory grade will be calculated with the repeat grade to reach an average for the course;

e.) All grades received for courses taken in the Pre-Nursing sequence, either at Kingsborough or at other colleges, will be included in determining the Pre-Nursing index. All grades for these courses will be included, whether or not transfer credit is granted;

f.) Satisfactory score on the National League for Nursing Pre-admission Test;

g.) Passing score on the CUNY Reading, Writing, and Mathematics Assessment Tests.

Students who successfully complete the Pre-Nursing sequence as described above, may then formally file for a change of curriculum into the Nursing Program to work toward the A.A.S. degree.

Admission into the program will be based on a combination of facts including, space availability, pre-nursing index and NLN Pre-Admission test results. On completion of 25 credits attempted at Kingsborough, students who fail to meet the transfer requirements into the Nursing Curriculum will be transferred into the Liberal Arts (A.A.) Degree program, or be required to file application to transfer to another degree program. Exception to this rule can be made only by the Nursing Department Admission Committee.

Change of curriculum forms are available in the Registrar’s Office (A-101). Completed forms must be filed in the Nursing Office (M-401) during the Fall or Spring semester in which students expect to complete the Pre-Nursing sequence.

Students who complete the Pre-Nursing sequence during the Summer Module will be evaluated for the Nursing Program in the following Spring Semester. Students who complete the Pre-Nursing sequence during the Winter Module will be evaluated for the following Fall Semester.

Students accepted into the Nursing Program who are Licensed Practical Nurses may receive credit for NUR 18 (Fundamentals of Nursing) by passing the National League for Nursing Mobility Profile Examination in “Fundamentals” with a score of 70% or better.

Credit for NUR 17 (Drug Calculations in Nursing), may be obtained by passing a Nursing Department examination with a score of 70% or better.

Information is available in the Nursing Office (M-401)
Retention Criteria

Criteria for retention in the Program mandates that students must:

a) receive no more than two grades under "C" in any pre or corequisites; no more than one grade under "C" in the Biological and Physical Sciences; no more than one grade under "C" in Behavioral Sciences;

b) earn a minimum grade of "C" in every required Nursing course;

c) repeat only once, any required Nursing course in which an unsatisfactory initial grade was received;

d) repeat totally no more than two (2) required nursing courses because of an unsatisfactory initial grade.

As of Fall 1983, Nursing students who enter NUR 17 and 18 for the first time MUST complete the Nursing Program within four years from the date of entry into core nursing courses. Students who risk not completing the program within four years will be encouraged to seek academic counseling. Students who do not complete the program in four years may appeal to the appropriate college committee.

Any student who has not attended nursing courses for two or more consecutive years cannot be readmitted into the Nursing Program unless qualifying examinations have been passed in sequential order in the courses previously completed. In accordance with the retention criteria of the Nursing Department, qualifying examinations can be repeated only once.

Drug Calculation Policy

As of Fall 1989, NUR 17, "Drug Calculations in Nursing" is a pre or corequisite of NUR 18 and a prerequisite to all other nursing courses. Throughout the rest of the program, drug knowledge and skills will be integrated and tested in every nursing course.

PRE-NCLEX RN Examination

As of Spring 1992, all students will be required to take the PRE-NCLEX RN examination while enrolled in their last clinical nursing course.

Malpractice Insurance—Health Clearance

Prior to registration, students entering nursing courses in which there are laboratory experiences in hospitals are required to have malpractice insurance, health clearance and a CPR certificate. Insurance policy, CPR certificate, health clearance must be valid for entire entering semester. Information on malpractice insurance and CPR is available in the Nursing Department (M-40); health clearance information, from the College Health Services Office (A-108).

Legal Limitations for State Licensure

Requirements for licensure as a registered nurse in New York State include having attained the age of eighteen years or more, the successful completion of the A.A.S. Program in Nursing, passing the National Council Licensure Examination and being of good moral character. The Office of Professional Discipline investigates all applicants with prior criminal conviction(s) and/or pending criminal charges (felony or misdemeanor). Following its investigation, a determination will be made as to the applicant’s eligibility for licensure.
Nursing Courses Must Be Taken in the Following EXACT Sequence:

+ NUR 17 DRUG CALCULATIONS in NURSING 1 cr. 1 hr.
  How to compute the proper drug dosage for oral, injectable and intravenous medication to be administered to infants, children and adults.
  Prerequisites: MAT M1, M2 and MAT R2, if necessary
  Pre or Corequisite: NUR 18 or equivalent

+ NUR 18 FUNDAMENTALS of NURSING 7 crs. 13 hrs.
  Introduction to basic nursing knowledge, skills, understanding, and the dependent and independent functions of the nurse. During lecture and laboratory sessions, facts, principles and concepts, derived from the biological and behavioral sciences, are applied to common elements of nursing care. Laboratory sessions will be on or off campus in hospitals or other health agencies.
  Pre or Corequisites: BIO 11, 12; PSY 11; SCI 25; ENG 12 (or C2, or 22 if exempt from ENG 12)
  Pre or Corequisite: NUR 17

NUR 21 NURSING the ILL ADULT I 9 crs. 16 hrs.
  Methods of nursing during illnesses which are major health problems to society. Nursing intervention, based on physiological and psychological needs of adult patients. Classroom and laboratory sessions provide opportunities to adapt and combine nursing skills needed when caring for patients with such health problems as: infectious processes, accidents, respiratory, cardiopulmonary, nutrition and elimination disorders. Laboratory sessions will be on or off campus in hospitals or other health agencies.
  Prerequisites: NUR 17, 18
  Pre or Corequisite: BIO 51 (see page 124)
  NOTE: BIO 51 must be taken BEFORE or WITH NUR 21. Nursing students cannot continue in NUR 21 if they withdraw from BIO 51.

NUR 20 NURSING the EMOTIONALLY ILL 4 crs. 14 hrs.
  (one-half semester)
  Introduction to intricacies of nursing emotionally ill individuals. How emotional illness affects the needs of individual and family; how to relate concepts and principles of psycho-dynamics to the behavior of these patients. Laboratory sessions will be on or off campus in hospitals or other health agencies.
  Prerequisite: NUR 21
  Corequisite: PSY 32
  Recommended: SOC 31, ENG 22

NUR 22 NURSING the ILL ADULT II 5 crs. 17 hrs.
  (one-half semester)
  Continuation of NUR 21, includes lecture and laboratory sessions on major health problems related to interference with normal cellular growth, with mobility and on concepts of long-term illness and rehabilitation. Laboratory sessions will be on or off campus in hospitals or other health agencies.
  Prerequisite: NUR 21
  Pre or Corequisite: PSY 32
  Recommended: SOC 31, ENG 22

+ Basic Course
NUR 19 FAMILY-CENTERED MATERNITY NURSING
4 crs. 14 hrs.
(one-half semester)
Introduction to family-centered maternity nursing. Lecture and laboratory sessions present facts, principles and concepts relevant to the care of individuals and families during the reproductive years of the life-cycle. Laboratory sessions will be on or off campus in hospitals or other health agencies.
Prerequisites: NUR 20, 22
Pre or Corequisite: SOC 31

NUR 23 NURSING of CHILDREN
5 crs. 17 hrs.
(one-half semester)
Introduction to nursing care of children, from infancy through adolescence, and of their families. Learning experiences include health care maintenance of children as well as concepts relevant to hospitalized children. Laboratory sessions will be on or off campus, in hospitals or other health agencies.
Prerequisites: NUR 20, 22
Pre or Corequisite: SOC 31

NUR 24 ISSUES in NURSING
1 cr. 1 hr.
Survey of the beginning nurse practitioner as an individual and as a member of the nursing profession. Major facts in the history of American nursing, on legal aspects, issues and trends in nursing. Open to fourth semester nursing students only.
Corequisites: NUR 19, 23

Electives

+ NUR 41 EMERGENCY HEALTH CARE
2 crs. 2 hrs.
Introduction to: existing and potential environmental hazards; planning and implementation of precautions in daily living; basic structure and function of the healthy heart and circulatory system; techniques of taking the vital signs, and of basic life support for cardiopulmonary emergencies; enhanced knowledge of environmental hazards, increased skills in identifying, preventing, and taking appropriate action(s).

+ NUR 42 PARENTING
3 crs. 3 hrs.
The attitudes and functions of the American family during the childbearing and child-rearing years. Discussions relate to areas of parenting that assist in developing approaches to satisfactory family life.

+ NUR 43 PERSPECTIVES on DEATH and DYING
3 crs. 3 hrs.
Examines the dynamics of death and dying for the purpose of understanding one's own feelings and attitudes so that meaningful assistance may be given to the dying individual and the family. The ethical/moral and legal problems arising from such controversial issues as advanced medical treatment, strategies, abortion, suicide and euthanasia.
Prerequisites: PSY 11, SOC 31

+Basic Course
NUR 44  DIET in HEALTH and ILLNESS  

2 crs. 2 hrs.

The nature of food and fluid intake in healthy and in ill individuals. Cultural differences, age variables, and dietary modifications.

Pre or Corequisite: BIO 11

NUR 82

1-3 crs. 1-3 hrs.

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
John Blunt, Associate Professor
Harvey F. Carroll, Professor
  Director, Engineering Science Program
Gearlen M. Crump, Senior College Laboratory Technician
Anthony D. Dilemnia, Associate Professor
  Fisheries and Marine Technology
Sidney L. Emerman, Associate Professor
Aston G. Gillies, Senior College Laboratory Technician
Miles Goodman, Associate Professor and
  Chairperson
Baila G. Gulkowitz, Senior College Laboratory Technician
Samuel Jaffe, Associate Professor
Laxman Kanduri, Lecturer
  Fisheries and Marine Technology
Thomas O. Meeks, Associate Professor
Kenneth R. Neuberger, Associate Professor
Irving Resnick, Professor
Rose K. Rose, Professor
Harvey A. Yablonsky, Professor
CHEMISTRY

☐ CHM 01 PREVIEW of GENERAL CHEMISTRY

0 crs. 2 hrs.
(2 equated credits)

Lecture and workshop introduces chemical nomenclature, symbolism, structure of atoms and molecules, simple chemical reactions and basic stoichiometry. Mathematics and solution of simple verbal problems, included. Critical reading of chemistry texts. Students receive intensive help with weak areas.

Corequisite: MAT 03 or equivalent

+ CHM 11 GENERAL CHEMISTRY I

4 crs. 6 hrs.

Two-semester classroom and laboratory course. First term introduces: chemical equations, stoichiometry, chemical nomenclature, atomic structure, periodic properties, bonding, (especially of carbon compounds), the gaseous, liquid and solid states, phase changes, electrolytes, and the properties of selected elements in relation to environmental problems.

Prerequisites: MAT 03 or equivalent, CHM 01 or competence on Department Placement Examination.

CHM 12 GENERAL CHEMISTRY II

4 crs. 6 hrs.

Study of chemical kinetics, equilibrium, acids, bases, and salts, weak electrolytes and pH, solubility, thermochemistry, electrochemistry, and transition metal chemistry. Laboratory experiments includes classical and modern chemistry methods.

Prerequisite: CHM 11

CHM 13 GENERAL CHEMISTRY LABORATORY

2 crs. 4 hrs.

Laboratory course for respiration therapy students who successfully completed the equivalent of one year of General Chemistry Theory at the Metropolitan Hospital School of Respiration Therapy and need the laboratory component. Upon successful completion of this course, credit will be granted for CHM 11-12.

Open to students in the Metropolitan Hospital Respiration Therapy Program only.

CHM 31 ORGANIC CHEMISTRY I

5 crs. 9 hrs.

Modern concepts of organic chemistry includes: structure and bonding reaction mechanisms, stereochemistry, nomenclature and synthesis; relationship between structure and reactivity of the functional groups representing the principal classes of organic compounds. Laboratory covers fundamental operations of organic chemistry including determination of physical properties, experimental reactions and procedures, basic instrumentation and analysis.

Prerequisite: CHM 12

CHM 32 ORGANIC CHEMISTRY II

5 crs. 9 hrs.

Continued study of structure and reactivity of organic compounds including: structure and bonding, nomenclature, synthesis, stereochemistry and reaction mechanisms of the important functional groups of organic compounds. Laboratory covers basic processes of organic chemistry, advanced instrumental methods, study of functional groups and derivatives and qualitative organic analysis. Select students may be introduced to research methods.

Prerequisite: CHM 31

+ Basic Course

☐ Remedial Course
CHM 40 FOOD ANALYSIS

3 crs. 5 hrs.

Chemical tests used by food analysts. Emphasis is on use and understanding of good analytical techniques, including gravimetric, volumetric and spectrophotometric methods. Procedures for screening, and for routine quality control, plus the official tests for fats, proteins, carbohydrates, and selected minor nutrients. For Food Science Majors and other interested students.

Prerequisite: CHM 12

CHM 81 INDEPENDENT STUDY

1-3 crs. 1-3 hrs.

Independent study of Chemistry is developed individually between student and faculty member and must be approved by the Department.

CHM 82

1-3 crs. 1-3 hrs.

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

A.S. Degree

CHEMISTRY

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A.S. Degree

ENGINEERING SCIENCE

Requirements—Page 59

A.S. Degree

ENVIRONMENTAL HEALTH and SCIENCE

Requirements—Page 61
FISHERIES and MARINE TECHNOLOGY

+ FMT 09  BOAT OPERATIONS and TRAINING

1 cr. 2 hrs.
Introductory vessel course includes: historical boating perspective; importance of New York Harbor; boating terms; seamanship; boat construction; vessel maintenance; navigation and recreational sail and power boating; career opportunities in the recreational boating field.

+ FMT 10  TOPICS in FISHERIES and MARINE TECHNOLOGY

2 crs. 3 hrs.
Commercial fishing and recreational boating industries. Topics include: the 2-mile limit law and its impact; survey of fishing gear; vessel orientation; fishing at sea; fish as food; seafood business management including marketing and distribution; seafood retailing; marina design and operations; charter and party boat industry.

+ FMT 11  AMERICAN FISHING INDUSTRY

3 crs. 3 hrs.
History and socio-cultural traditions of the commercial fishing industry. The industry in the United States is examined in the context of international and federal fisheries laws, world activity in harvesting, marketing and environmental constraints.

+ FMT 12  COMMERCIAL FISHERIES SCIENCE

4 crs. 6 hrs.
Biological and oceanographic background to commercial fisheries to understand the life cycles, abundance, distribution and behavior patterns of marine species. Identification, nomenclature of finfish and shellfish, fishery resource management, aquaculture and marine pollution.

+ FMT 13  INTRODUCTION to SEAFOOD

4 crs. 6 hrs.
Introduction to the biological, chemical and nutritional aspects of seafood includes: basic elements of seafood bacteriology, public health concerns and factors that affect quality. Laboratory exercises involve chemical, microbiological, physical and sensory analysis in evaluating seafood.

FMT 20  SEAFOOD BUSINESS MANAGEMENT

3 crs. 3 hrs.
Examination of: the seafood industry; trade systems for sales; processing operations; transportation; the market distribution system. International marketing procedures, supply and demand, price structures, policy making and regulatory agencies that affect business operations.
Prerequisite: BA 11 (see page 131)

FMT 21  SEAFOOD PROCESSING

3 crs. 4 hrs.
Introduction to seafood processing focusing on a detailed review of how to handle and process fresh and frozen fish and shellfish, the relationship of handling to quality.
Prerequisites: FMT 12, 13

+ Basic Course
FMT 22 SEAFOOD PRODUCTION LABORATORY  
4 crs. 6 hrs.
Practical experience in the principles and techniques of traditional and advanced seafood processing methods. Actual plant operations are performed.  
Prerequisite: FMT 21

FMT 23 SEAFOOD RETAILING  
3 crs. 3 hrs.
Seafood sales and marketing techniques with emphasis on product ordering and handling, facility design, sanitation, merchandising, regulations, retail business skills and sales promotion.  
Prerequisites: BA 14, FMT 20

FMT 30 SEAMANSHIP  
3 crs. 4 hrs.
The principles and practice of seamanship, including nautical terminology, introduction to vessels, vessel handling, deck equipment, Rules of the Road, marlinspike seamanship and meteorology.

+ FMT 31 NAVIGATION  
3 crs. 4 hrs.
Introduction to navigation emphasizing nautical charts, the compass, piloting, tides and currents, position determination, aids to navigation and marine electronics.  
Prerequisite: Placement at Math R2 level or above.

+ FMT 32 VESSEL BUSINESS MANAGEMENT  
3 crs. 3 hrs.
The business and management aspects of operating a fishing vessel and fishing fleet.

FMT 33 VESSEL TECHNOLOGY I  
3 crs. 5 hrs.
Seamanship theory and fundamentals of vessel operations, including vessel handling, piloting, all phases of applied engineering technology, operating rigging and deck machinery.  
Prerequisites: HE 36, FMT 30

FMT 34 VESSEL TECHNOLOGY II  
3 crs. 5 hrs.
Practical experience aboard vessels engaged in party-and-charter-boat fishing, oceanographic survey work, vessel delivery and cruising.  
Prerequisites: FMT 31, 33

+ FMT 35 DIESEL TECHNOLOGY  
3 crs. 4 hrs.
Introduction to diesel engine principles, construction, operation, testing, maintenance and overhaul. The basics of marine diesel engine designs and their accompanying fuel, exhaust, cooling, lubricating and starting systems.  
Prerequisite: Passing score on CUNY Mathematics Skills Assessment Test

+ FMT 36 COMMERCIAL FISHING METHODS  
3 crs. 4 hrs.
Principal forms of commercial fishing gear and methods and the factors influencing their choice for a particular species. Trawling gear and techniques, seine operations, gillnetting, long-lining, trap fishing and dredge fisheries and their respective fishing gear are reviewed.
FMT 37 AUXILIARY SYSTEMS

3 crs. 4 hrs.
The basic hydraulic and refrigeration principles, system components and common shipboard system design including: installation, application, operation, maintenance and troubleshooting of vessel hydraulic and refrigeration systems.
Prerequisite: Passing score on CUNY Mathematics Skills Assessment Test

FMT 39 VESSEL MAINTENANCE

3 crs. 5 hrs.
Basic skills required for maintaining and repairing wooden, fiberglass and steel vessels with emphasis on hulls, fluid and propulsion systems, rigging and welding.

FMT 40 SEAFOOD BUSINESS ISSUES and TRENDS

3 crs. 3 hrs.
Key concepts learned in the other fisheries and seafood courses plus current issues and trends in the industry. Guest lecturers from industry, academia and government. A research project on an important fishery or seafood problem or trend. Successful individuals and companies are profiled.
Recommended: Course should be taken in last semester.

FMT 41 MARINE ELECTRICAL SYSTEMS

2 crs. 3 hrs.
Electrical theory as applied to light marine vessels. The design, installation, operation, and maintenance of various electrical systems are covered.
Prerequisite: Passing score on CUNY Mathematics Skills Assessment Test

FMT 42 MARINE ELECTRONICS

2 crs. 3 hrs.
Electronic theory as applied to light marine vessels. The design, installation, operation, and maintenance of electronic equipment including echosounders, Loran-C, electronic charts, course plotters, radar, sonar and marine radios are covered.
Prerequisite: Passing score on CUNY Mathematics Skills Assessment Test.

FMT 43 MARINA OPERATIONS

3 crs. 3 hrs.
Basic skills required to operate a full service marina or boat yard includes: dock and storage facilities; parts and service department; boat engine sales; ship’s store; business and marketing.

FMT 44 OUTBOARD and INBOARD ENGINES

3 crs. 4 hrs.
The principles of outboard and inboard engines, and stern drive units includes their operation, construction, testing and maintenance.
GEOLOGY

+ GEO 31 METEOROLOGY
  3 crs. 3 hrs.
  Fundamental physical and chemical structure of the atmosphere including weather, climate, meteorological instrumentation, and air pollution.

+ GEO 32 PHYSICAL OCEANOGRAPHY
  3 crs. 3 hrs.
  Factors that have a major influence on the physical and chemical structure of the oceans includes tides, waves, currents, oceanographic instrumentation and coastal oceanography.

+ GEO 33 PHYSICAL GEOLOGY
  4 crs. 5 hrs.
  Study of the nature of the Earth and its processes; includes: mineral and rock classification; analysis of the agents of weathering and erosion; dynamics of the Earth's crust as manifest in mountain building, volcanos and earthquakes; recent data concerning the geology of other planets; field and laboratory techniques of the geologist.

+ GEO 35 HISTORICAL GEOLOGY
  3 crs. 3 hrs.
  History of the geological development and changes of the planet Earth through the course of geological time as revealed by rock and fossil records.

+ GEO 37 PHYSICAL GEOGRAPHY
  3 crs. 3 hrs.
  The climactic and geological systems of the Earth, and the impact of these processes upon mankind's economic and demographic development. Contemporary ecological problems are described and analyzed. Outside readings of geographical literature are assigned.
PHYSICS

+ PHY 11 GENERAL PHYSICS I 5 crs. 6 hrs.
First term of non-calculus two-semester lecture and laboratory course in classical and modern physics, includes study of mechanics, heat, hydrostatics and hydrodynamics, harmonic motion and waves. Physical principles are demonstrated and students receive "hands on" laboratory experience. 
Prerequisite: MAT 03 or equivalent.
Recommended for students in liberal arts, pre-medical, pre-dental, pre-pharmacy, pre-optometry and allied health.

PHY 12 GENERAL PHYSICS II 5 crs. 6 hrs.
Second term of General Physics, includes sound, electricity, magnetism, atomic and nuclear physics and optics. Laboratory sessions included.
Prerequisite: PHY 11

+ PHY 13 ADVANCED GENERAL PHYSICS I 5 crs. 6 hrs.
First term of calculus two-semester lecture and laboratory course in classical and modern physics. Physical principles demonstrated and "hands on" laboratory experience. 
Corequisite: MAT 15
Recommended for science, engineering, pre-medical and allied health students who desire a more comprehensive treatment than given in PHY 11.

PHY 14 ADVANCED GENERAL PHYSICS II 5 crs. 6 hrs.
Second term of PHY 13. Topics include sound, electricity, magnetism, atomic and nuclear physics and optics. Laboratory sessions included.
Prerequisite: PHY 13
Corequisite: MAT 16

PHY 21 MODERN PHYSICS 4 crs. 5 hrs.
Up-to-date course in atomic and nuclear physics, includes kinetic theory, the failure of classical physics, wave mechanics, special relativity, radioactivity, nuclear reactions, fission, fusion and nuclear energy and its economic and ecological impact. Laboratory sessions permit some experiments.
Prerequisite: PHY 12 or 14
Recommended for science, engineering and certain allied health students.

PHY 22 INTRODUCTION to ELECTRICAL ENGINEERING 3 crs. 4 hrs.
First course in electrical engineering, includes: circuit elements and their voltage-current relations; Kirchhoff's laws; elementary circuit analysis; continuous and discrete signals; differential and difference equations; first order systems.
Required for Engineering Science Majors with a concentration in electrical engineering.
Prerequisites: MAT 21, MAT 56, CP 51, PHY 14.

PHY 23 INTRODUCTION to ENGINEERING THERMODYNAMICS 3 crs. 4 hrs.
First course in engineering thermodynamics, topics include: Zeroth Law and absolute temperature; work, heat, First Law and applications; Second Law, Carnot theorems, entropy, thermodynamic state variables and functions, reversibility, irreversibility, and availability functions; Ideal gas mixtures, mixtures of vapors and gas, humidity calculations.
Required for Engineering Science Majors in mechanical, civil or chemical engineering concentrations.
Prerequisites: CHM 12, PHY 14
Corequisite: CP 51

+ Basic Course
PHY 29  BASIC ELECTRONICS

Lecture and laboratory work in the fundamentals of AC and DC circuits, vacuum tubes, transistors, circuit design and electronic instrumentation.
Prerequisite: A college level laboratory physics course or Department permission.

+ PHY 30  PHYSICS for EVERYDAY LIVING

Up-to-date coverage of developments in physics, with minimal use of mathematics, for liberal arts and career students. An integrative approach to traditional topics of mechanics, heat, liquids (at rest and in motion), wave sound, electricity and magnetism, atomic energy and nuclear physics, atomic bombs, space travel, and ecological problems.

+ PHY 31  ELECTRONICS for COMMUNICATION I

First in a three-term sequence. Topics include: atomic structure, simple AC and DC circuits, Ohm’s Law, resistors, Watt’s Law, meters, motors, batteries, inductance, capacitance, series circuits, parallel circuits, resonance and FCC rules and regulations. The central theme is the passive electronic components and their use. Laboratory gives practical experience.
Prerequisites: Elementary Algebra, MAT 03 or MAT R2

PHY 32  ELECTRONICS for COMMUNICATION II

Second in a three-term sequence. Topics include: tubes, transistors, common transistor amplifiers, power sources, audio frequency amplifiers, radio frequency amplifiers, oscillators, test and measuring equipment, integrated circuits, and digital fundamentals. The central theme is the simple active electronic components and their use in circuits. Laboratory gives practical experience.
Prerequisite: PHY 31 or Department permission.

PHY 33  ELECTRONICS for COMMUNICATION III

Third in a three-term sequence. Topics include: advanced AC and DC circuits, fundamentals of AM, FM, and television systems, transmitters, antennas, and coaxial lines. Preparation made for the General Class FCC License Exam. The central theme of broadcast systems. Laboratory gives practical experience.
Prerequisite: PHY 32 or Department permission.

+ PHY 35  INTRODUCTION to ASTRONOMY

Concepts and methods of astronomical science, the early theories of the universe, astronomical instruments, the solar systems and its members, stars, galaxies, recently discovered objects, and study of modern cosmological ideas. The laboratory part of this course, ASTRONOMY LABORATORY, SCI 41, 1 cr. 2 hrs., taken at the same time is equivalent to a 4 credit lab course.
Prerequisite: 11th year Math or MAT 03 or Department permission

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PHYSICS
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• Fulfills Group V requirements for Radio Broadcast Majors
+ Basic Course
SCIENCE

+ SCI 21  PHYSICAL SCIENCE I  
2 crs. 2 hrs.
First part of a two-semester sequence covers astronomy, mechanics, electricity and magnetism. May be taken with SCI 38, a two-hour laboratory course for total of 3 credits.

SCI 22  PHYSICAL SCIENCE II  
2 crs. 2 hrs.
Second semester covers light, atomic structure, chemistry, meteorology and geology. May be taken with SCI 29, a two-hour laboratory course for total of 3 credits.
Prerequisite: SCI 21, or Department permission.

+ SCI 25  APPLIED PHYSICAL SCIENCES for ALLIED HEALTH CAREERS  
3 crs. 5 hrs.
Lecture and laboratory course on chemistry and physics topics with direct bearing on health services. Includes: mechanics, electricity, optics, atomic energy, radioactivity, atomic structure, chemical bonding, chemical equations, behavior of gases, respiration and oxygen therapy, properties of liquids and solutions including hydrostatics and hydrodynamics, acids and bases, plus an introduction to organic and biochemistry.
For Pre-Nursing students only.
Prerequisites: CUNY test placement beyond the level of MAT M1 or equivalent and ENG 04 or equivalent or satisfactory completion of BIO 10 or Department permission.

+ SCI 29  SCIENCE for ELEMENTARY SCHOOL TEACHERS  
4 crs. 4 hrs.
A Science-Information and Methods-of-Teaching Science for Elementary School teachers to enhance their mastery of Physical and Biological Science concepts and methods of adapting these concepts to elementary school children. Development of scientific processes, integration of science into the curriculum, are considered in alternate sessions.

+ SCI 31  HISTORY and PHILOSOPHY of PHYSICAL SCIENCE  
2 crs. 2 hrs.
A modern science course emphasizing historical, philosophical and political view points. The work of the ancients in astronomy; the revolution in science during the Renaissance with emphasis on Copernicus, Galileo and Newton. Modern physics and chemistry, nuclear energy and space travel.

+ SCI 34  INTRODUCTION to MODERN CHEMISTRY  
4 crs. 5 hrs.
A one-semester, non-mathematical survey course focusing on the role of chemistry in society. Chemical principles are woven into the study of current topics such as drugs, plastics, energy production and air pollution. Laboratory work illustrates these principles.

+ SCI 35  INTRODUCTION to MODERN PHYSICS  
4 crs. 5 hrs.
A one-semester lecture and laboratory college-level survey course in classical and modern physics; includes mechanics, heat, wave motion, electricity, optics, atomic and nuclear physics.

• Recommended for Liberal Arts and Career students
+ Basic Course
SCI 36  INTRODUCTION to EARTH SCIENCE  

The earth's environment, meteorology, geology, astronomy, and oceanography. Field trips and laboratory work included.

SCI 37  CHEMISTRY and the ENVIRONMENT  

Aspects of air and water pollution, food additives, and lead poisoning of children. Emphasis on chemical understanding, basic principles, medical, social, and governmental aspects. Laboratory work coordinated with lectures.

SCI 38-39  PHYSICAL SCIENCE LABORATORY  

Activities of physicists, chemists, and earth scientists, for students desiring a basic laboratory course in science. Important principles of physical sciences illustrated.

SCI 41  ASTRONOMY LABORATORY  

Using traditional experiments in spectroscopy and optics, the heavens will be observed during day and evening with telescope and naked eye. Methods and tools used by astronomers will be illustrated as students gain familiarity with the heavenly bodies. Can be taken with PHY 35—Introduction to Astronomy.

SCI 51  PEOPLE and the ENVIRONMENT—CHEMISTRY EMPHASIS  

From a chemical point of view, course assesses what is known of the environment and how to conserve it; the actions designed to expand that knowledge and its use. Important contemporary problem of energy consumption and related pollution problems, waste disposal, and recycling. Note: This is a Basic Course. It does NOT require any prerequisite.

SCI 70  THE SCIENCE of NUTRITION  

Increased food processing and addition of chemical substances in foods make it important to understand the basic ideas of modern nutrition. This interdisciplinary course is taught jointly by the Biological Sciences and Physical Sciences Departments. Such concepts as biochemical individuality as related to nutrition for optimum health are integrated with surveys of carbohydrate, protein and fat metabolism; the role of vitamins and minerals in metabolic processes and their still-controversial role in orthomolecular nutrition, food selection, diet during pregnancy and infancy, special diets during illness, and the safety of the food supply. Students are asked to analyze their own diet. Open to all students in partial fulfillment of their science requirement.

- Recommended for Liberal Arts and Career students
+ Basic Course
SECRETARIAL/OFFICE ADMINISTRATION
DEPARTMENT
Room M-211 ext. 5655

Bobby L. Baldwin, Associate Professor
Catherine S. Barry, Professor and Chairperson
Donald Donin, Associate Professor
Lyla Garfield, Associate Professor
David C. Henry, Associate Professor
Florence Maloney, Associate Professor
Gloria M. McDonnell, Professor
Beatrice Pampillonio, Senior College Laboratory Technician
Naomi Platt, Professor
William C. Yenna, Assistant Professor
SECRETARIAL/OFFICE ADMINISTRATION

+ SEC 11 ELEMENTARY KEYBOARDING
  2 crs. 4 hrs.
Basic skills in keyboarding are developed and applied to the formatting of simple business and personal letters, tabulations, and manuscripts.

SEC 12 INTERMEDIATE KEYBOARDING
  2 crs. 4 hrs.
Keyboarding speed and control. Beginning production skill in keying business forms including letters, tabulated materials, business reports, and manuscripts emphasizing business standards. (With approval, students who satisfactorily completed the equivalent of this course may be exempt.)
Prerequisite: SEC 11 or equivalent

+ SEC 15 GREGG SHORTHAND (ELEMENTARY)
  3 crs. 4 hrs.
Understanding Gregg Shorthand theory is reinforced by practice in reading and writing contextual materials. The elements of transcription, proper English usage and correct grammatical form, are introduced. For students with no prior shorthand knowledge and students with less than one year of instruction in Gregg theory.

SEC 18 GREGG SHORTHAND (INTERMEDIATE)
  3 crs. 4 hrs.
Continued development of Gregg Shorthand language skills and pretranscription training. Emphasis is on taking dictation at sustained speeds and reading shorthand fluently. (With approval, students who satisfactorily completed the equivalent of this course may be exempt.)
Prerequisites: SEC 15 or equivalent and SEC 19 or equivalent
Corequisite: SEC 12

+ SEC 19 BASIC DICTATION
  2 crs. 3 hrs.
Dictation of short business letters. All dictation materials are previewed. Shorthand theory is reviewed through homework and laboratory assignments.
Prerequisite: SEC 13 or 15, or Department permission.

+ SEC 21 BASIC WORD/INFORMATION PROCESSING
  3 crs. 4 hrs.
Modern word/information processing concepts in the organization, operation, and control of office functions. Emphasis is on the secretary's dual role as an administrative assistant and/or as a correspondence secretary. Keyboarding of letters, memoranda, and tables on electronic word processing equipment including basic word processing terminology.
Prerequisite: SEC 11 or equivalent
Corequisite: SEC 12

+Basic Course
SEC 22 ADVANCED WORD/INFORMATION PROCESSING

Word/information processing procedures and equipment in a simulated word processing environment and total work flow of office communications from input through output. Keyboarding on electronic word processing equipment of tables, reports, letters, and form letters with variable information.
Prerequisites: SEC 12, and 21
Corequisite: SEC 33

SEC 23 ELECTRONIC TRANSCRIPTION for the ADMINISTRATIVE SECRETARY

Taped dictation of correspondence and reports representative of a variety of business firms and organizations are transcribed from a transcribing machine to the personal computer using current word processing software.
Prerequisites: SEC 12 and 21
Corequisite: ENG 12 or 22

SEC 24 OFFICE SYSTEMS and PROCEDURES

The systems and procedures of the electronic office for administrative secretary and word processing specialist includes: planning and organizing office operations; developing good office leadership and human relations; controlling office operations, theory, concepts, and practices relating to office systems and procedures, employee performance; output and job satisfaction. Required for all non-stenographic secretarial students.
Prerequisite: SEC 21
Corequisite: SEC 92

SEC 25 OFFICE INFORMATION PROCESSING APPLICATIONS

Knowledge, skill and understanding the uses of integrated software in the electronic office. Electronic spreadsheets, database management, word processing, graphics, and telecommunications are applied to office information processing.
Prerequisite: SEC 22

SEC 27 LEGAL ASSISTING I

Preparation to function as a non-lawyer assistant under the direction and supervision of a lawyer. Includes introduction to law and the legal profession; the legal system, its sources of law and the methodology of legal research; law office management; litigation and trial management.

SEC 28 LEGAL ASSISTING II

Specialized training for the legal assistant in the procedural aspects of Surrogate Court practice.
Prerequisite: SEC 27

SEC 29 LEGAL ASSISTING III: MATRIMONIAL and FAMILY LAW SPECIALIZATION

Specialized training as a non-lawyer assistant, while working under the direction and supervision of an attorney in the procedural aspects of Supreme Court and Family Court practice. Divorce, uncontested and contested; separation; child custody; alimony and support payments; annulment; separation agreements, and orders of protection.
Prerequisite: SEC 27

+ Basic Course
SEC 30  ADVANCED STENOGRAPHY and TRANSCRIPTION  
4 hrs.  
Stenographic skills are intensified with the ability to take dictation at rates of 80 to 100 words per minute for sustained periods, plus transcription techniques to meet office standards in the production of mailable transcripts.  
Prerequisites: SEC 12, 18 or equivalent  
Corequisites: SEC 33, 37

SEC 33  ADVANCED KEYBOARDING  
2 crs. 4 hrs.  
Mastery of keyboarding skills and formatting techniques includes formatting business communications, directives, business reports, and statistical data. Emphasis is on the executive secretary.  
Prerequisite: SEC 12 or equivalent or Department permission.

SEC 34  SECRETARIAL PRACTICE  
3 crs. 4 hrs.  
Simulates on-the-job secretarial duties concerning correspondence responsibilities, use of transmittal service, records management, receptionist and telephone techniques, travel procedures, financial and legal duties, preparing business reports, use of machine transcribers, and word processing equipment. Fostering good human relations in an office, and developing attitudes and traits of the successful executive secretary.  
Open to Program Majors only.  
Prerequisites: SEC 31, 33, 37

SEC 35  EXPERT KEYBOARDING  
1 cr. 2 hrs.  
To achieve expert levels in keyboarding and formatting of business letters, interoffice memoranda, directives, and manuscripts. Business standards are maintained in simulated office situations.  
Prerequisite: SEC 33

SEC 37  BUSINESS COMMUNICATIONS  
3 crs. 3 hrs.  
The principles of writing effective business communications, including letters, reports, memoranda, directives, organization, language arts, human relations and the application of business psychology in writing.  
Open to Program Majors only.  
Prerequisites: ENG 03, SEC 11 or equivalent

SEC 41  INTERMEDIATE KEYBOARDING: INTENSIVE  
4 crs. 4 hrs.  
Develops skill attainment levels of SEC 11 and SEC 12, for students with educational and/or experiential background of 30 wpm for five minutes with a 3 percent error limitation. Students are evaluated by the instructor, and individual prescriptions are prepared to eliminate gaps in knowledge, understanding, and/or skills inadequacies. Completion of special skills projects in secretarial laboratories, development of mailability standards, and tutorial instruction.  
Prerequisite: Department permission.
SEC 44 INTERMEDIATE SHORTHAND: INTENSIVE
4 hrs. 4 crs.
Develops skill attainment levels of SEC 15, and SEC 18, for students with educational and/or experiential background that includes the complete Gregg Shorthand and ability to take dictation at 60 wpm for two minutes with 95 percent accuracy. Each student is evaluated by the instructor to measure understanding the Gregg Shorthand principles, level of dictation and transcription skills. Individual prescriptions include the use of tapes for development of shorthand principles and the ability to take dictation, the completion of transcription projects in the secretarial laboratory, and tutorial instruction.
Prerequisite: Department permission.

SEC 45 ADVANCED SHORTHAND and TRANSCRIPTION: INTENSIVE
4 hrs. 4 crs.
Develops dictation speeds of 60 to 100 wpm, reviews principles of stenography, reinforces patterns of writing at high speeds. Introduces and develops transcription skills to meet performance objectives for SEC 16, or 18 and 31. Each student is evaluated by the instructor. Gaps in learning and understanding that do not reflect the standards of the administrative secretary are corrected through individual prescriptions including use of tapes in the Secretarial Resource Center and Media Center, transcription projects in the secretarial laboratory, and tutorial services.
Prerequisite: Department permission.

SEC 46 ADVANCED KEYBOARDING: INTENSIVE
4 hrs. 4 crs.
Develops skill attainment and production levels of SEC 12, and 33, for students with educational and/or experiential background of 40 wpm for five minutes with 2.5 percent error limitation. The instructor evaluates each student and provides individual prescriptions that include specialized projects, use of the secretarial laboratory for skill building, and use of tutorial services.
Prerequisite: Department permission.

SEC 51 ELEMENTARY LEGAL SHORTHAND and PROCEDURES
3 hrs. 3 crs.
Development of a comprehensive legal shorthand vocabulary through dictation and transcription of legal materials. Skill is developed in taking dictation of 80 to 100 wpm and in transcribing non-litigation forms and communications including letters, contracts, proxies, wills, bonds, releases, and legal documents involving the settlement of estates, land, and real estate sales, leases, mortgages, partnerships and incorporation procedures.
Open to Program (Legal) Majors only.
Prerequisites: SEC 12 and 16 or 18 or equivalent
Corequisites: SEC 31, 33, 37

SEC 52 ADVANCED LEGAL SHORTHAND and TRANSCRIPTION
6 hrs. 4 crs.
Rapid dictation of 100 to 120 wpm of litigation materials, continued legal vocabulary development and accurate transcription according to legal office standards. Structure of the courts and their relationship to one another, typical civil and criminal proceedings from initiation to enforcement of judgment, various documents used in litigation and responsibilities of the legal secretary.
Open to Program (Legal) Majors only.
Prerequisites: SEC 31, 51
Corequisites: SEC 34, 92
+ SEC 53-54 THE SCHOOL SECRETARY  2 crs. 2 hrs. (each semester)
This two-semester course considers educational principles relating to the school secretary's work. Emphasis is on the organization of school systems, particularly in New York City.
Open to Program (School) Majors only.

+ SEC 55 SCHOOL RECORDS and ACCOUNTS  2 crs. 2 hrs.
Introduction to the activities and responsibilities of the school secretary, including the preparation of a variety of reports usually completed in the school office; records of school personnel, accounts, textbooks and supplies.
Open to Program (School) Majors only.

+ SEC 56 KEYBOARDING for BUSINESS COMMUNICATIONS  2 crs. 3 hrs.
Basic keyboarding skills for typewriter and computer input and the basics of written business communications which will be applied to the production and editing of business communications.
Open to Non Majors.

SEC 61 MEDICAL TERMINOLOGY and ELECTRONIC TRANSCRIPTION  4 crs. 4 hrs.
The basic principles of medical word building to develop comprehensive medical vocabulary in the respiratory, cardiovascular, musculoskeletal, endocrine, hematic, urogenital and female reproductive systems. Job competency skills, including editing and proofreading, are acquired through transcription of taped dictation of medical reports and correspondence on the computer.
Required for all Medical Secretarial Majors.
Prerequisites: SEC 12, 21, 23; ENG 12
Pre or Corequisite: SEC 33
Equivalent courses and Department permission may be accepted in lieu of these requirements.

SEC 62 COMPUTER APPLICATIONS for the MEDICAL OFFICE  3 crs. 3 hrs.
This course is for anyone interested in learning how to convert the management of a medical office to a computerized operation.
Required for all Medical Secretarial Majors.
Prerequisites: SEC 12, 21; ENG C2 or 12

SEC 67 BEGINNING MEDICAL SECRETARY PRACTICE  2 crs. 3 hrs.
Medical office responsibilities of a medical secretary, includes analysis of medical care plans and their respective forms, development of skill in the use of office machines, medical filing techniques and procedures.
Open to Program (Medical ) Majors only.
Prerequisites: SEC 12 and 16, or 18
Corequisites: SEC 31, 33, 69

SEC 68 ADVANCED MEDICAL SECRETARY PRACTICE  2 crs. 3 hrs.
Duties and responsibilities of a medical secretary include: telephone techniques, meeting patients, preparation of case histories, medical records management, ethics, business aspects of a medical practice, financial records, insurance forms, organization and administration of a medical office, skills in the use of dictating and transcribing machines, and word processing equipment.
Open to Program (Medical) Majors only.
Prerequisites: SEC 31, 33, 67, 69
Corequisite: SEC 70

+ Basic Course
SEC 81 INDEPENDENT STUDY
1-3 hrs.
Independent study of Secretarial/Office Administration is developed individually between student and faculty member and must be approved by the Department.

SEC 82
1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

SEC 92a FIELD EXPERIENCE—EXECUTIVE
3 hrs.
Eight hours per week of supervised work experience in business offices in the community, and one hour a week of classroom discussion of the on-the-job experience are course requirements.
Prerequisites: SEC 31, 33, 37
Corequisites: SEC 32, 34

SEC 92b FIELD EXPERIENCE—LEGAL
3 hrs.
Eight hours per week of supervised work experience in law firms in the community, and one hour a week of classroom discussion of the on-the-job experience are course requirements.
Prerequisites: SEC 31, 33, 37, 51
Corequisites: SEC 34, 52

SEC 92c FIELD EXPERIENCE—SCHOOL
3 hrs.
Eight hours per week of supervised work experience in schools in the community, and one hour a week of classroom discussion of the on-the-job experience are course requirements.
Prerequisites: SEC 31, 33, 37, 53
Corequisites: SEC 32, 34, 54, 55

SEC 92d FIELD EXPERIENCE—MEDICAL
3 hrs.
Eight hours per week of supervised work experience in medical environments in the community, and one hour a week of classroom discussion of the on-the-job experience are course requirements.
Prerequisites: SEC 31, 33, 37, 67, 69
Corequisites: SEC 68, 70

SEC 92e FIELD EXPERIENCE—WORD/INFORMATION PROCESSING
3 hrs.
Actual experience in using word/information processing machines to complete projects in business offices. Each student works a minimum of 100 hours as a word information processing operator in business, attends lectures and seminars at the college to develop insight into the personnel and management problems of the electronic office.
Prerequisites: SEC 31, 33, 37, 21
Corequisites: SEC 22, 23

A.A.S. DEGREE
SECRETARIAL/OFFICE ADMINISTRATION
Requirements—Page 91
BILINGUAL SECRETARY

Students in the Bilingual Program who are concentrating in Secretarial/Office Administration MUST FULFILL:

1. COLLEGE REQUIREMENTS

   (*Successful completion of CUNY Freshman Skills Assessment Tests with passing Reading, Writing, and Mathematics Placement Examinations scores or, remedial courses may be required)
   ENG C2 &/or ENG 12 (based on CUNY Test scores, students may be exempt)....4 credits
   ENG 22 ..............................................................................................................4
   HPE 12 .............................................................................................................3

   If Required
   ESL 04 &/or 17, ENG C1 ....................................................................................0
   MAT M1 & M2 or MAT R2 proficiency ..............................................................0

2. COURSE REQUIREMENTS (course descriptions page 231)

<table>
<thead>
<tr>
<th>Course</th>
<th>Crs.</th>
<th>Hrs.</th>
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<tbody>
<tr>
<td>Keyboarding—Elementary and Intermediate (SEC 11-12)</td>
<td>4</td>
<td>8</td>
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<tr>
<td>Shorthand—Elementary and Intermediate (SEC 15-18)</td>
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<tr>
<td>Basic Dictation (SEC 19)</td>
<td>2</td>
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<tr>
<td>Shorthand and Transcription—Advanced I and II (SEC 31-32)</td>
<td>7</td>
<td>10</td>
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<tr>
<td>Advanced Keyboarding (SEC 33)</td>
<td>2</td>
<td>4</td>
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<tr>
<td>Secretarial Practice (SEC 34)</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Business Communications (SEC 37)</td>
<td>3</td>
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<tr>
<td>Field Experience (SEC 92)</td>
<td>3</td>
<td>9</td>
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<tr>
<td>Intensive Review of Spanish Grammar (SPA 17 page 161)</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Proper Models of Spanish Grammar and Conversation for Native Speakers (if needed) (SPA 18)</td>
<td>3</td>
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<tr>
<td>Spanish Syntax and Composition (SPA 36)</td>
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<tr>
<td>Spanish Business Writing I and II (SPA 47-48)</td>
<td>6</td>
<td>6</td>
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<tr>
<td>Listening and Speaking Skills (SPE 11 page 244)</td>
<td>3</td>
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<td>Effective Public Speaking (SPE 21)</td>
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<tr>
<td>Voice and Articulation (SPE 29)</td>
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<tr>
<td>Principles of Mathematics (MAT 7 page 198) OR</td>
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<tr>
<td>Introduction to Modern Concepts of Biology (BIO 33 page 122)</td>
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<td>4-5</td>
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<tr>
<td>The Caribbean: 1492 to Present (HIS 42 page 183) OR</td>
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<tr>
<td>Introduction to Sociology (SOC 31 page 113)</td>
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</tbody>
</table>

3. ELECTIVES—Sufficient to meet required total of ..............................................64 credits

- Students selecting specializations such as Legal, School, Medical, Executive, Word/Information Processing will do so on completion of SEC 31. Selection is to be made AFTER consultation with Department Advisor.
SPEECH and THEATRE DEPARTMENT
Room E-309B ext. 5591

Sheldon I. Aptekar, Professor
Stephen Castellano, College Laboratory Technician
Mary V. Crowley, Professor
David Frankel, Assistant Professor
Kristine Gjerlow-Johnson, Assistant Professor
Cindy Greenberg, Assistant Professor
Cliff Hesse, Associate Professor and Chairperson
Gerald Rothman, Senior College Laboratory Technician
Greg D. Sutton, Senior College Laboratory Technician
Terry Trilling, Associate Professor
MASS COMMUNICATIONS

+ MCB 34 SALES and ADVERTISING—RADIO and TELEVISION
3 crs. 3 hrs.
Plan and write advertising copy; write and make radio and television commercials; design and market an advertising campaign; understand the ethics, propaganda, budget and copyright laws as they apply to advertising.

+ MCB 35 INTRODUCTION to BROADCASTING
3 crs. 3 hrs.
Historical development, social philosophy and technology of radio and television, investigation of ratings, program production and scheduling.

+ MCB 36 ANNOUNCING—RADIO and TELEVISION
3 crs. 3 hrs.
Techniques of broadcasting, theory underlying use of the equipment employed and practical aspects of their proper use. Correct voice production procedures for announcing, methods of sight reading and oral reading.
Prerequisite: SPE 31 or Department permission.

MCB 37 BROADCAST JOURNALISM
3 crs. 3 hrs.
Understanding the role of radio and television in reporting and shaping the news and the differences between these media and the press. Reporting, writing and editing newscasts with practical experience working against deadlines.
Prerequisite: MCB 35

MCB 38 BROADCAST MANAGEMENT
3 crs. 3 hrs.
The decision-making roles in contemporary broadcast operations. Traffic flow, governmental requirements, ethics, community needs, inter-media relationships, and responsive programming.
Prerequisite: MCB 35

+ MCB 39 STUDIO OPERATIONS
3 crs. 3 hrs.
Introduction to operational and technical aspects of broadcast audio equipment, and of the media. Various uses of all studio equipment.

MCB 40 ADVANCED STUDIO OPERATIONS
3 crs. 3 hrs.
Sound manipulation, processing equipment, advanced editing techniques in the compilation of commercials, long-form programming and production for continuity.
Prerequisite: MCB 39

+ MCB 41 INTRODUCTION to TELEVISION
3 crs. 3 hrs.
Analysis of the experience of television viewing through a survey of its individual components and their logic. Television planning and coordination; set and lighting design; camera placement; lenses and angles; video control.

+ Basic Course
MCB 44 SPORTSWRITING and PRODUCING

Practicum in the unique journalistic area of sports presentation including reporting, writing, performing and producing sporting events, the job of the sports specialist in radio and television news programs and interviewing techniques.
Prerequisite: MCB 37

MCB 47 MEDIA MUSIC PRODUCTION

Research, planning, production and uses of music for radio, television, film and records, licensing, studio and equipment requirements and trends in these fields.
Prerequisite: MCB 39

+ MCB 59 RADIO STATION OPERATIONS

Day-to-day operations in a broadcast environment; airing news and music, network feeds, community interviews, scheduling, writing, and editing.
*Class meets once per week; other five hours arranged.

MCB 81 INDEPENDENT STUDY

Independent study of Mass Communications is developed individually between student and faculty member and must be approved by the Department.

MCB 91 INTERNSHIP

Applied work/study at professional broadcasting organizations.

+ MCF 40 FILM: THE CREATIVE MEDIUM

To recognize the film medium as a creative art, the historical, social, psychological and aesthetic elements of selected films are studied as illustrations of this creative force.

MCF 41 ANIMATION: CARTOON and COMMENTARY

The history of animation from 1906 to the present; from its reference of entertainment to its social, political and philosophical use. Animation from around the world will be explored.

MCF 43 FILM GENRE

The mass medium of film and its ability to reflect and influence a wide variety of sociological and psychological events and trends, as seen through a particular genre. The genre will change each semester (i.e., film noir, animation, the documentary, western).
Recommended—not required: MCF 40

+ Basic Course
MCM 30 MASS MEDIA

3 crs. 3 hrs.

Analysis of mass media to discover the way information is perceived and influences behavior. Extensive use is made of films, tapes, recordings and video tapes to examine the message systems employed by individuals, groups, institutions and politics. Focus is on radio, television, newspapers, magazines, film and advertising.

MCM 42 COMMUNICATIONS DEVELOPMENT and APPLICATIONS

3 crs. 3 hrs.

Communication from Caveman to Cronkite. Examination of the origins of human communication and technologies in order to apply this knowledge to everyday business and personal life. Body language, color, art, music and architecture as communication media.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SPE 11</td>
<td>LISTENING and SPEAKING SKILLS</td>
<td>3</td>
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<tr>
<td></td>
<td>To strengthen oral language abilities and improve listening proficiency,</td>
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<td>students are made aware of the nature for their language. Focus is on</td>
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<td>vocabulary enrichment, word pronunciation, attention to grammar,</td>
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<td></td>
<td>verbal self-expression, listening as a skill and note-taking techniques.</td>
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<td><strong>Not open to students required to take, or completed, ENG C2 or ENG 12</strong></td>
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<tr>
<td>SPE 12</td>
<td>INTRAPERSONAL/INTERPERSONAL COMMUNICATION</td>
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<td>The communicator's development of self-concepts, ability to understand and</td>
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<td>project a comfortable and confident self-image. Methods to improve and use</td>
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<td>this knowledge when interacting and communicating with other individuals</td>
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<td>and with groups.</td>
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<td>SPE 14</td>
<td>COMMUNICATION SKILLS for PRE and ELEMENTARY SCHOOL TEACHERS</td>
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<td>Research, brief written reports, oral presentation and class critiques to</td>
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<td>develop skills in classroom presentations of written material such as</td>
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<td>short stories, poetry, and essays for children. Listening to student</td>
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<td>feedback as children express their ideas concerning what has been read to</td>
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<td>them.</td>
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<td>SPE 15</td>
<td>SPEECH ARTS for PRE and ELEMENTARY SCHOOL GRADES</td>
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<td></td>
<td>Methods and materials for teaching speech arts in nursery and elementary</td>
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<td>schools. Students learn to understand and work with children on such</td>
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<td></td>
<td>activities as dramatic play, pantomime, creative dramatics, puppetry,</td>
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<td>storytelling, reading aloud, choral speaking, group discussions and talks.</td>
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<td>SPE 16</td>
<td>SPEECH PROBLEMS of CHILDREN</td>
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<td></td>
<td>Study of children's normal speech and language development. Future speech</td>
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<td>majors, classroom teachers, child care workers and parents learn to</td>
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<td>diagnose and help remediate children's major speech and language disorders.</td>
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<td>SPE 20</td>
<td>PERSONAL IMPROVEMENT in COMMUNICATION</td>
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<td>To overcome problems in the articulation of sounds, word pronunciation,</td>
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<td></td>
<td>voice production, stress and rhythm in connected speech. To eliminate</td>
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<td>regional accents, standard American speech is emphasized, the underlying</td>
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<td></td>
<td>theory of proper voice production and speech formation.</td>
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<td>SPE 21</td>
<td>EFFECTIVE PUBLIC SPEAKING</td>
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<td>The basic elements for clear and effective public speaking. Practice and</td>
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<td>study in skills such as organizing and outlining speeches, developing</td>
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<td>ideas, using audio-visual materials for clarification and amplification of</td>
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<td>ideas, techniques of extempore and impromptu speaking, methods of</td>
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<td>delivery. All basic elements are brought together through the presentation</td>
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<td>of several speeches.</td>
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</table>

+ Basic Course

□ Remedial Course
SPE 22 THE ART of CONVICTION and PERSUASION

The practical applications of the art of discourse in all aspects of human activities: law, politics, literature and science. Course aims to make students aware that every form of human endeavor must be persuasively and convincingly presented to a community of reasonable beings. 

Prerequisite: SPE 21 or Department permission.

+ SPE 23 SPEECH for FOREIGN-SPEAKING STUDENTS

To speak English more effectively students study the formation of word pronunciation, and the correct stress and rhythm in phrases and sentences. Practice in conversation, reading aloud and informal speech.

+ SPE 24 CAREER COMMUNICATION

Communication skills used most frequently in the professions, business and industry. Speaking logically and expressing ideas creatively. Theories of interpersonal communication and practice in such speaking situations as job interviews, small group presentations, business meetings, conferences and platform speaking, use of clear and acceptable speech.

SPE 25 GROUP DISCUSSION

Principles and techniques of group interaction. Conference leadership and participation skills are learned through reading, discussion, practice, observation and evaluation of group discussions. Focus is on how learned concepts may be applied to educational, social and business situations.

SPE 27 ORAL INTERPRETATION

Students learn to recreate and communicate what writers and poets say in various types of literature. Through guided preparation, analysis, presentation and evaluation of individual readings of material ranging from simple reports to poetry, practical skill and enjoyment in reading aloud is developed. Recommended to Theatre Arts and Radio Broadcasting students.

SPE 28 LANGUAGE and SPEECH for ESL STUDENTS

To extend speaking and comprehension abilities of ESL students. Those admitted to this course must have a fair ability in the English language, and must be intelligible to the average listener. Emphasis is on: oral production of English language grammar, elimination of articulatory, stress, and intonation errors; spoken production and comprehension of expanded English vocabulary, and American colloquialisms. Opportunities for practice to improve and further develop spoken English through the use of taped recordings (ESL courses, page 146). 

Prerequisite: SPE 23 or Department permission.

+ SPE 29 VOICE and ARTICULATION

For students with acceptable speech who wish to study the theory of voice production and the proper formation of the sounds of speech as typified by American standard usage. The mechanics of pitch, volume, quality and phonetic symbols. Assistance to overcome minor speech and voice problems most commonly found in the New York City area.
SPE 30       TRAINING the SPEAKING VOICE

To develop voice quality, the theory of voice production includes: physiology of vocal production studied as a prelude to understand the mechanics of pitch, resonance, projection and quality; breathing and relaxation (for speech as supports for good tone production) totality of the expressive voice. Practice to overcome voice problems and develop proper articulation.

SPE 31       TRAINING in ARTICULATION

Correct articulation of the sounds of speech, proper pronunciation, elimination of regionalism and development of speech patterns to enhance verbal communication skills and eliminate vocal production faults.

SPE 81       INDEPENDENT STUDY

Independent study of Speech is developed individually between student and faculty member and must be approved by the Department.

SPE 82

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
THEATRE ARTS

+ Th.A 50 INTRODUCTION to THEATRE ARTS 3 crs. 3 hrs.
Various elements which compose theatre—from classical to modern times—are studied as art forms and as parts of an integrated whole. The cultural role, as well as the business of theatre, considered as an institution in society. Films, slides, projects, and guest lecturers help comprehend the nature of theatre art.
Students are required to participate in technical aspects of a current major theatre production, or the equivalent.
Required for Theatre Arts Majors.
Recommended for non-Theatre Arts Majors.

+ Th.A 51 PLAY ANALYSIS 3 crs. 3 hrs.
Through consideration of a number of outstanding plays in theatrical history, and the study of various productions given these plays, students gain understanding of the plays and appreciation of the production problems involved. Relevance of the plays to the contemporary stage, screen, and television production.

+ Th.A 52 ACTING I 4 crs. 4 hrs.
The basic techniques of sensory awareness, memory, improvisation, character study and role preparation with emphasis on the words of Constantin Stanislavsky. Special projects include presentations and rehearsal techniques for scene study.

Th.A 53 ACTING II 4 crs. 4 hrs.
Advanced classroom and laboratory furthers sensory awareness, memory and character study for role preparation. Basic vocal and body techniques explore the psychophysical actions, objectives and super objectives of characters. Acting theories studied and practiced.
Prerequisite: Th.A 52 or Department permission.

+ Th.A 54 LABORATORY/WORKSHOP 1 cr. 3 hrs.
Under faculty supervision students present workshop productions in areas of theatre that require the use of theatrical materials in an experimental manner, unusual theatrical spaces, masks, puppets, experimental approaches to classic dramas and children’s theatre. Public performances involve student directors and stage designers.

Th.A 55 STAGECRAFT 3 crs. 4 hrs.
Through discussion and demonstration, students learn the various elements of production, back stage/studio technical organization, stage managing, scenery construction and painting.
Participation in major school productions required.
Prerequisite: Th.A 50 (may be waived by the Department)

+ Th.A 56 BASIC LIGHTING 3 crs. 3 hrs.
The field of lighting, principles of electricity and light, how they relate to designing lights for stage, screen, television and industrials. Technical implementations are qualified and applied in laboratory conditions and in actual productions. In-depth studies of lighting particular plays and participating in at least one college production required.

+ Basic Course
+ **Th.A 57 PUPPETRY**

Appreciation of puppets and puppetry, their history, production and manipulation. Students apply techniques of building and using puppets as effective theatre.

+ **Th.A 59 PLAY PRODUCTION**

Performance, technical theatre production, box office management and stage management. Student participation can earn up to a total of four credits (one each semester) for successful contribution to a production.

*Required for Theatre Arts Majors.*

**Th.A 60 FUNDAMENTALS of COSTUME DESIGN**

Lectures and demonstrations on costume construction and design. In the costume shop, students learn shop layout, machinery, and materials which compose the costume design. Laboratory sessions required in connection with regularly scheduled theatre productions.

*Prerequisite: Th.A 50*

**Th.A 61 MAKEUP for the STAGE**

Design and application of stage make-up, principles for designing make-up and the actual applications of corrective and three dimensional make-up through lecture-demonstrations, laboratory situations, and actual production work. Each student is expected to participate in the complete process of designing, applying and maintaining make-up during a production.

*Prerequisite: Th.A 50*

**Th.A 62 ACTING III**

Acting in pre-modern drama with detailed analysis of the acting styles of selected Classic, Elizabethan, Neo-Classic, Restoration and Romantic drama. Study of language and movement in historical periods, is supplemented by practice in laboratory situations. Class enrollment is limited.

*Prerequisite: Th.A 53 (may be waived by the Department)*

+ **Th.A 63 BASIC SOUND TECHNOLOGY**

Basic principles, equipment, operation of sound equipment and the proper methods for using tape recorders, microphones, and amplifiers in relation to designed productions for the stage, screen and air waves. Analysis of equipment and methods of operation are applied in class, laboratory and in actual production.

*Prerequisite: Th.A 50, or MCB 35, or Department permission.*

**Th.A 65 SCENIC DESIGN**

Techniques and development of scenic designs based on knowledge of the theatre. The designer's procedure and method of working are studied in laboratory and in actual production.

*Prerequisite: Th.A 55 (may be waived by the Department)*

**Th.A 66 DIRECTING: THE FUNDAMENTALS**

Principles of play interpretation, the directorial concept, and methods of focusing audience attention on dramatic values by synthesizing character, language, idea and plot with exciting design and purpose.

*Prerequisites: Th.A 50 and Department permission.*

+ Basic Course
+ Th.A 67  AMERICAN MUSICAL THEATRE  
3 hrs. 3 hrs.
Development of the Broadway musical theatre from European operetta and American jazz backgrounds to the present day. Emphasis is on the musical and theatrical traditions of this form as well as on the changing styles in music, staging, and production values.

+ Th.A 68  HISTORY of the THEATRE  
3 hrs. 3 hrs.
History of the theatre from its primitive origins to modern times, includes study of historical documents, contemporary writings, slides of theatre architecture, costumes, scenic designs and related artifacts.

+ Th.A 69  STREET THEATRE  
4 hrs. 4 hrs.
Study and involvement in elements of street theatre. Students participate in exercises which help create ensemble acting, adaptation of materials to fit the street, writing and composing music and dance for a particular production.

Recommended Prerequisites: Th.A 50, 51, 52, or 53

Th.A 81  INDEPENDENT STUDY  
1-3 hrs. 1-3 hrs.
Independent study of Theatre Arts is developed individually between student and faculty member and must be approved by the Department.

Th.A 82  
1-3 hrs. 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

_________________________________________________________________________________ 

A.S. Degree 
THEATRE ARTS 
Requirements—Page 70 

_________________________________________________________________________________ 

+ Basic Course
TRAVEL and TOURISM DEPARTMENT
Room E-219  ext. 5143

Sheldon Friedland, Professor and Chairperson
Laurel Marshall, Instructor
Stuart Schulman, Associate Professor
Barbara Steffen, Assistant Professor
TRAVEL and TOURISM

+ TAT 1 INTRODUCTION to TRAVEL and TOURISM 3 hrs. 3 hrs.
Overview of the many and varied organizations and agencies that make up the travel and tourism industry, their roles and interrelationships. Topics include transportation, lodgings, restaurants, wholesale and retail operations, attractions, government owned parks and facilities, trade organizations, and governmental agencies.

+ TAT 2 THE TRAVEL INDUSTRY I 3 hrs. 3 hrs.
Destination development topics include: travel motivation; man-made and natural attractions, and activities in their geographic context; major tourism destination areas; selling techniques used when counseling clients.

TAT 3 THE TRAVEL INDUSTRY II 3 hrs. 3 hrs.
Transportation and Wholesaling are major components of the travel and tourism industry. The Transportation area includes regulation and deregulation, fare structure, charters, administration, marketing. Wholesaling area includes services, tour packaging, legal aspects.
Prerequisite: TAT 2

TAT 4 COMPUTER RESERVATIONS SYSTEMS 3 hrs. 4 hrs.
Continuous hands-on experience in how to access the computer to make bookings for airlines, hotels, rental cars, trains and cruises. Intensive study of the TWA PARS computer reservations system.
Prerequisite: TAT 11

TAT 11 THE TRAVEL AGENT and WHOLESALER I 3 hrs. 3 hrs.
To understand the operation and management of a travel agency, emphasis is on development of skills and practical experiences in ticketing, the use of domestic and international reference guides, financial responsibility as it pertains to travel agency operation and management structure.
Prerequisite: TAT 2

TAT 12 THE TRAVEL AGENT and WHOLESALER II 3 hrs. 3 hrs.
The role of governmental and quasi-governmental bodies as they affect the operation and financial status of travel retailers and wholesalers. Introduced to the use of computer systems, students become familiar with governmental regulations and financial sales reports.
Prerequisite: TAT 11

+ Basic Course
TAT 21 THE HOSPITALITY INDUSTRY
3 crs. 3 hrs.
Operation and management of hospitality enterprises with emphasis on application of management principles and financial operations in hotels, motels, restaurants, and resorts.
Prerequisite: TAT 2

TAT 31 TRANSPORTATION
3 crs. 3 hrs.
Regulatory environment, pricing structure, marketing and sales considerations as they interact with economic and social factors in both passenger and cargo transportation. All modes of surface and air transportation.
Prerequisite: TAT 2

TAT 92 FIELD EXPERIENCE in TRAVEL and TOURISM
3 crs. 9 hrs.
(8 hrs. in field plus 1 hr. on-campus seminar)
To integrate theory and practice by applying acquired skills in an actual work environment, eight hours per week of supervised field experience in Travel and Tourism plus one hour a week on campus, of seminar discussion of relevant topic.
Prerequisite: TAT 11
LIBRARY DEPARTMENT
Room L-200  ext. 5637

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Jeanne Galvin, Assistant Professor
Florence Houser, Professor
Sharad Karkhanis, Professor
Coleridge Orr, Associate Professor
Michael Rosson, Assistant Professor

Director, Media Services
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Louis Tirado, College Laboratory Technician
Angelo Tripicchio, Associate Professor
THE ROBERT J. KIBBEE LIBRARY

The Library and Media Center is the major learning resource facility at the college. Students and faculty are provided with a rich variety of materials to support the curriculum, meet information needs, assist in study, in research, in stimulating cultural development, satisfying special interests and academic curiosity. Professional librarians offer reference service and individual teaching assistance for students, produce and distribute a library handbook and a twice yearly newsletter "Op Cit" for faculty, administration and staff, and are available to promote the full utilization of all library resources.

The Library's high-quality collection includes more than 125,000 carefully selected books, over 500 current periodicals, magazines and journals, more than 14,000 bound periodicals and over 8,969 micro-films. Additional resources include 10,000 pamphlets, government documents, career briefs, and special collections of maps and college catalogs. The Library also contains an online public access catalog (CUNY+) which contains Kingsborough's print holdings as well as those of several other City University colleges.

In the Media Center (Room L-115, ext. 5044) are a variety of non-print materials and media services. Among the materials available are motion pictures, audio and video tapes, slides, filmstrips, phonograph records and dictation discs. The Center maintains an audio studio for taped lessons, programs for playback and remedial use. Media reference service is available throughout the academic year. A "Learning Lab" provides audio playback facilities for faculty and students on a "walk-in" basis.
CONTINUING EDUCATION and EXTERNAL AFFAIRS
Room A-214  Ext. 5051

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Saul W. Katz, Assistant Dean
   Director, Community Relations
Bernice Douglas, Director, Publications
Franceska B. Smith, Director,
   Continuing Education Program Development
Robert P. Schipa, Director,
   Continuing Education Programs
Janet Birnkrant, Assistant Director,
   Continuing Education Programs
Charles Hines, Director, "Diploma Now" Program
CONTINUING EDUCATION and EXTERNAL AFFAIRS

In support of its mission as an educational institution for the community, the College relies on outreach to a broad spectrum of learners. In addition to students of all ages who matriculate in credit and degree programs, the College serves learners who seek courses and programs on a not-for-credit basis. It also promotes learning outside of classrooms by making its rich resources as a collegiate institution—its scholars, artists and performers, print and technology resources, and campus facilities—available to the community.

Recognizing the importance of inter-connected networks of educational institutions, corporate entities, civic and governmental bodies, the College, its President, faculty and administrators are all active in these networks in order to secure the future, not only of the institution itself but of the City of New York as all advance toward the Twenty-first Century.

Outreach efforts are developed in Continuing Education and External Affairs and, with the consent and support of the President, advanced by Community Relations, and Publications.

COMMUNITY RELATIONS

At the direction of the President and the Dean, Community Relations efforts serve to publicize the College and advance its mission. The College’s vital links with its community are enhanced in several ways: through public events, such as the enormously popular free concerts; through provision of meeting places and facilities, and by making scholarly and civic expertise available to the community in addressing community issues.

PUBLICATIONS

The Publications Office produces the major catalogs, course listings, schedules of classes and handbooks for the academic departments of the College. In addition to informational publications, advertising and promotional responsibilities are assigned to the Publications Office, which also services Administration with posters and promotions; individual departments and divisions with special targeted recruitment efforts, such as brochures, advertising, special promotions, invitations and programs; students’ requirements, including graduation invitations and souvenir programs.

CONTINUING EDUCATION PROGRAMS

Career Advancement Courses

Tailored to the needs of adults re-entering the job market or seeking to update or upgrade skills for current jobs, career advancement courses build skills in word processing, data processing, typing and shorthand, and other business office skills. Career planning is facilitated by courses which introduce the adult learner to occupational options.

Certificate Programs

Carefully designed sequences of courses comprise the certificate programs. Offered on a non-credit basis, exempt from liberal arts distribution requirements, and of considerably shorter duration than degree programs at the College, the Continuing Education certificate programs nevertheless require commitment to a sustained and rigorous course of study. They are designed for adults seeking entry level employment in such positions as bookkeeper, administrative assistant, and lawyer’s assistant (paralegal).
High School Equivalency

Preparation for the G.E.D. examination includes a diagnostic/prescriptive workup, practice in test-taking, instruction in content areas, critical thinking, writing skills development, and counseling for both career development and college admission. For adults not yet ready for high school completion, basic education courses are also provided.

English as a Second Language

Diagnostic testing and counseling precede placement in appropriate-level instruction for adults whose first language is not English. Instructional levels range from survival skills for those with no command of English, to advancement skills for employees in fields such as health care or business who wish to polish their English language skills.

Liberal Arts

A variety of liberal arts courses serves adults who wish to explore their current interests in the humanities, politics, psychology, foreign languages and other areas. Adults also register in short-term liberal arts courses to sample the experience of formal instruction in established disciplines, deciding whether they wish to enroll in the College's credit-based courses and degree programs.

S.A.T. Preparation Program

This Saturday morning program for high school students offers instruction, drill, and simulated testing in verbal, math, and test-wiseness skills in preparation for college entrance examinations. Counseling, advisement on college selection, the application process, financial assistance and scholarship programs are also included.

Diploma Now

Offered at public high schools in the College's service area. By providing preparation for the GED examination and vocational and college counseling, Diploma Now offers alternatives to students whose basic skills are good but who have fallen behind in their progress toward high school graduation and are at risk of dropping out of school. Approximately one-fourth of the Diploma Now graduates subsequently enroll in credit and degree programs at Kingsborough.

College for Kids

This Saturday morning program for pre-teens, ages 7 through 12, offers a combination of academic and active classes. Most classes are small and all instructors are dedicated and highly qualified so that youngsters enjoy these enrichment activities not ordinarily provided in the public schools. Courses may include, but are not limited to: foreign languages, creative writing, "hands-on" instruction in arts, crafts, and musical instruments, fishing, photography, as well as swimming, tennis, gymnastics, dance, self-defense, and soccer.

Contact Courses: Privately and Publicly Supported

Continuing Education also offers courses and services for specialized target populations and program providers. Funded programs may serve, for example, adult learners in need of vocational counseling, literacy and English language instruction, and job training; these are offered under the aegis of the College and various public agencies, both state and national. Continuing Education also designs and provides courses for the employees of local business and industry and municipal agencies in furtherance of the College's mandate to contribute to the development of the workforce of its service area.
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In addition to the preceding faculty members, the College anticipates the services of Adjunct Faculty as follows:

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</table>

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Education Law Section 224-a

Students unable because of religious beliefs to attend classes on certain days.

1. No person shall be expelled from or be refused admission as a student to an Institution of Higher Education for the reason that he/she is unable, because of religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days.

2. Any student in an Institution of Higher Education who is unable, because of 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 each student who is absent from school, because of religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which may have been 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 the said student 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 any student because of availing him/herself of the provisions of this section.

6. Any student, who is 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 rights under this section.

7. As used in this section the term "Institution of Higher Education" shall mean schools under the control of the Board of Trustees of the State University of New York or of the Board of Trustees of The City University of New York or any Community College.

Rules and Regulations for the Maintenance of Public Order
(Henderson Rules)

The tradition of the university as a sanctuary of academic freedoms 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 freedom; 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 or 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 obligation, to defend itself. Therefore, the following rules and regulations are in effect at Kingsborough Community College and will be administered in accordance with the requirements of the process as provided in the Bylaws of CUNY's Board of Trustees.
To enforce these rules and regulations the Bylaws of CUNY's Board provide that:

THE PRESIDENT, with respect to this education unit, shall:

a. Have the affirmative responsibility of conserving and enhancing the education standards of the college and schools under his jurisdiction;

b. Be the advisor and executive agent to the Board and of his 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 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 education unit.

Rules

1. No member of the academic community shall intentionally obstruct and/or forcibly prevent others from the exercise of their rights, or interfere with the institution's educational process or facilities, or with the rights of those who wish to avail themselves of any of the institution's instructional, 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 is prohibited.

5. Each member of the academic community, or an invited guest, has the right to advocate his 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 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 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.

7. Disorderly or indecent conduct on college-owned or controlled properties 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 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 college.

9. It is a violation of acceptable standards of conduct at the college, and it is prohibited for any individual, group or organization to engage in the practice of "hazing";

    "Hazing is defined as any action or situation which recklessly or intentionally endangers mental or physical health or involves forced consumption of liquor or drugs for the purpose of initiation into or affiliation with any organization."

10. In accordance with the policy of The City University of New York, the College prohibits sexual harassment of employees or students.
Penalties

1. Any student engaging in any manner in conduct prohibited under substantive Rules 1–10 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 1–10 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 CUNY Board), or suspension with/without pay pending a hearing before an appropriate college authority, dismissal after a hearing, ejection and/or arrest by the civil authorities. In addition, in the case of a tenured faculty member, or tenured member of the administrative or custodial staff engaging in any manner in conduct prohibited under substantive Rules 1–10 shall be entitled to be treated in accordance with applicable provisions of the Education Law or Civil Service Law.

3. Any visitor, licensee, or invitee, engaging in any manner in conduct prohibited under substantive Rules 1–10 shall be subject to ejection, and/or arrest by the civil authorities.

Sanctions Defined

A. ADMONITION: An oral statement to the offender that University rules have been violated.

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 a 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.

Adopted by the Board of The City University of New York, June 23, 1969, Calendar No. 3(b).

In addition to Henderson Rules, student conduct and discipline is governed by Article XV of the Bylaws of The City University of New York. Students are urged to familiarize themselves with the content of the Article. Copies of the Bylaws are available in the Library. They are printed in the Student Handbook as are the rules and regulations pertaining to Sexual Harassment.
Axonometric view of the Marine and Academic Center, on the southeastern coast of the country. The Academic Center includes classrooms, laboratories, offices, conference rooms, and facilities designed to serve over 500 students. It also includes a 300 seat theater and an art gallery. In addition, the Center houses the Center for Marine Development and Research, which focuses on issues related to marine resource management, vessel operations, and seafood business management. The facilities are equipped to support both marine and nautical studies.
TRAVEL DIRECTIONS to KINGSBOROUGH

SUBWAY

BMT
BRIGHTON LINE
D or Q Train
   to Sheepshead Bay Station; B-49 Bus* or,
   to Brighton Beach Station; B-1 Bus*
SEA BEACH LINE
   N Train to 86 Street Station; B-1 Bus*
WEST END LINE
   B Train to 25 Avenue Station; B-1 Bus*
FOURTH AVENUE LINE
   RR Train to 59 Street Station; change for Sea Beach N Train to 86 Street Station; B-1 Bus*

IRT
LEXINGTON AVENUE LINE
   Trains #4 or 5 to Atlantic Avenue station; or, to Borough Hall Station;
   change to Brighton Line Train and Bus*
SEVENTH AVENUE LINE
   Trains #2 or 3 to Atlantic Avenue Station; or, to Borough Hall Station;
   change to Brighton Line Train and Bus*

IND
SIXTH AVENUE LINE
   D Train to Sheepshead Bay Station; B-49 Bus* or,
   to Brighton Beach Station; B-1 Bus*
   F Train to Avenue X Station; B-1 Bus*
EIGHTH AVENUE LINE
   A Train to Franklin Avenue Station; Shuttle to Prospect Park Station;
   change to Brighton Line Train and Bus*

BUS
B-1*, B-49*
   B-4, B-36 and B-68 connect with B-1*
   B-2, B-3, B-6, B-9, B-12, B-25, B-31, B-35, B-36, B-45, B-47, B-48, and B-50 connect with B-49*

   *Take these buses to the last stop. Walk straight along Oriental Boulevard directly into the College.
CAR

From Manhattan

Belt Parkway eastbound to Coney Island Avenue—Exit 8. (Note: Exit 8 follows very closely upon Exit 7 and can easily be missed). Watch for the directional signs leading to the campus. They point the way along the following route: Cross Coney Island Avenue and continue along Guider Avenue to the stop sign. Turn right on East 12th Street for one block. Turn left on Neptune Avenue to the traffic light. Turn right at light on Cass Place and proceed until next traffic light. Turn right on West End Avenue. Turn left at traffic light to Oriental Boulevard which leads directly to the College.

From Queens and Nassau

Belt Parkway westbound to Coney Island Avenue—Exit 8. Watch for the directional signs leading to the campus. They point the way along the following route: Turn right at exit to Voorhies Avenue. Turn right at first traffic light to Sheepshead Bay Road. At second traffic light turn right to Emmons Avenue. At first traffic light turn left to West End Avenue. Turn left at the second traffic light to Oriental Boulevard which leads directly to the College.
SCHOLASTIC AWARDS
Annual awards are given to graduating students who achieved academic excellence in their various disciplines, and to students who gave outstanding service to the college through student government and student activities. The Faculty Committee on Awards, a sub-committee of the Committee on Students, administers the Annual Awards Program.

An annual Valedictorian Award has been established by members of the Addes Family in loving memory of Fred. F. Addes who attended Kingsborough Community College as a "My Turn" student.

An annual Scholastic Achievement Award in the field of Hebrew-Yiddish studies, has been established by the Milrod Family in loving memory of Louis Milrod, a 1972 Kingsborough Community College graduate who, in his 85th year completed his doctoral studies and earned the D.J.L. degree.

GIFTS and BEQUESTS
Kingsborough Community College is supported by student tuition and allocations from the City of New York and the State of New York. The limitations of these funds prevent the support of some valuable programs designed to stimulate, enrich and further the broad educational objectives of the college. Additional funds are needed to: provide awards, grants and loans to students; support educational programs and faculty development; sponsor research and publications; foster the cultural and social life of the college community.

The Kingsborough Community College Foundation Inc., a Not-For-Profit Corporation welcomes gifts, grants, awards and bequests from business, industry and public spirited citizens to support and expand these activities. The Foundation Office is at 2001 Oriental Blvd., Bklyn, N.Y. 11235.

HOLIDAYS and EMERGENCY COLLEGE CLOSING
The Academic Calendar lists scheduled holidays when the College is closed and no classes held.

In the event of Emergency College Closing, due to inclement weather or other factors over which the College has no control, students can get up-to-the-minute information by listening to the following radio stations for instructions.

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<td>107.5 fm</td>
<td>WLIB</td>
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<tr>
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<td>880 am</td>
<td>WMCA</td>
<td>570 am</td>
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<tr>
<td>—</td>
<td>101.1 fm</td>
<td>WOR</td>
<td>710 am</td>
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<tr>
<td>WFAS</td>
<td>1230 am</td>
<td>—</td>
<td>103.9 fm</td>
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<tr>
<td>—</td>
<td>90.9 fm</td>
<td>WKRB</td>
<td>90.9 fm</td>
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NOTE: Programs and requirements, tuition and fee schedules listed in the catalog, are necessarily subject to change at any time at the discretion of the administration and/or action by Kingsborough Community College, the CUNY Board of Trustees, The City University or State University of New York.
THE CITY UNIVERSITY OF NEW YORK, ........

which was created by state legislation in 1961, has evolved from a "Free Academy" underwritten by the people of New York City in 1847 into a "public entity" of nine (9) senior colleges, seven (7) community colleges, a technical college, a graduate school, a law school, and an affiliated medical school. Article 125 of the New York State Education Law (Sections 6201, et. seq.) establishes The City University of New York as a separate and distinct body, corporate governed by a Board of Trustees. Prior to 1979, the members of this Board were convened as "The Board of Higher Education," which had been established in 1926.

Of the Board's seventeen (17) members, ten (10) are appointed by the Governor, including one from each borough; five (5) are appointed by the Mayor, including one from each borough; and two (2) are elected ex officio members: the Chairperson of the University Faculty Senate, who does not vote; and the Chairperson of the University Student Senate, who may vote. In general, the Board sets policy and approves actions of the University; determines the Bylaws of the University, from which all units derive or adopt specific governance structures; and appoints the Chancellor of the University and the presidents of its colleges.

The Chancellor oversees the administration of policies approved by the Board, recommends to the Board policies and actions on all educational activities of the University, and coordinates college matters involving business and financial procedures and management. It is the Chancellor's responsibility as well, with the advice of the Council of Presidents, to prepare the operating and capital budgets of the University for consideration by the Board and presentation to the State and City. Administrative and staff support to these operations of the University, and to the Board, are provided through a structure of Vice Chancellories and Deanships.

The Council of Presidents of the several colleges is established by the Bylaws of the University and is chaired by the Chancellor. The Council not only advises the Chancellor on the budget and on the formulation and revision of a Master Plan for public higher education in the City, but it may recommend directly to the Board in matters concerning the physical and instructional development of the University at large. The President of each college unit is specifically charged with the administration of his/her own institution and in this capacity he/she is responsible directly to the Board.

Within each institution, governance structures are established to meet unique needs and objectives; some of these structures may be at variance with plans called for in the University Bylaws, but are permitted by them. Under these Bylaws, responsibilities for policy at the college level are shared by the President, the Faculty, and students. The President has affirmative responsibility for conserving and enhancing the educational standards and general academic excellence of the college under his/her jurisdiction and is responsible to the Board as its advisor and executive agent on his/her campus. The President is also directed to consult with the Faculty, through appropriate bodies, on matters of appointments, reappointments, and promotions. One means of this consultation is provided for in the Bylaws through the requirement for a Committee on Faculty Personnel and Budget at each college.

The Bylaws reserve to the Faculty of each institution, subject to guidelines established by the Board of Trustees, responsibility for the formulation of policy relating to curriculum, admission and retention of students, credits, attendance, and the granting of degrees. Recommendations in these matters by a Faculty, Faculty Council, or other organization created under a Board-approved college governance plan to represent the Faculty, as provided for in the Bylaws, shall be forwarded to the Board by the President.
SPECIAL PROGRAMS

Baccalaureate Degree Program

The CUNY Baccalaureate degree, awarded by the University, brings a flexible new approach to the concept of a liberal arts education. It gives a student maximum opportunity to take courses and work with faculty at other than the home college and permits the student to incorporate individual research, travel, work, community activities and other off-campus activities of educational value into an individually planned course of study. This program is open to students who have completed at least 15 credits at a CUNY college.

Information and applications are available from the campus coordinator (page 24) or from the Coordinator of the CUNY Baccalaureate Program, The Graduate School and University Center, 33 West 42nd Street, New York, New York 10036.

College Discovery

Students who meet certain requirements, particularly with regard to family income, may be eligible for admission to one of The City University's special programs. The Community College level program is called College Discovery. A "first-time admission" applicant, who may be qualified for this program, should complete the section on the admissions application form which pertains to Special Programs. Candidates are selected by a special, selective system. Those not chosen for the Special Programs are automatically considered for admission under regular admission procedures (page 9).

Computer Facilities

The University Computer Center provides Kingsborough students, faculty, and staff access to a large-scale computing facility for academic and administrative purposes. Batch job processing and teleprocessing services are provided. All standard IBM languages, numerous mathematical, social science, and scientific application packages and comprehensive Database services are available. A portion of the computer is dedicated to a "free class" of job execution that does not require the establishment of a UCC allocation account. The teleprocessing systems include WYLBUR for text editing and remote job entry, CMS for instructional interactive usage, and APL for scientific use. Graphic hardware and software is also available to users. In conjunction with the KCC Computer Center, consulting, documentation, and educational services are provided. Kingsborough students, faculty and staff have access to personal computing laboratories containing IBM and Apple computers plus significant amount of programs available for instructional use on these computers.

The University Computer Center is located at 555 West 57 Street in Manhattan, but KCC's remote job entry stations and public terminals enable access from the campus. For more information, contact the UCC Coordinator of User Services (212) 977-8000 or, KCC Instructional Computing Dr. Philip Greenberg (718) 368-5154.

Foreign Students Program

All applicants who hold, or expect to obtain, temporary (non-immigrant) visas, should obtain the correct application form from the Foreign Students Office of The City University of New York Admission Services, 875 Avenue of the Americas, New York, N.Y. 10001.

Super Citizens

New York State residents, 65 years of age and over, may attend CUNY colleges under a policy of the Board of Trustees. No tuition is charged to state residents, but a $52 registration fee is charged each semester. Some documentation of age and residency must be submitted.

Students are accepted on a matriculated or non-degree basis, depending upon previous educational experience and the availability of space at the College. Students wishing to apply as matriculated students should check the appropriate filing dates with the Admissions Office, Room A105 ext. 5676.

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The Office of Admission Services

The Office of Admission Services assists all prospective applicants who are interested in attending one of the colleges of The City University of New York. OAS, in conjunction with the University Application Processing Center (UAPC) processes all freshmen and advanced standing transfer applications and evaluates all foreign educational documents. The office is conveniently located at 101 West 31st Street in Manhattan and contains the following divisions:

**The Information Center**: Provides information on: CUNY Admissions Procedures, International Student Admissions, Financial Aid, CUNY Programs and GED information. The Center is open Monday through Thursday, 9:00 A.M.–6:00 P.M., and Friday, 9:00 A.M.–5:00 P.M. Phone: 212-947-4800.

**School and Community Services**: Disseminates pre-admission information on CUNY to students and guidance counselors in all New York City High Schools and most of the large community agencies.

**Computer Based Educational Opportunity Center (CBEOC)**: CBEOC is a federally funded program operating in conjunction with CUNY's Office of Admission Services. Its prime goal is to assist persons from low-income areas to enroll in a post-secondary education program. Phone: 212-868-6200.

**New York City Regional Center for Life Long Learning**: Housed at the Office of Admission Services, the Center for Life Long Learning provides information about post-secondary educational opportunities available in New York City.

In addition, OAS administers the College Level Examination Program (CLEP) and the Test of English as a Foreign Language (TOEFL). Other functions include the preparation of CUNY publications such as the Guide to Admissions and the CUNY Community Newsletters.
THE CITY UNIVERSITY OF NEW YORK

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Dave Fields ..............................................................Special Counsel to the Chancellor

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Colleges of The City University of New York

Graduate Division
THE GRADUATE SCHOOL and UNIVERSITY CENTER, founded in 1961
   Frances D. Horowitz, President
THE CUNY LAW SCHOOL at QUEENS COLLEGE, founded in 1973
   W. Hayward Burns, Dean

Senior Colleges
THE CITY COLLEGE, founded in 1847
   Augusta S. Kappner, Acting President
HUNTER COLLEGE, founded in 1870
   Paul Le Clerc, President
BROOKLYN COLLEGE, founded in 1930
   Vernon E. Lattin, President
QUEENS COLLEGE, founded in 1937
   Shirley S. Kenny, President
NEW YORK CITY TECHNICAL COLLEGE, founded in 1946; affiliated with The City University in 1964
   Charles W. Merideth, President
JOHN JAY COLLEGE of CRIMINAL JUSTICE, founded in 1964
   Gerald W. Lynch, President
YORK COLLEGE, founded in 1966
   Josephine D. Davis, President
BERNARD M. BARUCH COLLEGE, founded in 1968
   Matthew Goldstein, President
HERBERT H. LEHMAN COLLEGE, founded in 1968
   Ricardo R. Fernandez, President
MEDGAR EVERS COLLEGE, founded in 1968
   Edison O. Jackson, President
THE COLLEGE OF STATEN ISLAND, founded in 1976
   Edmond L. Volpe, President

Community Colleges
BRONX COMMUNITY COLLEGE, founded in 1957
   Roscoe C. Brown, Jr., President
QUEENSBOROUGH COMMUNITY COLLEGE, founded in 1958
   Kurt R. Schmeller, President
KINGSBOROUGH COMMUNITY COLLEGE, founded in 1963
   Leon M. Goldstein, President
BOROUGH of MANHATTAN COMMUNITY COLLEGE, founded in 1963
   Stephen M. Curtis, Acting President
EUGENIO MARIA de HOSTOS COMMUNITY COLLEGE, founded in 1968
   Isaura Santiago-Santiago, President
FIORELLO H. LA GUARDIA COMMUNITY COLLEGE, founded in 1968
   Raymond C. Bowen, President

Affiliated Institution
MOUNT SINAI SCHOOL of MEDICINE, affiliated with The City University in 1967
   John W. Rowe, President
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