

1989-1991

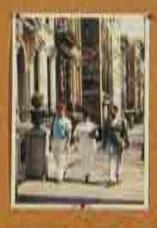
Catalogue





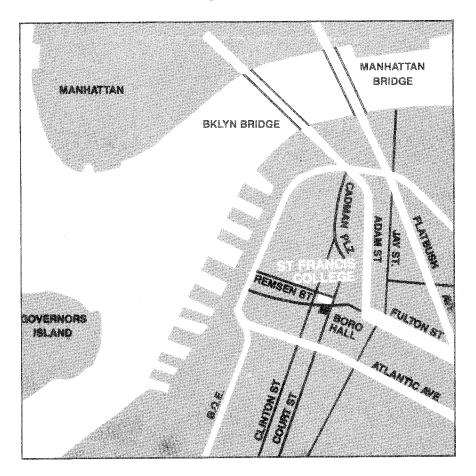






ST FRANCIS

Directions to St. Francis College, 180 Remsen Street, Brooklyn Heights



By Subway

IRT: 7th Avenue (2 or 3) and Lexington Avenue (4 or 5) lines to Borough Hall.
IND: A or F trains to Jay Street-Borough Hall.

BMT: N to Court-Montague. D, B or Q trains to DeKalb Avenue. Change to M or R trains; go two stops to Court-Montague Street stop.

From Staten Island: No. 7 bus to 95th Street and Fourth Avenue. Change to \mathbb{R} train; go to Court Street-Borough Hall stop.

By Bus

Bus Routes: **B-25**, **B-26**, **B-37**, **B-38**, **B-41**, **B-45**, **B-52** or **B-67** to Court

By Long Island Railroad

To Flatbush Avenue Terminal. Take IRT (2, 3, 4, or 5) subway two stops to Court Street-Borough Hall.

By Car

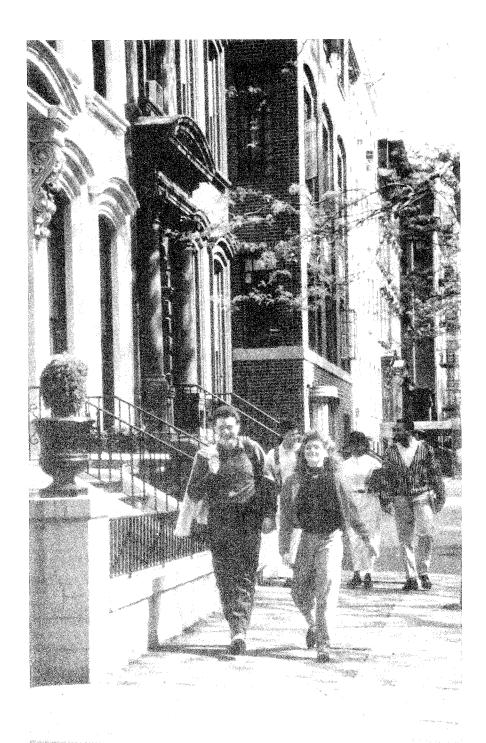
From Manhattan: Brooklyn Bridge to Cadman Plaza West Exit. Turn left. After several blocks Cadman Plaza becomes Court Street.

From Queens: Brooklyn-Queens Expressway to Cadman Plaza Exit. Same as above.

From Staten Island: Brooklyn-Queens Expressway to Cadman Plaza Exit. Turn right. Same as above.

1989-1991 Catalogue St. Francis College

180 Remsen Street, Brooklyn Heights, New York 11201



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Academic Calendar

Fall 1989

	AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.	
August 17	Thursday	Registration for returning students begins
September 4	Monday	Labor Day—administrative offices and library closed
September 6	Wednesday	Classes begin—free program changes
September 7	Thursday	Last day for free program changes
September 12	Tuesday	Last day for adding courses
October 3	Tuesday	Last day to file Pass-Fail Course Requests
October 9	Monday	Columbus Day—no classes—administrative offices and library closed
October 10	Tuesday	Pre-registration for Spring 1990 begins
October 31	Tuesday	Last day for seniors to file Application for Degree for 1990 February, June and September graduates. Pre-registration for Spring 1990 ends.
November 6	Monday	Mid-semester grades due by noon in
November 21	Tuesday	Registrar's Office Thanksgiving recess begins at 6:00 p.m. Administrative offices and library closed November 22-26 inclusive.
November 27	Monday	Classes resume
December 4	Monday	Last day to file Automatic Withdrawal (W)
December 12	Tuesday	Last day of classes
December 13	Wednesday	Study day—no classes
December	Thursday-	Final examinations
14-20	Wednesday	E' la
December 22 December	Friday	Final grades due by noon in Registrar's Office Christmas holidays—administrative offices
25, 26	Monday, Tuesday	and library closed
January 1, 2	Monday, Tuesday	New Year's holidays—administrative offices and library closed
Spring 19	90	
January 15	Monday	Martin Luther King, Jr. Birthday—
January 16	Tuesday	administrative offices and library closed Registration for returning students begins

January 29 January 30	Monday Tuesday	Classes begin—free program changes Last day for free program changes
February 2 February 19, 20 February 23	Friday Monday, Tuesday Friday	Last day for adding courses President's Day holidays—no classes— administrative offices and library closed Last day to file Pass-Fail Course Requests
April 2	Monday	Mid-semester grades due by noon in
April 10	Tuesday	Registrar's Office Easter recess begins after last class. Administrative offices and library closed
April 23	Monday	April 13-16 inclusive. Classes resume. Registration for Summer Session and pre-registration for Fall 1990 semester begins.
May 7	Monday	Last day to file Automatic Withdrawal (W)
May 18	Friday	Last day of classes
May 21-25 May 28	Monday-Friday Monday	Final examinations
IVERY AU	Monday	Memorial Day—administrative offices and library closed
May 29	Tuesday	Final grades due by noon in Registrar's Office
June 6 June 9	Wednesday Saturday	Baccalaureate Mass Commencement
Summer 1	990	
June 11	Monday	Summer Session I begins
July 4	Wednesday	Independence Day—no classes— administrative offices and library closed
July 12	Thursday	Summer Session I ends
July 16	Monday	Summer Session II begins
August 16	Thursday	Summer Session II ends
Fall 1990		
August 16	Thursday	Registration for returning students begins
September 3	Monday	Labor Day—administrative offices and
September 5	Wednesday	library closed Classes begin—free program changes
September 6 September 11	Thursday Tuesday	Last day for free program changes Last day for adding courses

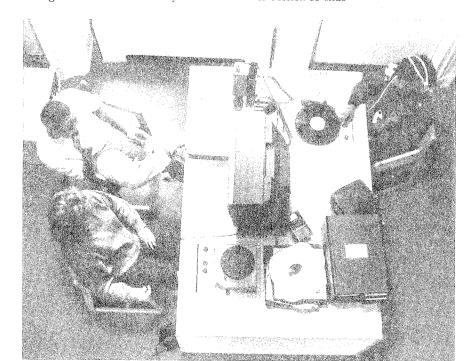
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		A CONTRACTOR OF THE PROPERTY O
October 2 October 8 October 9 October 31	Tuesday Monday Tuesday Wednesday	Last day to file Pass-Fail Course Requests Columbus Day—no classes—administrative offices and library closed Pre-registration for Spring 1991 begins Last day for seniors to file Application for Degree for 1991 February, June and September graduates. Pre-registration for Spring 1991 ends
November 5 November 20	Monday Tuesday	Mid-semester grades due by noon in Registrar's Office Thanksgiving recess begins at 6:00 p.m.
November 26	Monday	Administrative offices and library closed November 21-25 inclusive. Classes resume
December 3 December 11 December 12 December 13-19 December 21 December 24, 25 December 31, January 1 Spring 199	Wednesday Friday Monday, Tuesday Monday, Tuesday	Last day to file Automatic Withdrawal (W) grade Last day of classes Study day—no classes Final examinations Final grades due by noon in Registrar's Office Christmas holidays—administrative offices and library closed New Year's holidays—administrative offices and library closed
January 14 January 21 January 28 January 29	Monday Monday Monday Tuesday	Registration for returning students begins Martin Luther King, Jr. Birthday— administrative offices and library closed Classes begin—free program changes Last day for free program changes
February 1 February 18, 19 February 22	Friday Monday, Tuesday Friday	Last day for adding courses President's Day holidays—no classes— administrative offices and library closed Last day to file Pass-Fail Course Requests
March 25 March 26	Monday Tuesday	Mid-semester grades due by noon in Registrar's Office Easter recess begins after last class. Administrative offices and library closed March 29 to April 1 inclusive.
April 8	Monday	Classes resume

April 22	Monday	Registration for Summer Session and pre- registration for Fall 1991 semester begin
Мау 6	Monday	Last day to file Automatic Withdrawal (W)
May 17	Friday	Last day of classes
May 20-24	Monday-Friday	Final examinations
May 27	Monday	Memorial Day—administrative offices and library closed
May 28	Tuesday (A) & C	Final grades due by noon in Registrar's Office
June 5 - June 8	Wednesday Saturday	Baccalaureate Mass Commencement
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Summer 1991

June 10	Monday	Summer Session I begins
July 4	Thursday	Independence Day—no classes—
Tuly 11	Thursday	administrative offices and library closed Summer Session I ends
July 15	Monday	Summer Session II begins
Anoust 15	Thursday	Summer Session II ands



General Information

History

Early in 1858, the Right Reverend John Loughlin, first Bishop of Brooklyn, invited the Irish Congregation of the Franciscan Brothers to educate the boys of his diocese.

On September 16, 1858, the Brothers purchased a building at 300 Baltic Street and in the Fall of 1859 they opened St. Francis Academy, in which the College had its origin. In 1868, adjacent property was purchased and a new wing constructed to provide additional classrooms, a chapel, and accommodations for boarding students. On June 2, 1868, the original foundation was incorporated by an Act of the Legislature under the title "The St. Francis Monastery" of the City of Brooklyn.

On May 8, 1884, by amendment to the Act of Legislature, the Trustees of "The St. Francis Monastery" were empowered to "establish a Literary College in the City of Brooklyn under the title of St. Francis College, and...appoint as trustees of said College twelve persons of full age, citizens of the United States and of the State of New York, whom it desires to manage and direct the said College...they and their successors in office shall have the power to make such by-laws as they shall deem proper for the management of said College, and to prescribe the course of study and discipline to be pursued and observed by the students attending the same, and under the title of Trustee of St. Francis College shall have the same power to confer diplomas, literary honors and degrees as is possessed by the Universities and Colleges of this State..."

The Bachelor of Arts degree was conferred for the first time in June, 1885, and the first Bachelor of Science degree was granted in June, 1892. The Bachelor of Business Administration degree was first conferred in June 1956.

In 1912 the College discontinued student facilities to meet the needs of expansion. Student living quarters were remodeled to provide additional science laboratories, a library, and lecture rooms. Space needs became even more acute, and in 1923, the Brothers appealed to the people of Brooklyn for help. The College building, formerly located at 35 Butler Street, was erected in 1926 as a result of this appeal.

In 1957 the original Act of Legislation incorporating "The St. Francis Monastery" of the City of Brooklyn was amended to remove its power to conduct an institution of higher education. The Trustees of St. Francis College then petitioned the Regents of the University of the State of New York for an absolute Charter which was granted on April 10, 1957. St. Francis College moved to its present location in 1960. Shortly after moving to Remsen Street, the College became a coeducational institution. Additional property was purchased on both Remsen and Joralemon Streets. The College expanded its facilities by erecting a science building, a physical education complex, and a building to house the Franciscan Brothers and provide more space for faculty.

St. Francis observed its centennial in 1984. The many celebrations during the 1984-85 academic year emphasized the College's proud tradition and its ability to meet the challenges of each new era. Now in its second century, St. Francis College continues to provide students with the preparation they need to take their places as contributing members of society.

Mission

St. Francis College is an independent undergraduate urban institution with a history of conferring degrees in the arts, sciences, and preprofessional areas, mainly to the residents of the metropolitan New York area. Recognizing both the diversity of prior academic preparation and the varied career aspirations of its students, the College attempts to respond concretely to their individual intellectual and professional needs. This is done in two ways: principally by providing a fundamental and thorough education in the liberal arts tradition, and concurrently by correlating the benefits of this liberal education with the specific major-field studies of the student

St. Francis has in the past provided, and should strive to maintain, an association between students and faculty which is personal and friendly; its size permits it, and its commitment to liberal education requires it. With all of its curricular programs and support services firmly anchored to a core of liberal education, the College provides its students with the prerequisites for living a truly fulfilling existence. Acknowledging an additional responsibility within an increasingly technological environment, and in keeping with its Franciscan tradition, the College also promotes the development of specific professional preparation built on a firm foundation of universal values.

At St. Francis College, excellence of instruction unites the core curriculum and the major disciplines to provide a mutually supportive curricular framework for the College's response to the educational needs of its multiracial, ethnically varied, urban student body. These students, while pursuing their separate majors either in arts, sciences, or occupational/preprofessional studies, are nonetheless unified by their common exposure to the humanistic values of liberal education, signified in particular by the core curriculum. It is through the core curriculum that St. Francis College strives to develop minds capable of responsible intellectual self-determination.

The commitment in all programs to liberal education is the source of the institution's coherence. Liberal education is the systematic cultivation of that which makes man excellent: his reason, and the freedom grounded in that reason. It consists in the formation of intelligence, of character, of taste. Thus a liberal education seeks to develop free and rational men and women who are concerned with the pursuit of knowledge, who are conscious of their moral, religious, and social obligations, and who grasp the value of their common human heritage. Such individuals are best prepared to learn and master the special skills of the professional and business domains, to adapt to future changes in these domains, and to become competent, responsible, and mature citizens of a democratic republic.

As a result of its Franciscan heritage, St. Francis College advocates an education not only characterized by the ideals of the Judeo-Christian tradition, but also tempered by an ecumenical respect for the spiritual perspectives of a pluralistic society.

Goals and Objectives

St. Francis College defines itself in terms of the following objectives:

1. To provide programs in the arts, sciences, and preprofessional fields leading to the bachelor's and the associate degrees. The programs are designed to serve the needs of both traditional and non-traditional students who seek careers immediately after graduation as well as those who are preparing to enter

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graduate school or professional training. To each of these degree programs the following aims are integral:

- a. To prepare students to think critically and to read, write, speak, and compute effectively as befits liberally educated persons
- By means of an integrated core curriculum, to acquaint students with the fundamental areas of academic inquiry in the humanities, fine arts, social sciences, and natural sciences
- In a systematic fashion to deepen each student's knowledge of a major field of study
- 2. To promote the development of the whole person—intellectually, socially, and physically—and to develop among students an understanding and an appreciation of the importance of religious values
- Through quality instruction, to stimulate the cultivation of learning as a distinct ideal
- 4. To provide the local community with the opportunity to participate in the College's educational and cultural programs

Memberships and Affiliations

St. Francis College is chartered by the Legislature of the State of New York, and is accredited by the Regents of the University of the State of New York and the Middle States Association of Colleges and Schools. It is a member of the Association of American Colleges, the National Commission on Accrediting, the Commission on Independent Colleges and Universities, the Brooklyn Education and Cultural Alliance, the Association of Catholic Colleges and Universities, the Council for Advancement and Support of Education, the National Association of Independent Colleges and Universities, the American Assembly of Schools and Colleges of Business, and the Middle Atlantic Association of Colleges of Business Administration.

Location

St. Francis College is within four blocks of the Borough Hall subway stations of all subway lines and is easily accessible from all parts of the metropolitan area. The campus is located between Remsen and Joralemon Streets in Brooklyn Heights, a national historic landmark district.

College Facilities

The St. Francis College campus consists of five interconnected buildings which provide instructional areas, library, student services, and office space for the College.

Arts Building

The seven-story Arts Building is served by four elevators. It contains the recently renovated McArdle Student Center, 25 classrooms, and 3 seminar rooms in which faculty and student meetings are also held. It also houses administrative offices.

Science Building

This six-story structure is adjacent to the Arts Building on Remsen Street. An escalator and elevators provide access to both buildings. The Science Building houses classrooms and laboratories for the study of biology, chemistry, physics, and

psychology. Other facilities include a greenhouse, an animal room with adjoining surgical room, and a darkroom.

Offices and research laboratories for the science faculty as well as offices for the mathematics department are located in the building. A microcomputer laboratory for student use is located on the third floor.

The Office of Academic Support Services is also located on the third floor. On the main floor are a large lounge and study area and Founders Hall, a multi-purpose auditorium and classroom facility which seats 300 people.

Residence Building

This building houses faculty offices and the Brothers' Residence.

Physical Education Building

This building is located behind the Science Building and connects to it and to the Arts Building. It consists of a gymnasium where physical education courses are taught and which provides the court for men's and women's intercollegiate basketball and a wide range of intramural activities, an Olympic-size swimming pool, weight training room, auxiliary gymnasium office space, and roof recreation area.

McGarry Library

The McGarry Library underwent a two-million-dollar renovation-expansion, which was completed in the winter of 1981-82. The Library houses in excess of 150,000 volumes, and more than 880 periodicals are currently received. Bound and unbound journals, microfilm, pamphlets, and other materials are accessible for research and study. On-line data-base searching is available.

The Library provides subject orientation for students as well as individual bibliographic consultations on term paper projects. It houses the Apollo II magnifier for the visually handicapped.

The Library is richly supplemented by other library facilities in the area. As a member of the St. Francis community, students are entitled to use libraries at Long Island University, Pratt, Polytechnic University, New York City Technical College, Medgar Evers College, Brooklyn College, and St. Joseph's College.

Special Programs and Services

Federal Aviation Administration Cooperative Education Program

Students enrolled in the Aviation Administration or Aviation Business Studies Program are eligible at the end of their sophomore year to apply for positions in the Federal Aviation Administration Cooperative Education Program. A stringent selection process is conducted by the FAA. Successful candidates will be employed at FAA Air Traffic Control Facilities in the region. Upon completion of the two 26-week intern periods and graduation from St. Francis, the intern is offered full-time employment with the FAA as an air traffic controller.

Internship Opportunities

Excellent opportunities exist for paid and volunteer work experiences in a number of fields through various internship programs. Academic credit is often awarded by permission of department chairmen and the Academic Dean.

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Some examples of intern programs are: the New York City Summer Management Intern Program, Public Interest Research Group Internships, Urban Fellow Program, New York City Transit Authority Intern Program, and New York State Assembly Session Internships.

Internships in industrial and public accounting which provide guidance and practical experience are also available to selected students.

Junior Year Abroad

At the end of their sophomore year, students may elect to study abroad for one year and to apply this work toward their St. Francis degree.

Students may select a course and place of study from among many programs sponsored by international education agencies such as the Institute of European Studies or the International Education Exchange Service. They may also participate in the Inter-American Studies Program sponsored by the United States Government or other recognized educational institutions. Interested students should consult their department chairman and obtain program approval from the Office of the Academic Dean.

American Institute of Banking

St. Francis College accepts 32 semester hours of transfer credit, 18 semester hours from all fundamental courses and 14 from any single option of the student's choice, upon successful completion of the Institute's Standard Program. These credits may be applied toward a Bachelor of Science degree in Accounting or Management or toward the Bachelor of Arts degree in Economics.

Continuing education students who are applying American Institute of Banking credit towards their St. Francis degrees may be interested in the Bachelor of Science degree in Special Studies which provides flexibility for those who wish to develop their own programs.

United States Reserve Officers' Training Corps Programs

Qualified full-time students may participate either in the Army ROTC Program at Polytechnic University or in the Air Force ROTC Program at Manhattan College on a cross-enrollment basis. The two- or four-year program leads to a commission as a Second Lieutenant in the United States Army or the United States Air Force. Interested students should contact the Office of the Academic Dean of St. Francis College for further information.

Admissions

It is the policy of St. Francis College to admit as matriculated students only those applicants who present evidence that they can successfully pursue courses leading to a degree.

The College admits individuals of any race, religion, and national, or ethnic origin to the rights, privileges, programs, and activities offered students at the school. It does not discriminate on the basis of sex, race, religion, national or ethnic origin, or handicap in the administration of educational or admissions policies, scholarships and loan programs, or other college-based programs.

Students who desire admission should contact the Office of Admissions, (718) 522-2300, ext. 200, for an official application form. The completed form should be returned to the same office.

Requirements for Admission to the Freshman Class

High School Graduates

Applicants seeking an associate's or bachelor's degree must present a transcript from an approved secondary school. All applicants are encouraged to take the Scholastic Aptitude Test while enrolled in secondary school and to submit their scores to the College. Those who have not taken the SAT while in high school will be afforded an opportunity to do so by the College prior to their first registration for classes. It is necessary that an SAT profile for each enrolled student be on file at the College for research and placement purposes.

Applicants seeking an associate's or bachelor's degree should have completed a minimum of sixteen (16) academic high school units, including four years of English, three years of history/social science, two years of mathematics, and one year of natural science. Applicants seeking a bachelor of science degree should have completed 11th-year high school mathematics or its equivalent.

Those students seeking an Advanced Business Certificate must present proof of high school graduation prior to completion of a certificate program.

High School Equivalency Applicants

Applicants seeking an associate's or bachelor's degree who have a recognized High School Equivalency Diploma should present a transcript of the New York State (or other) General Educational Development (GED) test scores. The total score must be at least 250, with a minimum score of 45 on each individual part of the test.

Foreign Language Students

Applicants seeking an associate's or bachelor's degree whose native language is not English must present the results of the Test of English as a Foreign Language (TOEFL) and must achieve a score of at least 500 on the test.

Foreign students who seek admission should file an application, transcript of high school record, and proof of high school graduation. Because of the diversity of documentation, students must present official transcripts to the Admissions Office well in advance of their anticipated entrance date. (The College is authorized by Federal Law to enroll non-immigrant aliens for the purpose of obtaining a degree.)

Other Applicants

Applicants seeking an associate's or bachelor's degree program who do not meet the above-mentioned criteria may be admitted to St. Francis College after review and assessment of their educational background. The College is more interested in the applicant's potential to succeed in college than in any prescribed pattern of entrance units. When the preparation differs from the state's requirements, the record will be studied by the Admissions Office for evidence of unusual aptitude, especially in those studies which are prerequisite for the curriculum the applicant wishes to pursue. The number of such students admitted and the conditions for admission are strictly controlled.

Non-matriculated Students

Applicants who are not seeking associate's or bachelor's degrees may apply for admission. Acceptance will be on a space-availability basis, after an assessment of the applicant's ability to do college-level work.

Requirements for Admission with Advanced Standing

Transfer Applicants

The decision to admit to advanced standing and the determination of transfer credit to be allowed rests with the staff of the Admissions Office.

A student who has attended another college or university must submit an official transcript showing courses and grades, a catalogue from each institution attended which has been marked to indicate courses for which credit is sought, and a statement from an administrative officer that the applicant has been honorably dismissed.

The student must also complete an application form and submit a secondary school transcript.

Credit will be allowed only for courses appropriate to the curriculum selected at St. Francis College, and where records show course grades equivalent to or higher than the St. Francis grade of C.

The following chart lists the maximum number of credits that may be accepted toward St. Francis College programs:

Credits (max.)	Program
98	Bachelor's Degree
32	Associate's Degree
6	Business Certificate
62	Special Studies or Health Care Management (Registered Nurses)
The credits	listed below may be transferred from:
Credits	Program
32	American Institute of Banking
32	New York City Police Academy
9	Court Officers Academy
62	Radiology Training

60 Respiratory Therapy Training

A & P and Aviation Pilot's Licensing

62 Registered Nurses

Advanced Placement Program

Students who have completed a college-level course in high school may qualify for advanced placement by achieving a score of 3, 4, or 5 on the Advanced Placement Test of the College Entrance Examination Board. Questions regarding advanced placement should be addressed to the Office of Admissions. Information about Advanced Placement Tests may be obtained from the Educational Testing Service, P.O. Box 592, Princeton, New Jersey 08540

Credit Through the College Level Examination Program

Advanced standing with credit will be granted upon successful completion of the College Level Examination Program, General Examination, or Subject Examination of the College Entrance Examination Board, Princeton, New Jersey.

Credit is also granted for satisfactory grades earned through the completion of Regents College Examinations, (RECs) conducted by the New York State of Education Department.

Information may be obtained by contacting the respective agencies. Test results should be forwarded to the Admissions Office for evaluation.

Credit for Armed Forces Veterans

Honorably discharged veterans who have completed 6 to 18 months of active service in the Armed Forces of the United States may be granted 5 credits of the elective requirements toward a degree; those who have completed more than 18 months of service may be granted 10 credits of the elective requirements.

Student Classification

Regular or matriculated students: Those who have fulfilled enrollment requirements and are pursuing a degree program. Regular students are classified as follows:

Lower division

Freshmen: Those who have earned fewer than 28 credits. **Sophomores:** Those who have earned 28-59 credits.

Upper division

Juniors: Those who have earned 60-89 credits. **Seniors:** Those who have earned 90 credits or more.

Non-matriculated students: Those who are enrolled in courses, but who have not fulfilled all requirements for admission to a degree program.

Transfer students: Those who have withdrawn from another college or university and have been admitted to St. Francis College to complete their course of study, and holders of associate degrees earned at accredited two-year colleges.

Transient students: Those whose academic work at St. Francis College will be transferred to another college or university in which they are regularly enrolled.

Special students: Those who do not wish to complete a degree. They may be admitted with permission, but must submit credentials for all preparatory work and may pursue only those studies for which they are qualified.

Tuition and Fees

The Trustees of St. Francis College exert every effort to keep tuition costs as low as possible consistent with sound educational policy. The Trustees reserve the right to make changes in tuition and fees when deemed necessary.

Tuition (1989-90)

Communications 308

Communications 401, 402, 501

AUTHOR (1303-30)		
Per credit	\$170.00	
Per petitioned credit for experiential learning	57.00	
For non-credit courses: Mathematics 050	510.00	
Mathematics 070	680.00	
For each biology, chemistry, physics, and science laboratory (in addition to course tuition): Biology 003, 004, 103, 104, 201, 202, 203, 204, 206, 301, 302, 303, 304, 310, 402, 404	340.00	
Chemistry 003, 004, 101, 102, 201, 304	340.00	
Chemistry 301, 302, 401, 402, 404	510.00	
Physics 101, 102	340.00	
Science 301, 302, 303	170.00	
Regular Fees		
Application	\$20.00	
Matriculation (payable only once)	25.00	
Pre-registration (creditable towards tuition costs for semester of admission acceptance)	55.00	
Readmission	20.00	
Service, per term: Fall and Spring for full-time students (enrollment for at least 12 credits or the equivalent)	50.00	
for part-time students (enrollment for less than 12 credits, excepting students only registering for maintenance of matriculation)	20.00	
Service: Summer Session—all students	20.00	
Student activities, per Fall and Spring term (applicable only to full-time students—enrollment for at least 12 credits or the equivalent taking 50 percent or more of their courses before 6:00 p.m.)	25.00	
Laboratory Fees		

\$165.00

100.00

	Tuition and Fees	17
Accounting 102; Computer Information Systems 101, 111, 201, 202, 210, 340, 401, 460; English 392;		
Psychology 202	35.00	
Psychology 205, 206, 212, 302, 401	70.00	
Science 201	35.00	
Special Fees		
Change of program (for changing major, degree, composite record, etc.)	©10.00	
	\$10.00	
Change of registration	5.00	
Graduation: Certificate	20.00	
Graduation: Associate's Degree	30.00	
Graduation: Bachelor's Degree	65.00	
Late registration	75.00	
Locker rental, per academic year	5.00	
Maintenance of matriculation (applicable per term for matriculated students—degree candidates, if not enrolled for any coursework, excepting Summer Session, unless graduating at the end of the Summer)	15.00	
Teacher placement credentials (first two provided at no fee)	10.00	
Re-evaluation of transfer credit	10.00	
Returned check surcharge	25.00	
Special examination	5.00	
Transcript, per copy	2.00	

Estimated Cost of Books

The average cost of books is \$400 a year, assuming a student takes 30 credits.

Payment Procedure

All charges for tuition and fees are payable on the day a student registers for courses. During regular registration periods, payments may be processed by cash, check, money order, and MasterCard or Visa credit cards. During periods of late registration and change of program registration only cash, certified check, bank cashier's check, or MasterCard or Visa credit card payments will be honored. Additionally, if any check payment, upon presentation by the College, is dishonored and returned unpaid, a \$25 surcharge will be imposed and all subsequent payments to the College will be required to be by cash, bank cashier's check, certified check, or MasterCard or Visa credit card.

A student is liable for all charges for courses for which he or she registers. If there is a change in the original registration during the first week of classes, the change must be approved by the Registrar's Office and full payment submitted to the Student Accounts Office. The payment of any additional tuition and/or fees incurred by the student as a result of a registration change is due on the day of the

change. When a course is repeated, full tuition and fees are assessed, notwithstanding the reason for the course repetition.

A transcript of a student's record or certification of enrollment will not be issued by the Registrar's Office until a student's financial obligations to the College have been fully paid. No student will be certified for a degree or a certificate until all financial matters with the College have been satisfied.

St. Francis College does not offer a deferred or installment plan. The College does extend to students the courtesy of participating in the Monthly Budget Program administered by the Tuition Plan, a company of Manufacturers Hanover. Brochures outlining the MBP concept, which requires subscription and monthly payment commencing on May 15th preceding the academic year of enrollment, are available from the Student Accounts Office.

Refund Policy

The following fees are non-refundable: application, change of program, change of registration, late registration, life experience evaluation, locker rental, pre-registration, readmission, re-evaluation of transfer credit, returned check surcharge, special examination, and transcript. Petitioned experiential learning tuition is non-refundable.

When circumstances require a student to withdraw from the College or from one or more courses, it is necessary to file official written notification of withdrawal with the Registrar's Office. Normally, a student is expected to withdraw in person by completing a withdrawal form furnished by the Registrar's Office. If any portion of the tuition/fees is refundable (as detailed below), the date the official withdrawal notice is filed with the Registrar's Office will determine the refundable amount. If conditions preclude the student from withdrawing in person, a letter bearing the student's signature and requesting withdrawal should be forwarded to the Registrar's Office; in this instance, the postmarked date of the withdrawal letter will determine the official withdrawal date to which the refund policy is applied.

The following fees are refundable when assessed for a semester from which an official withdrawal notice has been filed with the Registrar's Office, if the withdrawal is initiated prior to the opening date of the term, as specified in the College's academic calendar: maintenance of matriculation, matriculation, service, student activities, and laboratory fees, as categorized above. On and after the beginning date of the semester, the preceding fees are not refundable.

Graduation fees are refundable if a student fails to earn the degree or certificate for which the fee was paid

For official withdrawal, a refund of course and science laboratory tuition charges is subject to the following schedule:

Fall and Spring Terms—full semester-length courses

withdrawal prior to the opening date of the term as specified in the College's academic calendar	100%	
withdrawal during the first two weeks of the term	80%	
withdrawal during the third week of the term	60%	
withdrawal during the fourth week of the term	40%	
withdrawal during the fifth week of the term	20%	
withdrawal after the fifth week of the term	none	

Summer Sessions

withdrawal prior to the opening date of the session as specified in the College's academic calendar	100%	
withdrawal during the first two days of the session	80%	
withdrawal on the third day of the session	60%	
withdrawal on the fourth day of the session	40%	
withdrawal on the fifth day of the session	20%	
withdrawal after the fifth day of the session	none	
Courses Computer Information Systems 040; 050;	052; 060; 062; 070	
withdrawal prior to the date of the first class session	A A A A A A A A A A A A A A A A A A A	
of the four-week course	100%	
withdrawal prior to the date of the second class session of the four-week course	50%	
withdrawal on the date of the second class meeting or thereafter of the four-week course	none	

Tuition refunds initiated by reason of course withdrawal and which occasion overpayment not related to financial aid/student loans will be held on a student's account and automatically credited to the subsequent term's enrollment costs, unless the student completes a refund check application form at the Student Accounts Office or submits by mail a written refund check request to the Student Accounts Office. It is necessary to allow a minimum of five business days for processing the refund application and for preparing the refund check which may be picked up at the Student Accounts Office upon presentation of the validated St. Francis College student identification card, or which, upon request, will be mailed to the student.

Financial aid funds or loan monies that are in excess of tuition/fees owed the College will be automatically disbursed to the eligible student by the issuance of a student refund check. The refund check will be processed within thirty days of the date that the financial aid and/or loan monies are credited to a student's account and thereby result in an overpayment or credit balance account being recorded. The refund check will be mailed to the permanent address of record for the student. Financial aid awards, student loans, etc. are not refundable until the actual funds have been received by the College and student eligibility for the funds has been determined.

In no case will a refund be granted to a student who is dismissed or who withdraws while under disciplinary action.

A student who feels that his or her individual circumstances warrant an exception to the College's refund policy may address a written appeal for special consideration to the Director of Student Accounts. The director's decision is subject to appeal to the Vice-President—Financial Affairs.

Financial Aid

St. Francis College has a comprehensive financial aid program, designed to insure that no otherwise-eligible student is prevented from attending the College solely because of inadequate finances. Eligible students may be offered a financial aid package which consists of some combination of scholarships, grants, loans and student employment.

Students who wish to be considered for such aid must file a St. Francis College Financial Aid Application and file a Financial Aid Form (FAF) with the College Scholarship Service. For academic year 1990-91 it is recommended that incoming freshmen apply by February 15, 1990. (The recommended date for a student applying for the 1991-92 academic years is February 15, 1991.) Currently enrolled students should apply by April 15, 1990. (Enrolled students applying for aid for the 1991-92 academic year should apply by April 15, 1991.)

Students who apply after these dates will be considered as long as funds remain available. A new application is required each year for renewal of any award.

Students who desire either an application form or a brochure detailing the kinds of financial aid and the process by which one applies for them should contact the Financial Aid Office.

General Eligibility Requirements

In general, to be considered for financial aid awarded by St. Francis College, a student must:

- 1. be accepted for admission to the College,
- 2. have completed matriculation requirements for a degree program,
- 3. be enrolled at least half-time in a program of study,
- 4. be in good academic standing and be making satisfactory progress toward degree requirements, and
- 5. be a U.S. citizen or permanent resident (with appropriate documentation).

Financial Aid Programs Available at St. Francis College

To be considered for any of the following programs, a student must file the Financial Aid Form (FAF). If further information is needed, the student will be contacted.

Grants

Pell Grants, formerly the Basic Educational Opportunity Grants (BEOG)

Supplemental Educational Opportunity Grants (SEOG)

State Aid: New York State residents may apply for the Tuition AssistanceProgram (TAP), Child of Deceased or Disabled Veteran Award, VietnamVeterans Award, Aid for Part-Time Study, The Regents Scholarship, and Child of Deceased Police Officer—Firefighter Award

- St. Francis College Grant-in-Aid
- St. Francis College Athletic Grant-in-Aid

Loans

Perkins Loan (formerly the National Direct Student Loan [NDSL]) Stafford Loan (formerly the Guaranteed Student Loan [GSL])

Student Employment

College Work-Study Program (CW-SP)

Student Assistant Program. The number of students employed under this program is limited.

Veterans

Veterans' benefit forms are processed by the Office of Financial Aid.

Scholarships

Non-endowed Scholarships

Principal's Scholarships These scholarships are awarded annually to two graduates (one male, one female) of the St. Francis Preparatory school and two (one male, one female) from Bishop Ford high school, who are nominated by their principals. The scholarship is a full tuition-and-fee award, less PELL, state aid, and any other "portable" financial aid for which the recipient is eligible. The award is continued provided that the recipient makes satisfactory progress toward his or her degree and maintains a quality-point index of at least 3.0.

Presidential Scholarships These scholarships are awarded to a select group of entering students who have demonstrated exceptional academic achievement and show promise of continued success, as assessed by secondary school average and performance on the Scholastic Aptitude Test. The scholarships are full tuition-and-fee awards, less PELL, state, and other "portable" financial aid for which the student is eligible. The award is continued provided that the recipient makes satisfactory progress toward his or her degree and maintains a quality-point index of at least 3.0.

The Most Reverend Thomas E. Molloy Memorial Scholarship Established by the Board of Trustees in memory of the late Bishop of Brooklyn, a distinguished alumnus of St. Francis College.

The Catholic Accountants Guild Scholarship This scholarship is solely for St. Francis College accounting students in the senior class. It is donated annually by the Guild.

Endowed Scholarships

The Right Reverend Msgr. Joseph V. McClancy Memorial Scholarship Established by the children of the Catholic schools in memory of their distinguished superintendent, an alumnus of St. Francis College.

The Right Reverend Msgr. Daniel A. Hanrahan Scholarship This scholarship is named for a distinguished alumnus of St. Francis College and is solely for the residents of Sacred Heart Parish, Cambria Heights, Queens.

The Brother Austin Sullivan, O.S.F. Memorial Scholarship Established by the friends of Brother Austin Sullivan, O.S.F. This scholarship is solely for a graduate of the St. Francis Preparatory School.

The John Fitzgerald Kennedy Scholarship Established by the St. Francis College Student Government in memory of the late President of the United States. This scholarship is awarded to three senior students each year on a combination of need, scholastic achievement, and extracurricular activities.

Endowed Presidential Scholarships

Since the College's Centennial celebration in 1984, corporations, foundations, alumni, and friends of the College have endowed a number of Presidential Scholarships. These scholarships are granted to students on the same basis and provide the same awards as Presidential Scholarships (see above). The following scholarships are included in this category:

Gladys Brook Foundation Scholarship Full scholarship endowed by the Foundation in 1987 is awarded to a student solely on academic ability.

John Daniel Callahan Memorial Scholarship Peter J. Callahan '63 endowed this half scholarship in memory of his father, John Daniel Callahan.

Lorenzo Caputo Memorial Scholarship Full scholarship established by the family and friends of Lorenzo Caputo, who served on the College's Council of Regents.

Chase Manhattan Bank, N.A. Scholarship Chase Manhattan Bank established this full scholarship in 1984.

Class of 1938 Scholarship Full scholarship endowed by the Class of 1938 on the celebration of its 50th anniversary. This scholarship will be awarded for the first time in Spring 1990.

Augustus E. Giegengack Memorial Scholarship Full scholarship endowed by Walter '38 and Margaret McArdle in memory of Augustus E. Giegengack, the thirteenth Public Printer of the United States.

The Manufacturers Hanover Scholarship This full scholarship was the first of the endowed scholarships to be donated to the College during its Centennial celebration. It represents Manufacturer Hanover's commitment to the support of higher education.

William Randolph Hearst Foundation Scholarship The Foundation originally endowed a half scholarship, but in 1988 increased it to a full scholarship in memory of William Randolph Hearst.

Ernst Kehr Memorial Scholarship This half scholarship was established in memory of Ernest Kehr '38 and will be awarded for the first time in Fall 1989.

Margaret L. McArdle Scholarship Full scholarship endowed by Walter McArdle '38 in honor of his wife, Margaret.

Rose D. McArdle Memorial Scholarship Full scholarship endowed by Walter McArdle '38 in memory of his mother, Rose.

John '51 and Mary McCarthy Scholarships John '51 and Mary McCarthy have endowed three full scholarships. The first was awarded in Spring 1987, the second in Spring 1988, and the third will be awarded for the first time in Fall 1989.

Brigit T. and Patrick J. McTague Memorial Scholarship Full scholarship endowed by the late Colonel Hugh O'Neill McTague '37 in memory of his parents.

Hugh O'Neill and Josephine McTague Memorial Scholarship Full scholarship endowed by Cynthia McTague, widow of Hugh O'Neil McTague, in memory of her husband and his first wife.

Brother Jerome Roese, O.S.F. Memorial Scholarship Full scholarship established in memory of the former St. Francis College President. This scholarship is awarded

to an entering student who has demonstrated exceptional academic achievement and shows promise of continued success.

Dr. Scholl Foundation Scholarship Half scholarship endowed in 1984 by the Dr. Scholl Foundation.

Third Order Regular Scholarship Full scholarship endowed by the St. Francis Fraternity Third Order of St. Francis. This scholarship is awarded on the basis of both financial need and scholastic merit.

Academic Eligibility for Receipt of Financial Aid

Requirements

Students must satisfy two requirements in order to be eligible for any kind of financial assistance—Federal, State, or institutional. First, they must show evidence of making satisfactory progress toward the completion of their respective degree objectives, as measured by the quality-point index. Second, they must demonstrate that they are pursuing their respective programs of study at an appropriate pace, as assessed by the number of credit-hours earned each semester. Both of these requirements must be met each semester in order for a student to remain eligible for assistance thereafter.

Students taking a full-time courseload (defined as twelve or more credits) must complete at least six credits with a passing or failing grade during their first year. They must complete at least nine credits during their second year, and a minimum of twelve credits each year thereafter. It is important to note that credits for "W" grades (for courses withdrawn from during the semester) are *not* included in the total.

Example: A student in her sophomore year initially registers for four three-credit courses. After mid-term exams, she decides to withdraw from two of these courses, receiving "W" grades for them. She finishes, and passes, both her remaining courses. This student has earned six credits of "countable" grades. Since, as a second-year student, she is required to complete *nine* such credits, she loses her eligibility for financial assistance for the subsequent semester.

Credits for a course which a student is repeating do *not* count toward the applicable minimum for full-time financial aid benefits, unless the course was not passed the first time it was attempted or the grade earned is unacceptable toward the student's degree. A course taken over merely to raise the student's index is *not* included in the calculation of total credit-hours completed for aid-eligibility determination. It is important that this be taken into consideration in the preparation of each semester's program of study, in order to avoid disallowance of financial assistance after the beginning of that semester.

With respect to satisfactory academic progress, full-time students are not expected to have earned any college credit before receiving their initial financial assistance award. All subsequent awards, however, are made only if the prospective recipient meets specified credit and grade-point index criteria. These criteria, too, vary according to the student's year of study. In general, they parallel the College's requirements for good academic standing. (see section on Academic Policies — Probation. pg. 29) Specific quality-point index standards applicable to aid recipients are enumerated in a statement of policy which is available in the Office of Financial Aid and the Office of the Vice-President for Student Affairs—Dean of Students.

Extraordinary Circumstances

In extraordinary circumstances (illness, injury, death of a relative, or serious and unanticipated personal problems beyond his or her control), a student may be granted a waiver of these requirements. This is available only once during the student's entire undergraduate career, and must be specifically requested — in writing and with appropriate supporting documentation — to the Vice-President for Student Affairs — Dean of Students. If the waiver is granted, it is expected that the student will use the semester for which it is granted to make up his or her deficiencies and advance to the level necessary to restore his or her eligibility for future semesters. It is important to note in this regard that a waiver merely makes available to a prospective aid recipient assistance for which he or she is otherwise ineligible, and does not change the total number of semesters of his or her eligibility. (New York State awards, for example, are limited to not more than eight full semesters.)





Academic Policies

Credit Hours

One credit hour represents one hour of regular class participation in a lecture or two or more hours in a laboratory session each week.

Credit Hour Loads

Full-time students may not carry less than 12 or more than 18 credit hours a semester. Permission to take more than 18 hours may be granted by the Vice-President for Academic Affairs. A day student on probation may not take more than 15 hours. An evening student on probation may not take more than 6 hours. Evening students may not carry more than 12 hours per semester without permission of their advisor.

Placement Testing

St. Francis College requires all new students to be tested in English and mathematics. The test results are utilized for advisement and placement of students in appropriate courses. For further information concerning time and location of testing, please consult the Admissions Office and/or the Office of Academic Support Services.

Registration Procedure

Registration is contingent upon a record of satisfactory grades for the previous semester.

Students are required to have their course selections for the following semester approved by their respective advisors during the advisement period.

Final registration days are indicated on the College calendar. Any changes in the course program outlined during the advisement period must be approved by the advisor at the time of final registration.

Registration will not be complete until the payments required by the Student Accounts Office have been made. Students may not report for any course for which they have not registered. They must attend the section selected unless permission has been obtained from the Registrar to change from one section to another. They may not register for a course unless all prerequisites have been satisfied.

Late Registration

Enrollment after the designated registration days will be permitted only with the consent of the Registrar and only for a satisfactory reason. Late registrants will be charged a fee of \$75.00, and will be held responsible for all absences caused by late registration.

Withdrawal from a Course

Students will be permitted to drop courses during the first week of the Fall and Spring semester and during the first two days of the Summer semester. This right in no way relieves the student of the responsibility to complete core or departmental requirements in the appropriate sequence nor does it relieve the student of tuition obligations.

Students who wish to withdraw from a course after the first week of the Fall and Spring semesters or after the first two days of the Summer semester may do so under the following conditions:

- 1. Report to the Registrar's Office to complete the proper forms.
- 2. The grade of W (withdrawal) will appear on the transcript with the course but will not be computed in the student's quality-point average.
- 3. Students will not be permitted to withdraw after the first Monday in December during the Fall semester and after the first Monday in May during the Spring semester and after the fourth week of the Summer semester. Only under very unusual circumstances and with explicit permission of the Academic Dean's Office, will students be permitted to withdraw after these deadlines. The date of withdrawal is the day the student informs the Registrar's Office.
 - Students who drop or withdraw from a course are advised to see a financial aid counselor regarding the effect this action has upon their receiving financial aid.

Attendance

Generally, when a student is absent for more than 10 percent of the total class meetings of a course, he or she is subject to a Grade of F for excessive absences. Seniors with a 2.0 cumulative index or better may be entitled to privileged attendance. This will be granted at the discretion of the individual instructor and such policy will be announced at the first class meeting.

Grades

Final grades reflect the combined results of class work and examinations. They are computed according to the following percentage scale:

A 90-100

B 80-89

C 70-79

D 60-69

F below 60

W Withdrawal

H Honors

P Passing

Under a special faculty ruling, students may not expect to receive a passing grade in any course in which they fail to maintain standards of good English in essays, examinations, and other written requirements.

Pass-Fail Courses

Any student studying a foreign language on the 100 level (101-102; 103-104) may elect to take that course on a pass-fail basis.

Any student taking HS 100A, HS 100B/PE 100A, or PE 100(B-H) may elect to take those courses on a pass-fail basis.

Junior and seniors who are not on probation may elect one elective course each term to be recorded on their permanent record on a pass-fail basis. This privilege may be used for a maximum of four terms; only one elective course may be selected each term. Courses required in the core curriculum or major department may not be selected for pass-fail status.

The student must designate the course which he or she wishes to take pass-fail on a special form provided by the Registrar's Office no later than the end of the fourth week of the school term (second week of Summer Session). This privilege does not excuse students from the required work of the particular course. Once the request is submitted, it may not be revoked.

Report of Grades

Report of credit grades by the Registrar is sent to the student twice each semester. Mid-semester grades are advisory in nature. Grades awarded at the end of the semester become part of the student's official academic record.

Written permission of the student is required for the release of academic information to anyone other than the appropriate academic officials of the College. Information on the Family Educational Rights and Privacy Act is outlined in the current edition of *The Cord*, the student handbook.

Appeal of Grades

A request for a change of grade must conform with the procedures established by the Faculty Academic Standards Committee and ratified by the faculty. Students are referred to the appeal procedures outlined in the current edition of *The Cord*, the student handbook.

Quality Point Index

Scholastic achievement is recorded by means of quality points. Points are assigned as follows for each credit hour completed:

Grade A	(90-100)	4.0 points
Grade B	(80-89)	3.0 points
Grade C	(70-79)	2.0 points
Grade D	(60-69)	1.0 point
Grade F	(below 60)	no quality points

The Quality Point Index (QPI) is obtained by multiplying the credit value of each course (whether passed or failed) by the number of points that correspond to the grade earned, adding all of the resulting quality points together, and dividing the total number of quality points by the total number of credit hours.

When a course is repeated and a higher grade is achieved, the previous grade is not included in the index provided the student has filed a Repeat Course Form.

Only courses completed at St. Francis College are evaluated for purposes of the Quality Point Index and honors. Courses taken under the Junior Year Abroad Program and under the Medical Technology Program are included in the total index.

A QPI of 2.0 is required for graduation.

Honors

Each semester a list of honor students is published by the Vice-President for Academic Affairs. This list recognizes students' academic achievements and includes those students who have achieved a Quality Point Index of 3.0 or better and have carried 12 or more credit hours if a full-time student, 9 or more credit hours if part-time.

Election to the **Duns Scotus Honor Society** is made each year and is limited to juniors and seniors. Only those students who have achieved high scholarship and have demonstrated their service to the ideals and activities of the College are eligible. Election entitles the student to wear the key of the Society, which is conferred at a special convocation each year.

Course Repetition

Students must repeat any required course which they have failed the next semester if it is offered.

Written approval of the department chairman is required before a student can receive credit for a major field course completed with a D grade.

Probation

Probation indicates that a student's academic work is below the expected standard. It is determined as follows:

Freshmen (fewer than 28 hours completed) will be placed on probation if their QPI is below 1.50.

Sophomores (28 to 59 credit hours completed) will be placed on probation if their QPI is below 1.75.

Juniors (60 or more credit hours completed) will be placed on probation if their QPI is below 2.0

No student may remain on probation for more than two consecutive terms.

Any student may be subject to academic dismissal at any time for poor academic standing.

Retention of Students

Retention statistics for the 384 full-time, first-time freshmen entering St. Francis College in Fall 1982 show that 135 of them remained to complete their studies and received bachelor's degrees before Fall 1988. Out of 134 transfer students entering St. Francis in Fall 1982, 60 remained and received degrees before Fall 1988.

Withdrawal from College

Students obliged to withdraw from the College should contact the Registrar's Office for further instructions.

Courses at Other Institutions

The College does not grant permission to pursue courses at other institutions, except when a required course is not being offered during the semester at St. Francis College. When such permission is granted, the combined programs may not exceed 18 credit hours per semester. Permission may be granted to attend the summer session at another institution provided that the courses sought are required and are not being offered at St. Francis College. In no case may a student take a total of more than six credits during a five-week summer session. Permission may be granted to take courses at another institution under the following conditions only:

- 1. The student has not entered senior year.
- 2. The student has a Quality Point Index of 2.0
- 3. Written approval for the required courses has been granted by the chairperson of the department concerned and the Vice-President for Academic Affairs.
- 4. Official permission of the Vice-President for Academic Affairs has been obtained before the end of the preceding semester.

Credit will be transferred only for courses completed with a grade of C or better.

Official Bulletin Boards

The official bulletin boards, located at the main entrance of the Science Building, and on each floor of the Arts Building near the elevators, carry announcements of interest to the entire student body, to certain groups of students, or to individuals. These announcements may be changes in schedule, revisions of rules and regulations, calls for students to appear at one of the administrative offices, etc. Students are held responsible for reading these bulletin boards and are obliged to acknowledge announcements pertaining to them within 24 hours after such announcements are posted.



Requirements for Degrees

The graduation requirements of the College, as published in the catalogue in effect at the time of the student's initial enrollment, are those which must be met for the completion of a degree program. Students who withdraw and then re-enter are responsible for graduation requirements as published in the catalogue at the time of re-entrance.

The College reserves the right to change the course and credit hour requirements of any or all academic programs, when such modifications are deemed necessary. All students must comply with the new requirements insofar as such modifications pertain to courses and/or credit hours yet to be completed. Such changes, however, will be made only for the purpose of more fully achieving the objectives of the curriculum.

Department chairmen have authority to waive or provide substitute course work for departmental requirements. Only the Office of the Academic Dean has the authority to waive or provide substitute course work for core curriculum requirements.

A candidate for a degree must complete the required courses as outlined in his or her respective curriculum and have a cumulative index of at least 2.0.

Each candidate for a baccalaureate degree must complete a major field of study and obtain a passing grade on a comprehensive examination or project in the student's major field. Education 404 (Observation and Supervised Practice Teaching) satisfies the comprehensive requirement for students in the Teacher Training Program.

Core Curriculum

The following courses must be completed by all students in **baccalaureate degree programs** with the exception of students majoring in aviation business studies, special studies, and health care management:

Credits	Core Courses
3	Communications 203
3	English 1031
3	English: Literature course ²
6	Fine Arts 401, 402
6	Natural Science or Mathematics
9	Philosophy (courses to be taken in sequence) ³
3	Liberal Arts Electives ⁴
3	History 201
3	Sociology 203
3	Religious Studies (choose one from 101, 202, 203, 204, 205, 212, or 234)
42	Total Core Credits
128	Total Degree Credits

Students majoring in aviation business studies, health care management, or special studies are required to complete the following core curriculum.

Credits	Core Courses
3	Communications 203
3	English
3	Fine Arts
3	History 201
3	Philosphy
3	Science or Mathematics
3	Sociology 203

21 Total Core Credits

The following courses constitute the core curriculum for all students in associate's degree programs:

Credits	Core Courses
3	Communications 203
3	English 103
3	English: Literature course ²
3	Fine Arts
6	Science or Mathematics
6	Philosophy
3	History 201
3	Sociology 203

30 Total Core Credits

¹Students who achieve a superior score on the placement test or who meet other criteria established by the English Department may be exempt from the English 103 requirement and substitute another English course (exclusive of English 101)

²In satisfying the core curriculum, English 200-level literature courses are designed to meet the needs of the majority of students. However, students with a superior background in English may select from among the 300/400-level courses.

³The philosophy sequence consists of one 100 course, one 200 course, and one 300 or 400 course. PHI 114, 203, and 403 are recommended as the philosophy sequence for teacher training students.

⁴The three elective credits in Liberal Arts must be selected from these areas: biology, chemistry, communications, economics, English, fine arts, French, health science, history, mathematics, philosophy, physics, political science, psychology, religious studies, science, social studies, sociology, or Spanish. Conversational Spanish is recommended to teacher training students.

Designating a Major Field of Concentration

All students must designate a major field from among those offered by the College.

Designation of Major forms must be filled out in duplicate and filed in the Registrar's Office by the end of the sophomore year. Students are responsible to their major department for advice on planning their registration programs.

Teacher Training

Candidates for a bachelor's degree in English, Social Studies, Mathematics may elect Teacher Training for the Elementary School (N-6), the Secondary School (7-12), or Special Education.

Candidates for a bachelor's degree in Accounting and Business Practice or Biology may elect Teacher Training for the Secondary School (7-12). Candidates for the B.S. degree in Physical Education are in the Teacher Training Program (K-12).

Major Fields of Study

St. Francis College awards the following undergraduate baccalaureate degrees:

Bachelor of Arts (B.A.)

Communications

Economics

English

English with Elementary, Secondary, or Special Education Teacher Training

History

Political Science

Psychology

Social Studies

Social Studies with Elementary, Secondary, or Special Education Teacher Training Sociology

Bachelor of Science (B.S.)

Accounting

Accounting and Business Practice with Secondary Education

Teacher Training

Aviation Administration

Aviation Business Studies

Biology

Bio-medical Science (preparatory for New York College of Podiatric Medicine)

Health Care Management

Health Services Administration

Management

Mathematics

Mathematics with Secondary Education Teacher Training

Medical Technology

Physical Education

Special Studies

The College awards the following associate's degrees:

Associate in Applied Science (A.A.S.)

Business Administration Criminal Justice

Associate in Science (A.S.)

Electronic Data Processing

Change in Degree Program/Change of Session

Students who wish to change their major field of study must obtain permission first from the chairman of the department in which they wish to enroll and then from the Vice-President for Academic Affairs. Change-of-major forms may be obtained in the Registrar's Office.

Students who wish to change from day session to evening session or vice versa must seek this permission by writing to the Vice-President for Academic Affairs. If a conference is necessary, an appointment will be arranged.

All summer courses are open to students in good standing, regardless of their status during the regular academic year.

Students enrolled in one session may register for some or all of their classes in another session with permission of the advisor. This does not constitute permission to transfer to the other session; such permission must be obtained as explained above.

Minor Fields of Study

In the interest of achieving an additional dimension of educational depth, students who so desire may select a set of elective courses, preferably in a subject area not related to their major field of study, as a minor concentration. A maximum of two minor concentrations are noted on students' transcripts as a way of recognizing that they have, in addition to the required major program, also concentrated to a lesser degree in one or more additional areas. To obtain a minor designation from St. Francis College a minimum residency requirement of nine credits of the College shall apply. A minimum grade of C is required in all minor program courses. Special studies majors do not pursue any minor field of study. St. Francis College offers the following minor fields of study:

Accounting

Aviation Administration

Biology

Business

Chemistry

Computer Systems

Economics

English

French

Health Administration

Health Science

History
Mathematics
Philosophy
Physical Education (3 programs)
Political Science
Psychology
Religious Studies
Sociology
Spanish

Note: In accordance with the College's standard practice, courses leading to a minor concentration are subject to cancellation in cases of insufficient enrollment.

Honors Program

The Honors Program at St. Francis College offers the gifted student an opportunity to enroll in special interdisciplinary seminars and to do research under the direction of distinguished professors. In their Honors seminars the students have the opportunity to do primary research appropriate to the undergraduate level.

To qualify for the Honors Program, students must have and maintain an index of 3.5. Qualifying students will be invited to join at the end of their freshman year. Students may also enter at the end of their sophomore year. In addition to invitations extended to qualified students, any student may apply for admission into the program, providing he or she meets the criteria established. A student's continuance in the program is reviewed at the end of each academic year. The minimal requirement is maintenance of the 3.5 index plus satisfactory performance in Honors courses and projects.

The chief form of recognition for graduates of the Honors Program is the degree with the notation of Honors, awarded at graduation. Transcripts bear this designation, and special recognition is given at commencement exercises. The requirements for a degree with Honors include the following: (1) participation in and completion of four one-semester Honors seminars; (2) participation in and attendance at one cultural activity or event each semester, as sponsored by the Honors Committee; and (3) completion and acceptance of a thesis involving serious and original research. Normally the topic is in the major field and is chosen before the start of senior year. The topic is approved by the chairman of the major department in consultation with the Honors Committee. There are two readers for the thesis—one from the major department and one from the Honors Committee.

The following are currently members of the Honors Committee: Dr. John K. Hawes, ex officio member; Assistant Dean Joseph Louzonis, delegate of the Academic Dean; Dr. Gerald Largo; Dr. Barbara Vigliano; Dr. Uwe Gielen; Dr. Francis Greene, Director of the Honors Program.

Comprehensive Examination or Project

The degree to which the student has achieved an overall understanding of his or her major field is tested during the senior year. This test may take such forms as: a senior seminar requiring the application of knowledge and skills acquired through the major; a senior thesis indicating mastery of the skills taught in the major and which demonstrates independent study; or a comprehensive examination, written

and/or oral. The specifics of this requirement are determined by the major department chairman with the approval of the Vice-President for Academic Affairs.

When a comprehensive examination is required, the Graduate Record Examination in the major field will form a necessary part of the comprehensive, if a Graduate Record Examination is offered in the discipline. No student will be eligible for a degree until he or she satisfies this requirement.

The grades earned in the comprehensive examination or project shall be signified as follows: H—Honors, 90 percent or better; P—Pass, 70-89 percent. Students who merit a grade of H in the comprehensive examination may be exempt from final examinations in all courses of their major field at the end of the senior year at the discretion of the department.

Health or Physical Education Requirement

All students must satisfy a two-credit health or physical education requirement. This can be accomplished by taking Health Science 100A, Health Science 100B/Physical Education 100A, or Physical Education 100 (B-H). Allied Health majors (Health Care Management, Health Services Administration, and Health Science) must take either the Physical Education 100 (B-H) or the interdisciplinary section, Health Science 100B/Physical Education 100A. Physical Education majors must take Health Science 100A or the interdisciplinary section. Students who participate in intercollegiate athletics must follow the regular registration procedures. They should select either Health Science 100A or the interdisciplinary section Health Science 100B/Physical Education 100A.

Freshmen Requirement

The completion of ED 110, Seminar for Academic and Social Success: Freshman Orientation, one credit, is required of all traditional incoming freshmen before the beginning of sophomore year. For certain degree students this will require the completion of 129 credits for the baccalaureate degree.

Senior Residence Requirement

The final 30 credits for the degree must be earned at St. Francis College.

Application for a Degree

Early in the last year of college each candidate will file with the Registrar a formal application for a degree. It is the responsibility of every degree candidate to observe all requirements and regulations, as well as all deadlines for paying fees, filing applications, submitting forms, and the like.

Graduation Honors

Graduation honors are inscribed on diplomas and recorded in the published list of graduates as follows:

The degree of Summa Cum Laude will be conferred upon a candidate who has achieved a Quality Point Index of 3.8.

The degree of Magna Cum Laude will be conferred upon a candidate who has achieved a Quality Point Index of 3.6.

The degree of *Cum Laude* will be conferred upon a candidate who has achieved a Quality Point Index of 3.4.

A student must complete 60 credits in residence at St. Francis College for these honors.



Continuing Education Programs

Men and women of all ages are encouraged to become students of St. Francis College. The various programs of the College are open to non-traditional college-age students who wish to study full-time, or part-time, days or evenings.

Some degree programs have been especially designed with these students in mind, and are scheduled for the convenience of those with work and home responsibilities. These are the Bachelor of Science in Special Studies, the Bachelor of Science in Health Care Management (Allied Health Department), Bachelor of Science in Aviation Business Studies (Aviation Department), the Bachelor of Science in Accounting, the Bachelor of Science in Management, the Bachelor of Arts in Communications, the Associate in Applied Science in Business Administration (Management Department) or Criminal Justice (Sociology and Criminal Justice Department), and the Associate in Science in Electronic Data Processing (Computer Information Systems Department). The Departmental Organization section describes requirements for all of these programs.

Complete information and details about courses and degree and certificate programs may be obtained from the Office of Admissions. Interested persons should call the Office of Admissions at (718) 522-2300, ext. 200, for an appointment with an admissions counselor.

Certificate Programs

Those students with short-term educational goals will find one of the six Advanced Business Certificate Programs extremely beneficial. These certificates, awarded after the successful completion of 18-21 credits, are designed to provide the necessary technical competence and intellectual skill to compete in the corporate world. The credits which comprise a certificate may also be transferred into one of the St. Francis College degree programs. Information about these programs is included in the sections devoted to the Accounting and Management Departments.

Paralegal Studies Program

The Certificate Program in Paralegal Studies at St. Francis College is administered by the Department of Accounting and Business Law. The faculty includes experienced attorneys with expertise in the various phases of the legal profession.

Through this program, students gain the broad knowledge required of the paralegal, as well as expertise in specific areas of the profession. All students study legal research; real estate and mortgages; wills, trusts, and estates; and litigation; in addition, they specialize in two of the last three areas.

The program is open to persons who have earned a bachelor's degree or who are sponsored by an appropriate employer. To accommodate working adults, all courses are offered in the evening, each meeting once a week.

Class Schedules

Courses are scheduled early in the morning, during lunch hour, and during the evening for the convenience of students with work and home responsibilities.

Financial Aid

Many non-traditional-age students are eligible for the financial aid programs described on pages 20 to 25 and are encouraged to consult advisors in the Office of Financial Aid. This office is open Monday and Thursday from 9 a.m. to 6 p.m. and Tuesday, Wednesday, and Friday from 9 a.m. to 5 p.m. The phone number is (718) 522-2300, ext. 255.

Advisement and Registration

Educational advisors are available by appointment, Monday through Thursday between 8:30 a.m. and 6:00 p.m. Special registration hours are arranged for continuing education students.

Admissions Process

Continuing education students can attend classes by completing a temporary application. To pursue a degree, candidates must file an official application with the Office of Admissions and submit official transcripts.

Interested students are encouraged to make an appointment through the Office of Admissions for complete information and educational advisement.

Experiential Learning

St. Francis College grants credit for learning acquired outside the classroom through its Experiential Learning assessment program. This program is available to all students pursuing a bachelor's degree.

Students must submit a portfolio in order for their prior learning to be assessed. They must petition for a specific number of credits in academic areas in which they are presenting prior learning experience.

Prior to portfolio submission, students must complete the one-credit course, ED101 *Preparation of a Portfolio*, at the College.

Further information about this program may be obtained from the Office of the Academic Dean.



Student Services and Activities

Student services at St. Francis College are designed to assist students in making a successful transition to the collegiate environment, to enable them to pursue their academic objectives with optimal efficiency, and to provide for out-of-class experiences which promote individual growth and development. These services begin with preadmission counseling and orientation for freshmen and transfer students. They continue throughout each student's college career and include educational, vocational, spiritual, and personal guidance, extra- and co-curricular activities, and job placement.

New-Student Orientation

Freshmen and transfer students are expected to attend Orientation, which is hosted by the College during the week before Fall Semester classes begin. Faculty, administrators, and students are on hand to welcome new students and introduce them to the traditions, policies, and resources of St. Francis College.

Meetings with faculty, peer advisors, and student government representatives are scheduled to assist new students in familiarizing themselves with academic programs, the services offered, and the opportunities which exist for participation in student activities.

Foreign Student Advisor

The Foreign Student Advisor is available to counsel foreign students on visa extension and immigration regulations, and to explain academic procedures and many aspects of American culture which may be unfamiliar to them. The Foreign Student Advisor's office is located in the Office of Student Activities, Room 101A, (718) 522-2300, ext. 215.

Campus Ministry

The Director of Campus Ministry, whose office is in Room 107A, endeavors to strengthen students' spiritual growth and development. He provides spiritual guidance and counseling, holds pre-Cana conferences for prospective marital partners, and celebrates a Mass in the College Chapel each week and on a number of special occasions throughout the year.

Health Service

The Student Health Service is staffed by a professional nurse on Mondays and Wednesdays from 9 a.m. to 4 p.m. and on Tuesdays, Thursdays, and Fridays from 9 a.m. to 3 p.m. The Medical Suite, in the student lounge on the mezzanine, is equipped to provide emergency first-aid attention, and contains a cot and other short-term facilities. Appointments can be made with a local general practitioner when necessary. Several hospitals are in the immediate vicinity of the College. The nurse is available for general health and nutrition counseling on a walk-in basis and by appointment.

Academic Support Services

Under the auspices of the Office of Academic Support Services, the following services are provided to all students registered at St. Francis College:

Academic Advisement

Advisement is an important aspect to each student's academic career. It is the responsibility of each student to know and meet graduation and other school requirements and to make every reasonable effort to obtain adequate academic advisement. Advisement insures an understanding of the registration process and course selection appropriate to a student's educational goals. Consequently each full-time degree student is assigned a faculty member to be his or her Academic Advisor. Students who have declared a major will be assigned an advisor who is a member of that student's major department. Students who have not declared a major will be assigned a Faculty Advisor.

In addition, an Academic Advisement counselor is available to both day and evening students throughout the year to help students clarify their goals, discuss their progress, direct them to further assistance, and provide overall help with educational matters. The Academic Advisement office is located in Room 303S. Every student must have selected courses approved by an Academic Advisor before registration.

Academic Computing

The Office of Academic Computing operates two facilities: the Microcomputer Center, Room 300S and the Electronic Classroom, Room 308S. The Microcomputer Center houses 10 IBM-PC or compatible computers and 10 Apple //e computers. It is available for students on a walk-in basis. At all times staff from the Office of Academic Computing is available to assist students with word processing, spreadsheets, data base management systems, computer-aided instructional packages, and a variety of other software directly related to courses in accounting, management, computer information systems, psychology, history, social studies, political science, chemistry, biology, English, and health care management. The Electronic Classroom, which is the site of classes with a computing component in them, contains 25 IBM-PC or compatible computers and a projection system linked to the instructor's computer. Each facility also has dot matrix printers. A laser printer is available for special projects. Both areas are open from 8:00 a.m. to 8:45 p.m. Monday through Friday and from 10:00 a.m. to 4:00 p.m. on Saturday.

Learning Center

The Learning Center, located in Room 303S, is a support service provided to all students registered at St. Francis College. The center's trained personnel assist students in upgrading their basic skills (reading, writing, and mathematics). In addition, the center provides specialized assistance in reading and writing English to students for whom English is a second language. Throughout the semester, the center also conducts workshops in academic skills such as note-taking, textbook usage, test-taking techniques, and study skills.

Placement Tests

All new students must take the College's placement test prior to Academic Advisement and registration. The results of the tests are used to advise students as to the appropriate mathematics or English courses. Basic subject areas included in the placement test are sentence structure, reading, and mathematics.

Identification Cards

In the interest of increasing the safety and security of the campus, the College requires that all members of the academic community have a properly validated photo identification card. Students must carry the card at all times, display it upon entering the College, and present it when requested by a College official or security officer. Presentation of the card is required in order to pick up refund and workstudy payroll checks at the Office of Students Accounts. Periodic ID card checks are conducted. Students not in possession of a properly validated card may be denied entrance to the College.

New students may obtain the ID card by reporting to the Office of Student Activities on 1M after the first week of the Fall and Spring semester, according to the schedule publicized in the College. Continuing students require a validation sticker for each semester. To obtain the sticker, students must present their computer printout of courses, stamped by the Office of Student Accounts, which they receive during registration. Validation stickers may also be obtained in the Office of Student Activities.

Bookstore

The College bookstore, operated by Barnes and Noble, Inc., is located in the basement of the Science Building. The store provides all necessary books, materials, and supplies, as well as incidental items. The bookstore is open from 9 a.m. to 6:30 p.m., Monday through Thursday, and 9:30 a.m. to 4 p.m. on Friday. During the first two weeks of each semester bookstore hours are 9 a.m. to 8:30 p.m. Monday through Thursday. These hours are subject to change without notice.

Career Placement Center

The professional staff and resources of the Career Placement Center are available to assist students to make wise and suitable career choices and secure appropriate postgraduate employment. Toward these ends, the center provides a substantial library of print and audiovisual career planning reference materials, as well as an excellent computer-assisted career search system. The staff of the center is available for career guidance and counseling on an individual basis, and regularly offers workshops in such essential aspects of the career planning process as resume writing, preparation for the employment interview, and effective job search skills and techniques.

A video cassette recorder is available for students to watch various career-related video tapes. Students may also be taped during practice interviews and review the tape for valuable feedback.

Members of the senior class may take advantage of the substantial number of placement interview opportunities offered each spring with representatives of major corporations and others seeking St. Francis graduates. All students may avail themselves of the part-time employment opportunities which are made available through the center all year.

The staff is also able, on a limited basis, to provide assistance to any student who is experiencing personal problems which are interfering with his or her academic performance.

The office is located in Room 701A, (718) 522-2300, ext. 260.

The McArdle Student Center

The extensively-renovated Walter and Margaret McArdle Student Center, located on the first floor of the Arts Building, provides several areas for students to meet together informally and pursue various social, cultural, and recreational activities. The Center includes the John and Ruth Gorman Dining Hall, the Councils of Regents Lounge, and a game room. An extensive array of food and beverages is available at comparatively low cost through the cafeteria service, located in Gorman Hall.

Medical-Accident Insurance Program

Provided that the College is able to negotiate a policy on their behalf, all full-time day students will be covered by a medical-accident insurance plan.

In brief, the benefits and limitations of this plan follow:

- The plan covers medical expenses incurred as the result of accident or illness
 for all full-time students while enrolled at the College. Coverage is in effect 24
 hours a day, including attendance at school-sponsored activities during the
 summer months.
- 2. Payment will be made up to a maximum benefit of \$5,000 for each injury, and up to a maximum benefit of \$2,000 for each illness. Additionally, a flat sum of \$5,000 will be paid in the event of accidental death; a like amount will be paid in the event of accidental dismemberment.
- 3. The plan does not cover replacement or repair of eyeglasses, contact lenses, prescriptions, dental X-rays, hearing aids, loss due to war, drug addiction, or losses for which benefits are payable by Worker's Compensation. Dental expense is covered only to the extent of that incurred as a result of injury to sound, natural teeth.

The costs of this program are borne by a portion of the student activity fee paid by all full-time day students; there are no additional charges. Information or advice concerning claims is available in the Student Health Office on the mezzanine.

In addition to this program, the College also makes available to interested students an optional supplemental accident and sickness medical benefit plan. The supplemental plan is designed to provide additional coverage for students and their dependents, if any, at competitive rates. Details are available in the Student Health Office.

For information concerning insurance for students who participate in intercollegiate sports, contact the Athletic Trainer in the Physical Education Center.

Student Activities

The College offers a program of cocurricular and extracurricular activities broad enough to satisfy a wide variety of tastes and to meet the needs and interests of most students. Cocurricular activities are related to specific disciplines and curricular programs. Extracurricular activities offer students the opportunity to develop new interests and leadership skills, to relax and enjoy a welcome change from daily study routines.

Students are encouraged to involve themselves in these activities which provide opportunities for personal growth and development complementing those of the classroom and laboratory.

44 Student Services and Activities

The student activities program is supervised by the Faculty Committee on Student Activities and by the Student Government, and is administered by the Director of Student Activities.

Student Government

The Student Government of St. Francis is concerned with the affairs of students in their relations with the College and surrounding communities. Student Government acts as a sounding board for all student interests, and provides efficient and productive leadership for the students. Elected annually by the student body, the Student Government derives its power from, and is essentially responsible to, the students. Student Government is responsible for representing the student body before the various groups involved with life in the College community.

Special Interest Clubs

The wide variety of special interest organizations stimulates a lively campus atmosphere at St. Francis. Among the clubs currently in operation are:

The Accounting Society

The Aerobics Club

The Black Students Organization

The Botanical Society

The Chess Club

The Christian Club

The Computer Club

The Economics Society

The Finance Club

The Fine Arts Club

The Foreign Students Association

The Gaelic Society

The History and Political Science Society

The Latin American Society

The Management Marketing Society

The Music Club

The National Association of Black Accountants

The Psychology Club

The St. Francis Flyers

The St. Thomas More Pre-law Society

The Science Society

The Troupers

The United Nations Club

Social Fraternities and Sororities

Fraternities and sororities offer social advantages that appeal to many students.

Alpha Phi Delta, Beta Sigma Chapter, a scholastic and social fraternity, was established in 1961.

Pi Sigma, Delta Chapter, a sorority, was founded in 1970. Its basic aims are the

promotion of friendship and social interaction, the diffusion of liberal culture, and the advancement of quality in College affairs.

National Honor Societies

Alpha Eta Rho is a national honor society whose Phi Kappa chapter was formed at St. Francis in 1987. The fraternity's aims are to further aviation in all its branches; to instill in the public mind a confidence in aviation; to promote contacts between students and those engaged in the profession; and to promote a closer affiliation between the students of aviation for the purposes of education and research. It is open to aviation majors who have completed 12 aviation credit hours and who have a minimum cumulative index of 2.75.

Alpha Kappa Delta is a national sociology honor society whose purpose is to encourage scholarship among sociology majors, to stimulate interest in sociology, and to sponsor research into social problems. The Xi Chapter was founded at St. Francis College in 1973. Membership is open to juniors and seniors, who have completed at least 10 credit hours in sociology and have attained 3.0 both as a cumulative index and index in sociology.

Alpha Kappa Psi is a professional business fraternity whose Zeta Iota Chapter was established at St. Francis in 1964. The fraternity's aims are to further the welfare of its members; to foster research in all facets of business; to appreciate and demand higher ideals from the business world; and to promote and advance in colleges and universities courses leading to degrees in business administration. In accordance with these goals, the fraternity annually conducts a professional program intended to educate and broaden the interests of its members.

Alpha Psi Omega, Pi Zeta Chapter of the National Drama Society, was founded at St. Francis College in 1961. Membership is open to students who have participated in two College dramatic productions.

Chi Beta Phi, Alpha Xi Chapter, is a natural science honor fraternity established in 1969. It is open to junior and senior biology, chemistry, and psychology majors who have a minimum cumulative index of 2.8 and a major or science index of 3.0.

Eta Sigma Gamma, Alpha Chi Chapter, is a national professional honor society in health science (education) whose principal purpose is to elevate the standards, ideals, competence, and ethics of professionally trained men and women in the discipline of health science. The College chapter was founded in 1979. Membership is open to those with a cumulative index of 2.7 who have completed 12 credits in health science with an index of 3.2

Kappa Delta Pi is a national society dedicated to fostering scholarship among students in education. The St. Francis College Xi Rho Chapter was established in 1978. Membership is limited to juniors and seniors participating in teacher training programs at the College. They must have completed 12 credits in the professional study of education, and must have a cumulative index of 3.2

Kappa Mu Epsilon, New York Theta Chapter of the National Mathematics Honor Society, is a vehicle for discussion and undergraduate research in mathematics. Membership is limited to sophomores, juniors, and seniors who have an index in mathematics of 3.0 and a cumulative index of 2.75 or better. Members must be mathematics majors and have completed at least 12 credits in mathematics.

Omicron Delta Epsilon, Eta Chapter, is an international economics honorary fraternity. The St. Francis Chapter is limited to juniors and seniors who have a cumultive index of 3.0 and have earned 12 credits in economics with a better than 3.0 average.

Phi Alpha Theta is a national history honor fraternity whose Theta Nu Chapter

was established at St. Francis College in 1961. Membership is limited to juniors and seniors who have an index in history of 3.0 and a cumulative index higher than 2.8. Members must have completed at least 12 semester hours of history.

Phi Gamma Nu is a national professional honor society in business. Beta Psi Chapter was established at St. Francis College in 1976. A 3.0 index is required for membership.

Psi Chi, the national honor society in psychology, serves to recognize psychology as a diverse science by encouraging students to develop research and clinical interests, attend regional and national conventions, and become familiar with academic and clinical settings in the metropolitan area.

Sigma Delta Pi is the national Spanish honor society whose Zeta Theta Chapter was formed at St. Francis in 1967. Membership is limited to juniors and seniors who have an index in Spanish of 3.0 and rank in the top 35 percent of their class.

Sigma Tau Delta is the national English honor society. Membership is open to students who have completed 12 credits in English and attained an index in English of 3.0.

Theta Alpha Kappa is the national religious studies/theology honor society whose Tau Chapter was formed at St. Francis College in 1978. Membership is limited to students who have completed a minimum of 12 credits in religious studies with a 3.5 average and a cumulative index of 3.0. The purpose of this society is to encourage scholarship among its members, to further the pursuit of religious studies on the undergraduate level, and to bring students, teachers, and writers of religion together both intellectually and socially.

The Duns Scotus Honor Society

The Duns Scotus Honor Society primarily aims to encourage among students a love and desire for excellence in scholarship and service to all the activities of the College. Its secondary aim is to honor and recognize worthy students who, by outstanding attainment, have won the esteem of their fellow students, members of the administration, and faculty. To be eligible for membership a student must have completed 60 semester hours and two years of residence at St. Francis College. Applicants must have an index of 3.6 and must show satisfactory evidence of distinguished participation in at least two extracurricular activites at the College. When requesting the membership application, prospective candidates will be given a detailed explanation of the requirements for membership. At commencement, each member wears the red and blue tassel reserved for society members. Membership does not cease at graduation. Alumni and other distinguished persons who have rendered outstanding service at the College may be elected as honorary members.

Athletics

Under the supervision of the Director of Athletics and his staff, the College's athletic program provides opportunities for students with exceptional talent to participate in a wide variety of intercollegiate athletic competition. St. Francis College, a member of the Northeast Conference and NCAA Division I, is represented by varsity teams in several sports. Men participate in basketball, soccer, baseball, swimming, and water polo. Women participate in basketball, volleyball, swimming, and softball. Coed varsity sports include bowling, cross-country, tennis, and indoor track.

The Office of Athletics is located in the Physical Education Center, (718) 522-2300, ext. 268.

Intramurals

Under the direction of the Intramurals Supervisor, the College provides a well-rounded program of intramural sports and recreational activites. Intramural sports, with teams for men and women in most cases, include basketball, softball, volleyball, floor hockey, indoor soccer, touch football, billiards, and table tennis.

Students are encouraged to take advantage of the swimming pool, gymnasium, and weight room for recreational use.

Intramural activities and programs are described in a brochure which is available in the Intramurals Office, on the second level of the Physical Education Center.

Publications

The Cord, the College student handbook, contains statements of major institutional policies, statements of student rights and responsibilities, a directory of student services, the Student Government Constitution, and other items of importance to students.

The Franciscan, the College yearboook, is published annually by members of the senior class to record class history and important College activities of the year.

Montage, founded in 1977, is the student literary magazine. It affords student writers and artists an opportunity for publication of their work.

The Wice is the student newspaper. It is edited and published by members of the student body.

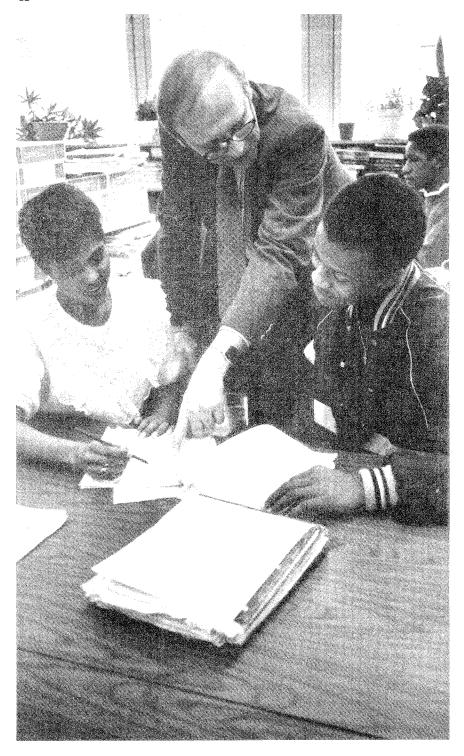
Alumni Association

The Alumni Association, founded in 1887, exists to advance the principles and purposes of St. Francis College and to benefit the present and former students. All former students of St. Francis College are members upon graduation of their class.

The Association aims to foster and promote the growth, development, and welfare of the College and to advance the social, professional, and economic interests of its members. The Association renders financial aid and sponsors a number of social and educational affairs which serve to stimulate and maintain interest among its members and to renew old acquaintances among graduates and former students.

The Office of Alumni Relations is located in Room 613A, (718) 522-2300, ext. 270.





Departmental Organization and Courses of Study

The College is divided into the following departments:

Accounting and Business Law

Allied Health

Aviation Administration and Business Studies

Biology

Chemistry, Physics, and Mathematics

Communications

Computer Information Systems

Economics

Education

English

Foreign Language and Fine Arts

History, Political Science, and Social Studies

Management

Philosophy

Psychology

Religious Studies

Sociology and Criminal Justice

Two-part courses for which both semesters must be taken for credit are indicated with a *hyphen* (BIO 005-006). For two-part courses separated by a *comma* (ACC 101, 102), either half, but not necessarily both, may be taken for credit.

The administration reserves the right to cancel courses with insufficient preregistration, insufficient registration, or lack of an instructor.

Accounting and Business Law

Chairman: Geoffrey R. Horlick

Professor Emeritus: Savage; Professors: Horlick, Yellin; Associate Professor: Diamond; Assistant Professor: Marino; Instructor: Siegel; Adjuncts: Celano, Cuddahy, DePaola.

The department offers courses in financial accounting, managerial accounting, auditing, taxation and business law.

Major

Accounting

A major in accounting prepares the student for a career in public accounting, private accounting (corporate), or not-for-profit accounting (government agencies, foundations and associations, hospitals, religious organizations, arts groups, etc.) Upon satisfactory completion of the major in accounting, the student may sit for professional certification examinations such as the CPA exam or CMA exam. The degree requirements are fully registered with the State of New York.

Internship programs providing a guided practical experience in both corporate and public accounting are available to selected students.

Graduates of the accounting program of St. Francis College have been employed by a broad range of CPA firms, banks, brokerage houses, manufacturing firms, retail establishments, governmental agencies, and not-for-profit groups.

Major Course Sequence

Accounting

Credits	Courses
42	Core curriculum (see pg. 31), including Mathematics 109; 110
6	Business Law 201; 202
9	Economics 201; 202; 306
6	Two from the following: Economics, any course; History 303; 307; 406; 410; Political Science 204; 309; 404; 406; Psychology 201; 312; 317
6	Business 101; 490
3	Computer Information Systems 101
3	Finance 301
3	Marketing 201
3	Quantitative Analysis 308
3	Mathematics 301
30	Accounting 101; 102; 201; 202; 303; 305; 401; 404; 405; 406
12	Free Electives

Health Science 100A, Health Science 100B/Physical Education 100A, or Physical Education 101 (B-H)

128

Total credits required

Minor

Accounting

The minor in accounting introduces students to the field of accounting and provides them with an overview of financial and managerial accounting, taxation, and an introduction to computers. It allows students majoring in other areas to obtain some knowledge and understanding of various accounting practices and procedures used today. A minor in accounting may be pursued by students in any major degree program.

Minor Course Sequence

Courses

Accounting

Credits

For liberal arts majors:

12 3	Accounting 101; 102; 303; 405 Computer Information Systems 101
15	Total credits required
For manag	gement majors: Courses
15 3	All above courses Accounting 409
18	Total credits required

Advanced Business Certificate

Corporate Accounting

To qualify for an Advanced Business Certificate, a minimum of fifteen of the required credits (excluding transfer and experiential learning credit) must be taken in residence at St. Francis College. Non-matriculated status and possession of a high school diploma or its equivalent are required for entry into the program. St. Francis students matriculated in degree programs may not pursue these certificates. A minimum grade of C is required in each course. The possession of basic skills in mathematics is required for all certificate program students, with algebra required for the corporate accounting option.

The program in corporate accounting is especially geared for adults who work with public and private accountants or who wish to be involved in the accounting field, as well as the government and non-profit sectors.

Advanced Business Certificate Course Sequence

Corporate Accounting

Credits	Courses
6	Accounting 101; 102
3	Business 101
3	Computer Information Systems 101
3	Accounting 303
3	Accounting 405
3	Business 250

21 Total credits required

Note: See Management section for information on other Advanced Business Certificate Programs.

Certificate

Paralegal Studies

The six-course, 18-credit program is registered with the New York State Department of Education and was designed to conform with the standards of the American Bar Association. Through this program, students gain the broad knowledge required of the paralegal, as well as expertise in specific areas of the profession.

The program is open to persons who have earned a bachelor's degree or who are sponsored by an appropriate employer. A minimum grade of C is required in each course. St. Francis students matriculated in degree programs may not pursue this certificate.

Certificate Course Sequence

Paralegal Studies

Credits	Courses
3	Paralegal Studies 101
15	Paralegal Studies 201; 202; 211; 212; 221; 222 (choose five)
18	Total credits required

Courses

Accounting (ACC)

ACC 101 Elementary Accounting I 3 credits.

An introduction to the basic principles of accounting including the accounting cycle, classified financial statements, and the measurement and valuation of current assets, current liabilities, and noncurrent assets. Every semester. Day, evening.

ACC 102 Elementary Accounting II 3 credits.

A continuation of the basic accounting principles learned in *Accounting I*. Specific topics include: accounting for partnerships, corporate owners' equity, long-term liabilities, statement of cash flows, financial statement analysis, and aspects of managerial accounting. *Prerequisites: ACC 101 and MAT 050 or passing grade on math placement test. Lab fee. Every semester. Day, evening.*

ACC 150 Introduction to Accounting 3 credits

Intended for non-business majors An introduction to accounting as the universal language of business. A study of the postulates and concepts underlying the preparation of basic corporate financial statements. The preparation of such statements is considered; analysis and interpretation of the statements are strongly emphasized. Spring. Day, evening.

ACC 201 Intermediate Accounting I 3 credits.

An in-depth analysis of accounting theory and financial reporting combining theory and problems. Emphasizes asset and liability valuation and the corresponding measurement of revenues and expenses. Specific topics include: the accounting process and adjustments, classified financial statements, conceptual framework underlying financial accounting, recognition and measurement of current and non-current assets. Prerequisites: ACC 102 and CIS 101 (CIS 101 may be taken as corequisite). Every Fall. Day, evening.

ACC 202 Intermediate Accounting II 3 credits.

A continuation of *Intermediate Accounting I*. Specific topics include: recognition and measurement of current and non-current liabilities, stockholders' equity, dilutive securities, investments, revenue recognition problems, accounting for income taxes, accounting changes and errors, and statement of cash flow. *Prerequisite: ACC 201. Every Spring. Day, evening.*

ACC 303 Cost Accounting 3 credits.

The managerial use of cost data for routine planning and control, and for long-range planning; product costing using job order, process, and standard costs. *Prerequisites:* CIS 101 (may be taken as corequisite); ACC 102 or ACC 150. Every Fall. Day, evening.

ACC 305 Auditing 3 credits.

Principles, standards, procedures, and techniques of auditing with emphasis on the analytical approach; electronic data processing and statistical sampling; types of audit examinations with appropriate reports, evaluation of assets, and substantiation of liabilities; an auditing practice case to be completed. *Prerequisite: ACC 201. Every Spring. Day, evening.*

ACC 400 Accounting Internship Program 1 credit.

Full-time professional staff work for limited period in public and private accounting; complete analytical written report of experience. Admission to course by permission of department chairman. *Every Fall. Day.*

ACC 401 Advanced Accounting Problems 3 credits.

An in-depth analysis of accounting theory and financial reporting. Course coverage includes partnerships, installment sales, consignments, and consolidations. *Prerequisites: ACC 202 and FIN 301. Every Fall. Day, evening.*

ACC 404 Senior Seminar in Accounting 3 credits.

A study of current literature, current accounting topics, and recent professional pronouncements through active participation, oral presentations, and a research paper. *Maximum enrollment: 15. Prerequisite: ACC 401. Every Spring. Day, evening.*

ACC 405 Taxation I 3 credits.

A study of the basic principles of federal income taxation as applied to individuals. Prerequisite: ACC 102 or ACC 150. Every Fall. Day, evening.

ACC 406 Taxation II 3 credits.

A study of the basic principles of federal income taxation as applied to partnerships and corporations; social security, gift, and estate taxes. *Prerequisite: ACC 405. Every Spring. Day, evening.*

ACC 408 New York State and City Taxation 2 credits.

A study of the basic principles of New York State and City taxation emphasizing corporations, individuals, partnerships, estate trusts, gift, and sales taxes. Special emphasis is given to the differences between the federal and state taxes. *Prerequisite:* ACC 405. Every Spring. Day.

ACC 409 Internal Auditing 3 credits.

Provides the tools and techniques needed to enter the corporate internal audit department. Included are the standards and components of internal auditing, report writing, computer control and audit, operational auditing, and the major differences between external and internal auditing. *Prerequisites: ACC 102 or ACC 150; and BUS 101. Every Fall. Evening.*

Courses

Business Law (BL)

BL 201 Business Law I 3 credits.

An introduction to law; the court system and legal process; the law of torts, business crimes, contracts, and sales; Article 2 of the Uniform Commercial Code. *Prerequisite: sophomore standing. Every semester, day. Fall, evening.*

BL 202 Business Law II 3 credits.

The law of commercial paper: Articles 3 and 4 of the Uniform Commercial Code; the law of property, bankruptcy, agency and business organizations: individual proprietorships, partnerships, and corporations. *Prerequisite: BL 201. Every semester, day. Spring, evening.*

BL 403 Business Law III 3 credits.

The legal environment of business; federal regulations and administrative law; consumer law, issuing and trading securities, trade restraints, monopolies and mergers, labor-management relations and environmental law; business ethics and corporate social responsibility. Prerequisite: BL 201. Recommended: BL 202. Spring 1991. (It is suggested that interested students take BL 201 and BL 202 by their junior year in order to have completed the prerequisites for Spring 1991.) Day.

Courses

Paralegal Studies

PL 101 Introduction to Law and Legal Research 3 credits.

An introduction to the Anglo-American legal system, the federal and state court systems, and the role of the paralegal. Topics include the sources of law, sources and tools of legal research, and an introduction to contracts, crimes and torts. *Every semester. Evening*.

PL 201 Real Estate and Mortgages I 3 credits.

The law of real property and mortgages, background and development. The preparation of real estate contracts, binders, and brokerage agreements, including a legal analysis of the various documents. The real estate closing. *Prerequisite: PL 101 (may be taken as corequisite). Every semester. Evening.*

PL 202 Real Estate and Mortgages II 3 credits.

The title search and examination, its analysis and relative importance. The role of the title closer. The preparation of the mortgage and its various documents and related forms. The mortgage closing. The mortgage foreclosure. *Prerequisite: PL 201. Every semester. Evening.*

PL 211 Wills, Trusts, and Estates 3 credits.

Wills and trusts, their background and development. The uses and preparation of wills and trusts. The Surrogate's Court, its various functions, and the preparation of probate and administration proceedings. *Prerequisite: PL 101 (may be taken as corequisite). Every semester. Evening.*

PL 212 Wills, Trusts, and Estates II 3 credits.

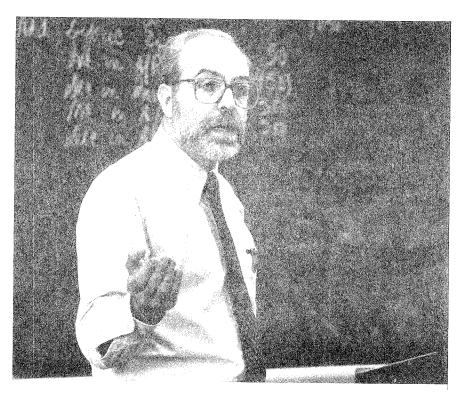
The federal estate tax, preparation of the 706 form and required accompanying documents. The New York estate tax, preparation of the motion and schedules, including the short form (TT102). The accounting procedure and its preparation. Miscellaneous proceedings. *Prerequisite: PL 211. Every semester. Evening.*

PL 221 Litigation I 3 credits.

Case preparation, fact gathering, and witness interviews. The differences and management of civil and criminal proceedings. Preparation of court pleadings and various judicial documents. Pretrial motion practice and procedure. Prerequisite: PL 101 (may be taken as corequisite). Every semester. Evening.

PL 222 Litigation II 3 credits.

Pretrial depositions and calendar practice. Trial and motion practice and preparation. Special remedies and procedures. Post-judicial proceedings and appellate practice. *Prerequisite: PL 221. Every semester. Evening.*



Allied Health

Chairman: Carolyn Plonsky

Professor: Plonsky; Associate Professor: Glascock; Assistant Professor: Blake; Adjuncts: Adamic, Denard, Driscoll, Giachetti, Kramer, Sedutto, Smith, Velez.

The Allied Health Department offers majors in Health Care Management, Health Services Administration, and (in conjunction with the State University of New York Health Science Center of Brooklyn) a program leading to the B.S. in Medical Records Administration.

Note: All new students who declare a major or indicate an interest in majoring in Allied Health degrees, or who wish to register for HC 101-102 must be tested in reading, English, and math. This testing is done on an individual basis at the Learning Center but must be completed before the student is enrolled in HC 101. Based on the results of these tests, the student may register for HC 101 with no restrictions or will be required to register for a one-hour per week lab/workshop designed to help students develop and improve basic academic skills. Specific details about testing are available from the Allied Health Department.

Major

Health Care Management (for Health Professionals)

This program provides an opportunity for individuals already employed in the health care field to obtain knowledge and skills which will prepare them to enter middle management positions in health care fields.

Enrollment in the program is intended for those who have had a minimum of two years of post-secondary training and a minimum of three years of professional experience in the field. The program has been planned to allow flexibility; 60 percent of the program is elective (except 42 semester hours must be in the liberal arts) so that a sequence of supporting courses can be developed to meet the needs of the individual student.

The program allows the student to receive transfer credit for courses completed at other accredited institutions.

Many applicants have had learning experiences acquired outside academic life which merit Experiential Learning credits. The Bachelor of Science in Health Care Management program allows qualified individuals to apply for this evaluation.

The department offers The Gelfand Medal for health care management majors at each June Commencement. Eligibility information and criteria are available at the department office.

Major Course Sequence

Health Care Management

Credits	Courses
21	Core Curriculum (see pg. 32)
30	Health Care 101-102; 103; 104; 105; 106; 203; 701; and two health-related electives

128	Total credits required	
2	Health Science 100B or Physical Education 100 (B-H)	
33	Free electives	
42	Liberal Arts electives	

Note: The student's interests, goals, as well as specific graduate school requirements should be considered when choosing liberal arts, free, or health-related electives.

Major

Health Services Administration

The health services administration major emphasizes the areas of management, economics, and science. It prepares students to enter administrative positions in hospitals and voluntary and public health agencies as well as a variety of careers in the private sector with organizations such as pharmaceutical and insurance companies. The major is also a good preparation for graduate study in public administration, public health, community health, hospital administration, and the M.B.A. Graduate study can enable students to obtain supervisory and department head positions in hospital personnel, admissions, business and records, and for associate directorships in nursing, ambulatory services, business and planning.

Major Course Sequence

Health Services Administration

Credits	Courses
42	Core curriculum, including Mathematics 301 and Biology 106 or Biology 101 (see pg. 31)
39	Major requirements: Health Care 101-102; 103; 104; 105; 106; 203; 600, 701; Health Science 102; 406; and two health-related electives
9	Economics 201; 202; 309
3	Computer Information Systems 101
3	Human Resources 210 or Psychology 317
9	Liberal Arts electives
21	Free electives
2	Health Science 100B or Physical Education 100 (B-H)
128	Total credits required

Program

Medical Records Administration

Through an affiliation agreement with SUNY Health Science Center at Brooklyn (formerly Downstate Medical Center), the Allied Health Department offers professional education in the field of medical records administration. After

completing two years of academic study at St. Francis College, the student commences clinical training at the Health Science Center. The baccalaureate degree is awarded by the SUNY Health Science Center at Brooklyn. Minimal requirements for admission to the program are a 3.0 index on a 4.0 scale and no D grades. Students who successfully complete the program are eligible to take the National Registration Examination, administered by the American Medical Record Association. Passing this exam entitles the candidate to professional recognition with the title of Registered Record Administrator (R.R.A.).

The primary responsibility of a Medical Records administrator is the management of health information systems consistent with the medical, administrative, ethical, and legal requirements of the health care delivery system. Specifically, the medical records professional is prepared to plan and implement medical records systems, to direct a total health records program, and to coordinate the system with other departments in a variety of facilities such as nursing homes, community health clinics, regulatory agencies and hospitals, as well as insurance companies.

Program Course Sequence

Medical Records Administration

Credits	Courses
8	Biology 103-104
4	Chemistry 101
3	Computer Information Systems 101
3	Communication 203
3	English 103
3	Mathematics 104
3	Fine Arts 401 or 402
3	History 201
9	Health Care 101-102; and 103
3	Philosophy 101 or 114 or Religious Studies 101 or any 200-level course
3	Psychology 201
3	Sociology 203
12	Electives*
60	Total credits required

^{*}May be selected from Computer Information Systems 201; 301; 302; Business 250; Economics 201; 202; 309; Health Care 104; 106; 201; 203; 204; 306; Psychology 317.

Minor

Health Administration

This minor provides students with the opportunity to investigate the area of health administration in a systematic, in-depth manner. Such a minor is useful for both liberal arts majors and management majors who are interested in applying their

skills to this specific professional area, while expanding their sphere of expertise and increasing their future marketability.

Minor Course Sequence

Health Administration

Credits	Courses
12	Health Care 101-102; 103*; 104
3	Health Care 105**; 201; 202; 203; 204; 302; 304 Religious Studies 315; Health Care 306 or 307 (choose one)
15	Total credits required

Total credits required

Minor

Health Science

A minor in health science is both useful and appropriate for a variety of students. Because the health field is such a rapidly growing and diverse industry, the talents of many individuals with backgrounds in areas such as English, economics, sociology, psychology, and management, combined with knowledge in health science are utilized in numerous situations.

Knowledge of concepts, theories, and application of skills in health science is particularly vital for physical education, teacher training and pre-med students.

Minor Course Sequence

Health Science

Credits	Courses
15	Health Science 102; 204; 206; 207; and 302
3	Health Science 301*; 403; 406**; or 419 (choose one)
18	Total credits required

^{*}Prerequisite Psychology 201

^{*}Students who have taken Business 101 may substitute Health Care 105; 201; 202; 203; or 204.

^{**}Students who have taken Human Resources 304 may not select this course.

^{**}Prerequisite Mathematics 301

Courses

Health Care (HC)

HC 101-102 Introduction to American Health Service Delivery I-II (formerly HC 407, HS 208, and HS 501) 6 credits.

An introduction to the pluralistic health system of 20th century America: institutions, manpower, consumers, financing, and government. This two semester foundation course will survey topics covered in higher-level courses, as well as describe the broader environment in which individual services are grounded. Topics include public, private, and voluntary services; the impact of laws and regulations at the local, state, and federal levels; the public health hierarchy; the influences of fiscal intermediaries on health care. HC 101 is prerequisite to HC 102. Every semester. Evening.

Note: To take HC 101, students must be tested in reading and English prior to the first week of classes (see pg. 56).

HC 103 Organization and Management of Health Institutions (formerly HC 401) 3 credits.

Introduction to basic organization with emphasis on acute-care hospitals and their departmental structure. The managerial functions and supervisory skills for the middle manager; comparison of managerial styles. *Prerequisite: C or better in HC 101-102. Every Fall. Evening.*

HC 104 Legal Issues in Health Care (formerly HC 403) 3 credits. An overview of legal issues confronting health care personnel. Topics include contracts, informed consent, patient rights, record keeping, liability for negligence and malpractice, as well as other ethical topics. Prerequisite: C or better in HC 101-102. Every Spring. Evening.

HC 105 Personnel Management in the Health Field (formerly HC 404) 3 credits.

Introduction to the effective management of human resources, or people at work. Topics covered include recruitment, training and supervision, discipline, evaluation, and termination. The course applies personnel theories and techniques to the health field. *Prerequisites: COM 203, HC 103. Every Spring. Evening.*

HC 106 Decision-making in the Health Field 3 credits. An in-depth workshop approach to management problems in health care delivery. The emphasis is on case study and an experiential method of problem-solving. Specific cases will be used to illustrate problem-solving and decision-making techniques of practical use to health care professionals. Interpersonal skills and group dynamics are also developed. Prerequisite: C or better in HC 101-102. Every Fall. Evening.

HC 201 Health Planning and Research 3 credits.

The application of statistical methods and techniques to the planning and delivery of health services. History of health planning; its impact on financing, manpower, and institutions. Research methods illustrated by case study. Topics include population projection, needs assessment, forecasting. Prerequisites: C or better in HC 101-102; and MAT 301. Fall 1990. Evening.

HC 202 Evaluation and Quality Assurance in Health Care 3 credits. Introduction to the efforts to assure quality in health services, professionals, and institutions; peer review, utilization review, medical audit, credentialing and continuing education, accreditation, DRG's. Accountability within professions vs. external controls. Evaluation models as applied to health programs and services. Prerequisites: C or better in HC 101-102; and MAT 301. Spring 1991. Evening.

HC 203 Financial Management for the Health Field (formerly HC 436-438) 3 credits.

Survey of the principles of accounting theory with emphasis on their application to the health field. Managerial accounting as it relates to planning, budgeting, staffing, and rate setting. Designed for the middle manager. *Prerequisite: HC 103. Every Fall. Evening.*

- HC 301 Introduction to Gerontology (formerly HC 435) 3 credits. An overview of issues concerning the aging population and process; stereotypes, retirement issues, physical and psychological changes, legal and financial needs, family supports. Traditional facilities as well as innovative concepts and programs are introduced. *Every Fall. Evening*.
- HC 302 Long-term Care Management (formerly HC 310) 3 credits. The principles, skills, and knowledge involved in organizing and managing a long-term care facility. Special attention is given to the needs of the aged in various levels of care, financing mechanisms, federal, state, and local regulations, and criteria/standards which must be met to secure licensure in New York State as a nursing home administrator. *Prerequisites: HC 103 and HC 301. Spring 1990. Evening.*
- HC 303 Alternate Care for the Aged (formerly HC 434) 3 credits. Current policy and legislation which pertain to the aged will be discussed. Structure, content, and adequacy of programs and services which comprise the continuum of care for the noninstitutionalized elderly will be examined. Future direction, goals, and strategies for the development of the continuum of care will be explored. Prerequisites: HC 103 and HC 301. Spring 1991. Evening.
- HC 304 Healing and Wholeness (formerly HC 215) 3 credits. Explores healing and wholeness from many perspectives. It includes an overview of healing from the traditions of the shaman to contemporary faith healers; an exploration of health care organization from ancient roots through modern medicine; alternative medicines and holistic therapies including psychic healing and biofeedback; and ways to self-healing through dream journals and meditation. Fall 1990. Evening.
- HC 305 / PSY 225 Coping with Stress (formerly HC 225) 3 credits. This interdisciplinary course will explore theories, research and techniques related to the impact and management of stress. There will be heavy emphasis upon the application of stress reduction techniques through class exercises in progressive muscle relaxation, autogenic and imagery training, systematic desensitization, assertiveness training, time management, and problem solving. Day, evening.

HC 306 Women and Management in the Health Field (formerly HC 450) 3 credits.

A study of the traditional management of health care reveals that while women comprise the majority of patients and workers, male administrators and physicians have dominated planning and delivery of services. Women's emergence as administrators, as well as particular problems women face in predominantly male fields are studied. Empowerment of women as managers and facilitators is the focus of class discussion. *Prerequisite: HC 103 or BUS 101. Fall 1989. Evening.*

HC 307 Mental Health: Concepts and Administration (formerly HC 411) 3 credits.

A study of basic principles of mental health, as well as an overview of maladjustment. Programs, treatment modalities, and facilities designed to maintain or restore mental health, and long-term custodial institution will be discussed. *Prerequisite: PSY 201 and HC 103. Fall 1990. Evening*.

HC 500, 501 Independent Study I, II 3-6 credits per semester.

Independent investigation into selected topics in health care management under the

direction of a department faculty member. With the approval of the chairman only. Prerequisite: At least 15 credits in Health Care or Health Science with a B average. Every semester. Day, evening.

HC 600, 601 Field Placement in the Health Field I, II 3 credits per semester.

Observation and supervised experience in selected health care settings; participation in administrative meetings and training sessions. Includes on-campus seminar to discuss problems and progress. May be taken for two semesters. Prerequisite: At least 15 credits in Health Care or Health Science. Every semester.

HC 701 Seminar in Health Management Issues 3 credits. Senior seminar dealing with current management issues in the health field. In depth study of selected problems and problem-solving techniques. Seminar format requires major research paper and oral presentation of same to class. Prerequisites: HC 104 and HC 105. Every Spring. Evening.

Courses

Health Science (HS)

HS 100A Health Issues 2 credits.

Provides an overview of select current issues in the area of health. Data necessary for making informed decisions will be presented. Personal and societal attitudes, beliefs and values implicit in the decision-making process will be discussed as they relate to health behavior and, consequently, health outcomes. Every semester. Day, evening.

HS 100B / PE 100A Exercise, Fitness and Weight Control 2 credits. An interdisciplinary (Health Science/Physical Education) approach to the relationship of exercise to health, including nutrition and weight control, stress reduction, and cardiovascular fitness. The course includes classroom work as well as participation in fitness assessment and activites. One of the 2-credit HS, PE, HS/PE options required of all students for graduation (see pg. 00). This course is offered on a graded basis. Every semester. Day, evening.

HS 102 Community Health 3 credits.

Introductory course in community health issues including the impact of the urban environment and social problems on health. An overview of community agencies will acquaint the student with available resources. Topics include: models for developing community health services, educational programs and crisis intervention; overcoming barriers to access; fundraising for community services; community impact on health services. *Every Fall. Day or evening*.

HS 204 Environmental and Occupational Health 3 credits. Environmental science concepts and factors including population dynamics, air, water, and noise pollution, and the growth of technology and how these impact on human health in the community as well as in the workplace. Topics include ecology issues, environmental and workplace hazards, health standards and regulations. Spring 1991. Day or evening.

HS 206 Safety and First Aid 3 credits.

Survey of home, school, and community programs in safety and first aid. Identification of types of accident hazards, control of causative conditions, and responsibilities of community agencies and individuals for safe living. Procedures for temporary treatment in cases of accident or sudden illness. Successful completion of this course leads to the American Red Cross Certificate in standard first aid and personal safety. Spring 1991. Day or evening.

HS 207 Nutrition 3 credits.

A foundation of human nutrition including its importance to optimum physical and emotional health. The nutrients, fundamental principles of normal nutrition, body requirements of various food elements, diet patterns for varying age groups and specific conditions are studied. The social and cultural influences on food selection are considered. *Spring 1991. Day or evening*.

HS 301 / PSY 301 Health Counseling 3 credits.

Not intended for psychology majors. This team-taught, interdisciplinary course focuses on both issues and techniques of health counseling. It investigates ways in which a health professional can detect needs of clients and work cooperatively to foster better health. It explores the helping relationship's impact on health behavior. Prerequisites: HC 101-102 and PSY 201. Offered as needed. Day or evening.

HS 302 Consumer Health 3 credits.

Consumer problems are viewed in terms of economic, sociological, psychological, and biological consequences to the individual and the community; consumer attitudes and behavior regarding needs, desires, and response to advertising, incorrect labeling, health insurance, life insurance, medicare, over-the-counter drugs, cosmetics, health fads and quackery, consumer protection agencies, evaluation of products, and other topics of interest to the consumer. *Every Fall. Day or evening*.

HS 403 Women's Health Issues 3 credits.

Accurate information about women's health needs will enable them to become more active participants in their own health care. Issues include: physician's attitudes toward women, knowing one's own body, contraception, pregnancy, rape, family violence, hysterectomy and mastectomy, mental health issues, and patients' rights in the health system. *Every Spring. Day or evening*.

HS 406 Epidemiology (formerly HS 503) 3 credits.

An introductory study of the factors influencing the nature and cause of communicable diseases and chronic conditions in human populations. The study of principles, practices, theories, and methods related to the control and prevention of disease prepare the student for practical application of statistics. Topics include: the natural history of diseases in various population groups, environmental and biological factors influencing the emergence of disease, and the investigation of a community health problem. *Prerequisite: MAT 301. Every Fall. Day or evening*.

HS 407 / EDS 202 Health Education for the Exceptional Child (formerly HS 505) 3 credits.

Daily living problems of the mentally retarded explored as to their self-realization and personal awareness; emphasis on the health responsibility of the individual as well as of the teacher, parent and community. *Every Spring. Day or evening*.

HS 419 Death, Loss, and Grief 3 credits.

Investigates the processes of death, loss, and grief while focusing upon the manner in which patterns of dealing with death are interwoven with patterns of living. The family, religion, medicine, economy, law, and community are considered. Specific issues addressed include the moral and legal aspects of euthanasia and the right to die, the hospital, hospice, and home as alternative sites for dying, definitions of life and death, religious and cultural burial customs, and the bereavement process. The implications of these issues are explored for health care practitioners and other individuals in the helping professions. *Spring 1991. Evening*.

HS 503 Internship in Health Science 6 credits.

Observation and supervised experience in a community health setting, giving practical application to previously studied theories. On-campus seminars allow students to discuss problems encountered and progress made in the field. May be

Allied Health

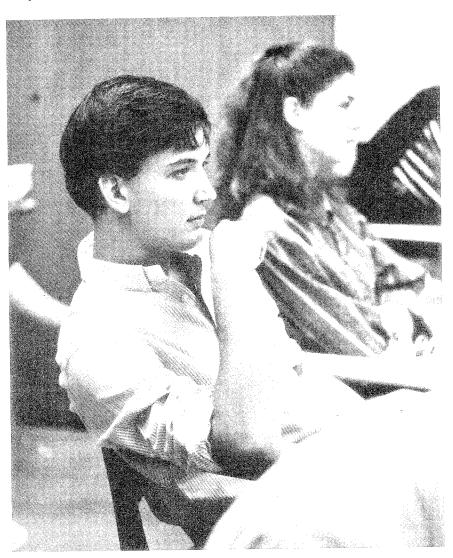
taken for two semesters. Prerequisites: HC 104 and HC 105. Every semester. Not offered in Spring 1990. Day.

HS 600, 601 Independent Study in Health Science 3-6 credits per semester.

Independent investigation into a selected health science topic under the direction of a department faculty member. Prerequisites: Approval of the chairman and at least 15 credits in Health Care or Health Science with a B average. Every semester. Day or evening.

HS 701 Seminar in Health Science 3 credits.

An in-depth study of major health issues of current interest. Using a seminar format, the content changes each semester depending on public attitude and opinions, local and international health concerns, and medical innovations. *Prerequisites: HC 104 and HC 105. Every Fall. Day or evening.*



Aviation Administration and Business Studies

Chairman: Emmett N. O'Hare

Assistant Professors: Maratos, O'Hare; Adjuncts: Recio, Tambi, Tracy.

The department offers majors in aviation administration and aviation business studies.

Major

Aviation Administration

Professionals in the field of aviation administration manage airports, oversee airline operations, control air traffic, market aircraft, supervise space programs, and conduct flight training.

The aviation administration curriculum includes the necessary technical and managerial skills for the aviation field while insuring that the student receives a broad-based liberal arts background.

Opportunities for qualified aviation managers in all parts of the industry exist world-wide. The aviation administration major provides the knowledge and skills required to function in entry and mid-level management positions with airlines, airports, manufacturers, consultants, or fixed-base operators.

Major Course Sequence

Aviation Administration

Courses
Core curriculum, including Mathematics 109 and 110 (sec pg. 31)
Accounting 101 and 102
Aviation 101; 102; 310; 320; 330; 340; 420; and 440
Aviation Management course (to be selected in consultation with advisor)
Aviation or complementary field specialty track electives
Business Law 201
Economics 201 and 202
Liberal Arts electives
Free electives
Business 101
Computer Information Systems 101
Mathematics 301
Political Science 404
Psychology 201 or 313

2 Health Science 100A; Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)

128 Total credits required

Specialty Tracks

Specialty tracks provide students with the opportunity to gain more detailed knowledge in a particular area of aviation administration or to study a complementary field in order to augment understanding of aviation administration. The department chairman must approve the specialty track and the grouping of courses that constitute the track for each individual student.

The following specialty tracks are among those available:

Aviation: air traffic control, airport management, aviation operations, aviation maintenance, flight operations, travel and tourism, aerospace science (Air Force ROTC).

Complementary fields: accounting, computer information systems, economics, management, political science, military science (Army ROTC).

Major

Aviation Business Studies

The Aviation Business Studies program furnishes the graduate with the knowledge and skills necessary to advance into management positions within the industry. The program is designed primarily for students who fall within one of the following categories:

- 1. holders of an FAA certificate or license
- 2. persons with current or previous employment in the aviation industry
- 3. transfer students from other colleges with aviation or related majors
- 4. graduates of technical aviation programs
- 5. graduates of two-year college aviation-related programs
- 6. continuing education students who desire a change in career

Students who are not in any of these categories may be admitted to the Aviation Business Studies program with the approval of the department chairman.

Major Course Sequence

Aviation Business Studies

Credits	Courses
21	Core curriculum (sec pg. 32)
33	Liberal Arts electives
18	Free electives
18	Aviation 310; 320; 330; 340; 420; and 440
3	Aviation Management course (to be selected in consultation with advisor)

15	Aviation or complementary field specialty track electives	
3	Business 101	
3	Computer Information Systems 101	
3	Business Law 201	
3	Mathematics 301	
3	Political Science 404	
3	Psychology 201 or 313	
2	Health Science 100A; Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)	
	11.61	

128 Total credits required

Airway Science Option

Aviation business studies majors wishing to specialize in a concentration of courses designed to prepare them for employment with the Federal Aviation Administration may do so through the Airway Science Option. Completion of the program results in non-competitive eligibility for employment by the FAA.

Courses Required for the Airway Science Option

Students choosing the airway science option follow the major course sequence in aviation business studies with the following modifications:

Core curriculum: Mathmatics 109 must be chosen as the "Mathematics or Science" selection.

Liberal Arts electives: The following courses must be included in this group: Chemistry 003; Economics 201; 202; 309; English 392; Mathematics 202; Physics 101; 102; Psychology 201; 307.

Major requirements: The Aviation electives chosen must be: Aviation 101; 213; 350; 410; and 430.

Free electives: These must include: Administration 201; Computer Information Systems 201; 340; Human Resources 304; and Quantitative Analysis 308.

Minor

Aviation Administration

A minor in aviation administration provides students majoring in other disciplines with a basic understanding of the aviation industry. The technical knowledge gained will be valuable to anyone considering a career in an aviation-related field.

Minor Course Sequence

Aviation Administration

Credits	Courses	
9	Aviation 101; 102; and 320	

15

68

6

Total credits required

Courses

Aviation (AV)

AV 101 Introduction to Air Transportation (formerly AV 201)

The history of aviation, focusing on the events which led to the development of today's air transportation system. An analysis of aviation's impact on economic and sociological affairs, both nationally and internationally. A survey of the components of the aviation business community including air carriers, manufacturers, private aircraft operators, government agencies, and trade associations. *Every Fall*.

AV 102 Aviation Operations (formerly AV 202) 3 credits. Describes the conduct of professional flight operations including those of air carriers, corporations, F.B.O.s, and the military. Introduces aircraft types, air routes, personnel, information systems, regulations, and safety. Every Spring.

AV 203 Aviation Meteorology 3 credits.

Emphasis on interpretation of meteorological phenomena which affect aircraft flight; basic concepts of aviation meteorology; temperature, pressure, moisture, stability, clouds, air masses, fronts, thunderstorms, icing, fog, analysis and use of weather data for flight planning and safe flying; interpretation of weather maps, reports, and forecasts. Every Fall.

AV 210 Astronautics 3 credits.

Introduces spacecraft systems from propulsion to electronic and life support. Provides history of space exploits with emphasis on discoveries and lessons learned from each space mission. NASA documents used to insure current information. Fall 1989.

AV 213, 214 Aeronautics I, II 3 credits per semester.

Physical principles of operations and design of airfoil and aircraft systems. Aircraft performance and impact of weather on performance. Navigation, radio navigational aids and air traffic procedures combined with federal air regulations. Fall 1990. Day.

AV 220 Aviation Regulatory Agencies 3 credits.

A detailed analysis of the regulatory agencies involved in the field of aviation. The historical background, current status, and future outlook of each governmental body will be studied. The Civil Aeronautics Board, Federal Aviation Administration, National Transportation Safety Board, and other agencies will be covered. A comparison between national and international organizations will be made. Every Fall.

AV 310 / MKT 310 Aviation Marketing and Economics 3 credits. An examination of the marketing theory and practices of the major components of the air transportation industry; air carriers, aircraft manufacturers, F.B.O.'s, and aircraft components suppliers. Topics include market structure, strategy, advertising, and research. Every Fall.

AV 320 Airport and Airway Facilities 3 credits. National and international air navigation facilities, their history, structure, and administration. Airport operations and development including design, equipment, management, funding, and community relations. Every Fall.

AV 330 / HR 330 Aviation Personnel Practices 3 credits.

A study of human resources management in the aviation industry. Topics of study include industry hiring practices, management development, employee motivation, and labor relations practices. The course examines labor influence on industry economics, government regulations, and manpower allocation programs. The impact of participative management and employee ownership on human resource management are examined. *Every Spring*.

AV 340 Aviation Communications Practicum (formerly AV 430) 3 credits.

Provides a working knowledge of the means by which communications are accomplished within the aviation industry, including written correspondence, telephone systems, teletype, two-way radio, and computer information systems. Students gain practice in typical communications exchanges by writing business correspondence, preparing computer documents, and role-playing conversations for various communications systems. *Prerequisites: ENG 103 and COM 203. Every Spring.*

AV 350 Air Traffic Control 3 credits.

History, present system, and future operation of the domestic and international air traffic control system. Emphasis on interaction of the three domestic ATC options—enroute, terminal, and flight service. Evaluates the system operation and its impact on the air transportation system. Involves visits to air traffic control facilities and lab experience in traffic control and handling. *Prerequisite: permission of chairman. Every Spring*.

AV 355 / CJ 212 Aviation Security 3 credits.

Analysis of security and protection within the aviation industry. Course discusses existing and future security programs and systems and equipment. Industry and corporate protection areas evaluated include: building control, industrial espionage, theft and pilferage. Airline passenger screening and protection, aircraft and fixed-base operator security programs are prepared and reviewed. Terrorist and bomb threats, building evacuation, and search procedures are reviewed. Legislation concerning aviation security is covered from both a historical and present requirement viewpoint. *Fall 1990*.

AV 360 / ADM 360 Transportation Management 3 credits. Examines principles of rail, highway, air, and waterway transportation, and considers the impact of transportation on economic, political, and social factors. The special impact of transportation on industrial development sites is examined. Spring 1991.

AV 365 Air Cargo Management 3 credits.

Intensive study of the management practices and problems involved in the air cargo industry. Background, services, facilities, and competition are discussed. Course includes IATA rate and tariff problems and an overview of Dangerous Goods Regulations. Field trips to air cargo and air freight forwarder facilities reinforce the course content. *Spring 1991*.

AV 410 Aviation Safety 3 credits.

Examines key areas of air and ground operations that contribute to accidents in the air transportation system. Basic elements of human psychology are integrated with the regulatory framework of the aviation system to explore the causes and issues that stem from actual air carrier accidents. The course also involves safety analysis within aviation organizations to determine hazards and potential problems, and to select preventive measures. Safety program preparation, implementation, and evaluation within the industry are also discussed. *Spring 1990*.

AV 420 Aviation Law and Business Policy 3 credits.

An examination of governmental regulatory functions which impact the aviation industry. Includes manufacturing and operating regulations, contracts, torts,

insurance, and security. Legal and ethical considerations of business policy are addressed. *Prerequisite: BL 201. Every Fall.*

AV 430 / ADM 430 Airport Management 3 credits.

An analysis of the role of the airport manager and his involvement with day-to-day and long-term management and operations of an airport. Course includes planning, operations, role of government agencies, community involvement, environmental issues, and human relations management. Site visits to several airports and guest lecturers enhance the presentation. *Prerequisites: BUS 201 and AV 320. Fall 1989.*

AV 440 Current Trends in Aviation 3 credits.

Analysis of selected contemporary issues and trends facing aviation management. Students investigate problems and analyze the underlying causes. The seminar format places emphasis on the student's written and oral presentation of information. The course includes preparation of a major research project which is required for satisfaction of the departmental requirements for graduation. *Prerequisites: aviation major with senior status. Every Spring.*

AV 450, 451 Special Topics in Aviation 3 credits per semester. Lectures, seminars, laboratories, independent studies, or a combination of these on selected topics in general aviation and aviation management. Every semester.

AV 510 Thesis/Seminar on Aviation 3 credits. Students explore topics of interest and of significance to contemporary aviation community. Research, analysis, group discussion, and formal presentation of conclusions are required. May be repeated for up to 9 credits. Prerequisites: senior standing; permission of chairman. Every semester.

AV 600 FAA Cooperative Education Program 3 credits per semester. The Federal Aviation Air Traffic Control Training Internship. The program consists of 4 three-credit semesters during which the student is employed by the FAA at an air traffic facility as a trainee. The student is evaluated and graded by the FAA facility manager and by the chairman of the aviation department. Prerequisites: approval of department chairman and acceptance into program by FAA. Every semester.

AV 610 Airline Internships and Cooperative Education Programs.

Cooperative education and internship training programs are set up with various aviation industry organizations. The student is placed in a variety of training positions within the company and evaluated on his or her performance. The overall grade for the program is compiled from the various individual grades received in each of the areas of training received. *Prerequisites: approval of department chairman and airline. Every semester.*

Biology

Associate Professor: Corrigan; Assistant Professor: Klinger; Adjuncts: Almurani, Conklin, Dines, Minkowitz, Nobel, Raimondi.

The Biology Department offers majors in biology, bio-medical science, and medical technology. In conjunction with the State University of New York Health Science Center at Brooklyn, programs leading to B.S. degrees in the fields of nursing, occupational therapy, and radiologic science and technology: medical sonography track, are also offered.

Major

Biology

The major in biology prepares the student for admission to graduate and professional schools (medicine, dentistry, veterinary medicine, podiatry, osteopathy and optometry).

Major Course Sequence

Biology

Credits	Courses
43	Core curriculum, including Mathematics 202 and 301 (see pg. 31)
37	Biology 103-104; 109-110; 202; 303; 310; 402; 503; and 200/300/400/500-level electives
22	Chemistry 101-102; 301; 302; and 304
8	Physics 101-102
6 or 12	Foreign Languages*
4 or 10	Free electives*
2	Health Science 100A; Health Science 100B/Physical Education 100A; Physical Education 100 (B-H)

128 Total credits required

*If 6 credits of a foreign language are taken, 10 credits of electives must be taken. If 12 credits of foreign language are taken, 4 credits of electives must be taken.

Major

Bio-medical Science (Podiatric Medicine)

In a cooperative effort with the New York College of Podiatric Medicine the department has an accelerated bio-medical science program which enables highly qualified students to complete a science-studies curriculum in two years and then make application to the New York College of Podiatric Medicine. Upon completion of the program, the student is awarded a B.S. in Biology from St. Francis College and a D.P.M. (Doctor of Podiatric Medicine) from the New York College of

72 Biology

Podiatric Medicine. Normally this curriculum would be completed in eight rather than six years.

Major Course Sequence

Bio-medical Science

Credits	Courses
43	Core Curriculum, including Mathematics 202 and 301 (see pg. 31)
20	Biology 103-104; 109-110; and 202; or 301; or 310; or 402; or Science 201
22	Chemistry 101-102; 301; 302; and 304
8	Physics 101-102
2	Health Science 100A, Health Science 100B/Physical Education 100A or Physical Education 100 (B-H)
35	Cooperative Hospital Training; New York College of Podiatric Medicine

130 Total credits required

Major

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Medical Technology

The program in medical technology prepares the student for acceptance into one of the clinical facilities with which we have affiliation: Maimonides Medical Center or Methodist Hospital. Upon completion of clinical training, the student receives a B.S. in Medical Technology from St. Francis College, a certificate of program completion from the respective School of Medical Technology attended, is awarded a Board of Health permit as a Laboratory Technologist, and is eligible to sit for certification examinations.

Major Course Sequence

Total credits required

Medical Technology

Credits	Courses
43	Core curriculum, including Mathematics 202 and 301 (see pg. 31)
22	Biology 103-104; 109-110; 301; 405; and 408
22	Chemistry 101-102; 301; 302; and 304
8	Physics 101-102
2	Health Science 100A, Health Science 100B/Physical Education 100A, or Physical Education 100 (B-H)
32	Cooperative Hospital Training

Professional Programs

Through an affiliation agreement with the State University of New York Health Science Center at Brooklyn, the Biology Department offers professional education in the fields of nursing, occupational therapy, and radiologic science and technology: medical sonography track. After completing two years of academic study at St. Francis College, the student commences clinical training at the Health Science Center. The baccalaureate degree is awarded by the SUNY Health Science Center at Brooklyn. Minimal requirements for admission to these programs are a 3.0 index on a 4.0 scale and no D grades.

Program Course Sequence

Nursing

Gredits	Courses
12	Biology 003-004; and 301
4	Chemistry 003 or 101
3	Mathematics 104
6	English 103; and any 200-level literature course
6	Psychology 201 and one of the following: 203; 204; 307; 312; 314; 329; or 409
6	Sociology 203 and one of the following: 301; 305; 309; or 402
12	Humanities electives*
11	Free electives**

Total credits required

Program Course Sequence

Occupational Therapy

Credits	Courses
20	Biology 103-104; 109-110; 202; and 402
4	Chemistry 101
6	Mathematics 104; and 301
6	English 103; and any 200-level literature course
9	Psychology 201; 203; and 409
3	Sociology 203

^{*}May be selected from: communications; economics; English; fine arts; foreign language; history; philosophy; psychology; religion and/or sociology.

^{**}It is recommended that some general electives be chosen from the area of physical science: Chemistry 301; 302; Physics 101-102. Health Science 201 is also recommended.

74 Biology

16 Humanities electives*

64 Total credits required

*May be selected from: communications; economics; English; fine arts; foreign language; history; philosophy; psychology; religion and/or sociology.

Program Course Sequence:

Radiologic Science and Technology: Medical Sonography Track

Credits	Courses
12	Biology 103-104; and 109-110
4	Chemistry 101
6	Mathematics 104; and 301
6	English 103; and any 200-level literature course
6	Psychology 201; and 312
4	Physics 101
6	Electives*
20	Choose from Biology 201; 202; 206; 402; Chemistry 102; Physics 102; Computer Information Systems 101; and Health Science 302

64 Total credits required

Minor

Biology

The minor in biology is not intended as a preparatory for graduate study but it will reinforce the student's biological science background.

Minor Course Sequence

Biology

Courses
Biology 103-104; and 109-110
Choose from: Biology 201; 202; 203; 204; 206; 301; 302; 303; 403; 405; and 408

19-21 Total credits required

^{*}Must be chosen from the following: communications, economics, English, fine arts, foreign languages, history, philosophy, psychology, religion, and sociology.

Courses

Biology (BIO)

BIO 003-004 Anatomy and Physiology 8 credits.

An analysis of the relationship between structure and function. Laboratory experiments and dissections are designed to achieve this objective. This course is designed to fulfill program requirements for the nursing program and the physical education major. Two lectures, one recitation, and three lab hours per week. Every year. Day.

BIO 005-006 Principles of Anatomy and Physiology for the Special Educator 6 credits.

An analysis of the anatomy and physiology of man designed for the teacher of special students with emphasis on the pathology of the neuromuscular system. This course is designed for the student majoring in special education. Three lecture hours per week. Every year. Day.

BIO 101 Introduction to Biology I 3 credits.

Introduces the student to the architecture, metabolism, and reproduction of plant, and animal cells. Basic concepts in genetics, development, evolution, and ecology are discussed. A survey of the major plant and animal phyla is made. This course is designed for all non-science majors. Three lecture hours per week. Every Fall. Day.

BIO 102 Introduction to Biology II 3 credits.

Introduces the student to the organization and function of the human body from cells to systems. Included are selected topics in inheritance, human genetics, and immunity. This course is designed for all non-science majors and fulfills one of the science prerequisites in the Elementary School Teacher Training Curriculum. Three lecture hours per week. Every Spring. Day.

BIO 103-104 General Biology I-II 8 credits.

Examines basic principles in cellular and molecular biology, genetics, development, ecology, and evolution. The organization of plants and animals from cells to integrated systems is discussed and a comparison made between plant and animal phyla. Experiments and dissections are designed to accomplish these objectives. Two lectures, one recitation, and three lab hours per week. Corequisite: BIO 109-110. Every year. Day.

BIO 106 Principles of Anatomy and Physiology for the Health Care Facility Supervisor 3 credits.

The functional anatomy and physiology of the prenatal, normal adult and aging model of the human being are explained. Discussion of relevancy of material for informed decision-making and efficient operation of the health care facility is included. This course is designed for the Health Services Administration major. Three lecture hours per week. Every year. Day.

BIO 108 Biological Research Techniques 3 credits.

This laboratory-oriented course consists of a botanical techniques section, a bacteriological techniques section and a radiation biology section. Every year. Day.

BIO 109-110 Introduction to Biochemistry I-II 4 credits.

Surveys the following: essential elements for life and their functions; the bio-organic compounds, vitamins, water, and minerals; the processes of cellular energetics in both plants and animals and molecular genetics. *Corequisite: BIO 103-104. Two lecture hours per week. Every year. Day.*

BIO 201 Embryology 4 credits.

A descriptive study of the development of amphioxus, frog, chick, and mammal in lecture and laboratory; developmental genetics; the problems of development; an introduction to experimental embryology. *Prerequisites: BIO 103-104. Two lectures, one*

recitation, and three lab hours per week. Offered as needed. Day.

BIO 202 Comparative Anatomy 4 credits.

A comparative lecture and laboratory study of the macroscopic anatomy of typical representatives of the classes of vertebrates. Prerequisites: BIO 103-104. Two lectures, one recitation, and three lab hours per week. Every Fall. Day.

BIO 203 Invertebrate Zoology 4 credits.

Major invertebrate phyla with emphasis on taxonomy, structure, physiology, and ecology; field trips to selected local areas for the collection and study of representative invertebrate forms. Laboratory dissection of representative types. Prerequisites: BIO 103-104. Two lectures, one recitation, and three lab hours per week. Offered as needed. Day.

BIO 204 Ecology 4 credits.

An introduction to ecological principles and their application to the environment; environmental problems; numerous field trips to representative systems. Prerequisites: BIO 101 and 102, or 103-104. Two lectures, one recitation, and three lab hours per week. Every Summer. Day.

BIO 206 Histology 4 credits.

A study of the microscopic anatomy of normal animal tissues and organs. The laboratory sections include methods of preparing histological specimens and observation of prepared slides. Prerequisites: BIO 103-104. Two lectures, one recitation, and three lab hours per week. Offered as needed. Day.

BIO 301 Microbiology 4 credits.

A survey of the principal groups of microorganisms (bacteria, fungi, algae, protozoa, viruses, and rickettsiae) with emphasis on taxonomy, morphology, physiology, and their industrial and medical application. *Prerequisites: BIO 103-104.* Two lectures, one recitation, and three lab hours per week. Every Spring. Day.

BIO 302 Botany 4 credits.

A survey of the principal groups of plants from the standpoint of their structure and development with intensive studies on the morphology and physiology of the angiospermae. Prerequisites: BIO 103-104. Two lectures, one recitation, and three lab hours per week. Offered as needed. Day.

BIO 303 Genetics 4 credits.

An introduction to variation and heredity; the theory of the gene as developed in classical genetics, biochemical and molecular genetics; cytogenetics; the genetics of populations; cytoplasmic inheritance; laboratory problems and experiments in drosophila, bacterial, and viral genetics. Prerequisites: BIO 103-104. Two lectures, one recitation, and three lab hours per week. Every Spring. Day.

BIO 304 Biological Techniques: Instrumentation 4 credits. The theory and practical application of various analytical procedures and the solution of biological problems by instrumentation. A study of the use of centrifuges, pH meters, analytical balances, dialysis techniques, countercurrent distribution application, chromatographic techniques: paper, column, thin layer, gas and liquid, and spectroscopy (UV, VIS, and IR). Prerequisites: Departmental approval and BIO 103-104. Two lectures, one recitation, and three lab hours per week. Limited enrollment. Offered as needed. Day.

BIO 310 Cell Biology 4 credits.

An introduction to the form and function of cells; a study of the origins of life; cell prototypes and prokaryote; the eukaryotic cell (plant and animal) and its organelles; bioenergetics; the central dogma; and vital activities of various cell types. Prerequisites: BIO 103-104 and CHE 101-102. Two lectures, one recitation, and three lab hours per week. Every Fall. Day.

BIO 402 Vertebrate Physiology 4 credits.

The basic principles involved in the physiology of vertebrate systems; the physiochemical aspects and homeostatic mechanisms of the functional systems. Prerequisites: BIO 103-104. Two lectures, one recitation, and three lab hours per week. Every Spring. Day.

BIO 403 Endocrinology 3 credits.

A survey of the glands of internal secretion; each of the endocrine glands will be considered according to structure, development, synthesis of hormones, regulation of function, action of hormones, and the interrelationship with other components of the regulatory system. *Prerequisites: BIO 103-104. Three lecture hours per week. Offered as needed. Day.*

BIO 404 Radiation Biology 4 credits.

The nature of ionizing radiation and its effects on living matter. Cell death, somatic and genetic effects, effect on the embryo, chronic low-dosage exposure, and radiation medicine. Detection of ionizing radiation. Uses of ionizing radiation in medicine and the life sciences. Prerequisites: Departmental approval and BIO 103-104; CHE 101-102; 301; PHY 101-102. Two lectures, one recitation, and three lab hours per week. Offered as needed. Limited enrollment. Day.

BIO 405 Immunology (formerly BIO 406) 3 credits.

Erythropoiesis, hemostasis, and immunohematology are discussed. How the immune response is established is analyzed. Different forms of immunity; immunuglobulins; antigen; immunodeficiency; autoimmunity; hypersensitivity; antigen-antibody reactions and serological tests are covered. *Prerequisites: BIO 103-104. Three lecture hours per week. Offered as needed. Day.*

BIO 408 Medical Microbiology (formerly BIO 407) 3 credits. Discusses the bacteriological, rickettsial, chlamydial, fungal, viral, protozoan, and helminth organisms of significance in the propagation of disease. Prerequisites: BIO 103-104. Three lecture hours per week. Offered as needed. Day.

BIO 409 Neurobiology 3 credits.

The basic organization and function of the vertebrate nervous system are covered. Discussed in detail are the spinal cord, brain stem, limbic system, cerebellum, and cerebrum as well as central sensory systems for vision, audition, and equilibrium. Dissections are incorporated to demonstrate critical anatomy. Prerequisites: BIO 103-104. Three lecture hours per week. Offered as needed. Day.

BIO 500 Independent Study 1-3 credits.

Independent study under the direction of a faculty member. Prerequisites: senior standing and departmental approval. Every semester. Day.

BIO 501 Biological Research 3 credits.

Independent laboratory research under faculty guidance. A completed thesis is required. Prerequisites: senior standing and departmental approval. Every semester. Day.

BIO 502 Biological Research 3 credits.

Independent laboratory research under faculty guidance. A completed thesis is required. Prerequisites: senior standing and departmental approval. Every semester. Day.

BIO 503 Biology Seminar 1 credit.

Discussion of topics reflecting research and current problems in the biological sciences in a seminar format. Specific areas of discussion vary from semester to semester. Topics are announced prior to termination of the Fall semester. A written paper and oral presentation are required. *Prerequisites: senior standing. Every Fall. Day.*

The following courses are offered at Methodist Hospital and satisfy the clinical training requirements for the B.S. degree in Medical Technology (MHB).

MHB 400 Clinical Biochemistry 8 credits.

Introduction to major concepts of basic metabolic pathways and biochemical control mechanisms, including organic and physiological aspects of clinical laboratory procedures with emphasis on analytical and quantitative chemistry as applied to clinical methods. Techniques include absorption spectrophotometry, flame photometry, atomic absorption spectrophotometry, and electrophoresis. Hands-on experience is given in the use of the Astra-8, RA 1000, and SMA 12-60.

MHB 420 Hematology 4 credits.

Origin and interrelationship of blood cells, their structure in normal and abnormal states and their normal maturation. Diseases of both the erythrocyte and leukocyte series are discussed; laboratory diagnosis of these diseases. Route and special procedures are learned during the students' stay in the laboratory. Instruction in the use of the Technician 6000 and Coulter S-Plus is given.

MHB 430 Coagulation 2 credits.

Theoretical aspects of blood coagulation in normal and disease states with current laboratory methods employed and practical experience within the lab.

MHB 440 Immunohematology 4 credits.

Methods in blood banking with emphasis on genetics and transfusion therapy, including extensive laboratory techniques.

MHB 450 Immunology/Serology 4 credits.

Principles of immunology and serology with emphasis on antibody antigen reaction, disease states and practical application in current laboratory techniques including radioimmunoassays, immunodiffusion, and fluorescence microscopy techniques.

MHB 460 Bacteriology 4 credits.

Identification and classification of all major bacteria of clinical importance. The practical aspects are studied in the lab including isolation techniques, biochemical reactions, and antibiotic sensitivity methods.

MHB 470 Mycology 2 credits.

A study of classification, identification of life cycles and morphologic, physiological, and biochemical aspects of fungi of medical importance; a study of infections they may form.

MHB 480 Parasitology 2 credits.

A study of the life cycle, morphology, transmission potency, pathology, and treatment of diseases caused by protozoans, and helminths, along with prevention and distribution of these organisms. All aspects of practical lab work and identification methods discussed with emphasis on immunology and recogniton of parasites found in stool, blood, and tissues.

MHB 490 Urine Components 2 credits.

A study of the physiology of the kidney with emphasis on the composition of urine both chemically and morphologically in disease and normal states. Practical lab work involves knowledge of macroscopic, and chemical analysis of urine. Urinalysis is considered by most physicians as the single most significant lab test.

The following courses are offered at Maimonides Medical Center and satisfy the clinical training for the B.S. degree in Medical Technology (MMC).

MMC 400 Clinical Biochemistry 5 credits.

Introduction to basic major metabolic pathways with discussion of both normal and pathological conditions affecting these pathways. Emphasis is placed on quantitative analytical chemical methods with particular attention paid to clinical methodologies.

MMC 410 Laboratory Automation and Instrumentation 3 credits. The student is introduced to the current state-of-the-art instrumentation in all major areas. Both theoretical and practical aspects of all instruments are taught as

the student rotates through each area. Instruction includes the SMA-II, Beckman Astra-8, Blood Gas Analyzers, electrophoresis, immunoelectrophoresis, laser nephelometry, Coulter S-Plus, Coulter S-Plus Four, Diff-4 Counter, Bactec and Beckman 4000 and Nuclear of Chicago Gamma Counters.

MMC 420 Hematology 4 credits.

Origin of structure of both normal and abnormal cells are discussed, as well as the laboratory diagnosis of hematological disorders. Both routine procedures, such as sedimentation rates, as well as the more special procedures of hemoglobin electrophoresis and ANA are also presented. Instrumentation taught includes both cell counters and differential analyzers.

MMC 430 Coagulation 2 credits.

Practical and theoretical aspects of blood coagulation are covered, with emphasis placed on the cascade process of coagulation in both normal and disease states. Automation includes the Coagamate 2000 and the Dual Channel Coagulizer.

MMC 445 Endocrinology 2 credits.

Introduction to basic principles of radioimmunoassay and competitive protein binding are taught, with particular emphasis being placed on the special techniques necessary to do analyses at very low concentrations of metabolites (nano- and picogram) carried out in this area. Tests covered include thyroid function determinations and therapeutic drug monitoring.

MMC 450 Immunology/Serology 4 credits.

Basic principles of immunology and serology with particular emphasis on the antigen-antibody reaction are taught. Practical applications include instruction in current laboratory techniques such as RPR's, ASO titers, heterophiles, laser nephelometry, and immunodiffusion.

MMC 460 Bacteriology 4 credits.

Theoretical aspects of the classification and identification of all bacteria of clinical importance are emphasized. The practical aspects of culturing and sub-culturing, as well as biochemical reactions and antibiotic sensitivity methods are taught. Instruction is given on the Bactec, an instrument for the analysis of blood cultures.

MMC 470 Mycobacteriology (TB) and Mycology 2 credits.

Stains for acid-fast bacilli and chemical testing to identify all mycobacteria and TB are taught. India ink and KOH preparations for direct fungal elements are also taught and positive classification and identification of the fungi is carried out by the Uni-Yeast-Tek system.

MMC 480 Parasitology 2 credits.

An outline of the life cycles, pathology, and treatment of diseases caused by parasites significant in human illnesses is covered. Practical aspects of the laboratory identification of medically significant parasites found in blood, stool and, tissues are taught.

MMC 490 Urinalysis 2 credits.

The physiology of the kidney, with particular emphasis on the formation and composition of urine is taught. Practical laboratory work involves the dipstick method for identification of certain abnormal metabolites and microscopic analysis for cells and other substances found in the urinary sediment. Direct chemical analyses for other metabolites are also taught.

MMC 500 Laboratory Computer 2 credits.

Instruction is given on the theoretical aspects of computer hardware and software. Practical applications include use of the CRT's for entering patient laboratory requests and results, as well as an introduction to running both background and foreground functions on the laboratory computer, such as statistical programs and quality control analysis.

Chemistry, Physics, and Mathematics

Chairman: Thomas Quigley

Professors Emeriti: Burke, Schneider; Professors: Guaraldo, Quigley; Associate Professor: Lazzara; Assistant Professor: Tremmel; Adjuncts: Bajue, Bianchi, Cohn, DiClementi, Hayes, Joseph, Jacklitsch, Kreis, Kiernan, Naughton, Russo.

Major

Mathematics

The department offers a major in mathematics. The program provides a sound foundation for study at the graduate level in mathematics and/or computer science. In addition, many of the offerings are essential for careers in industrial and actuarial mathematics.

Major Course Sequence

Mathematics

Credits	Courses
44	Core curriculum including 8 credits in physics (see page 31)
6	Foreign Language*
40	Mathematics 202; 203; 304; 401; 403; 404; 409; 412; 415; and 300/400-level electives (excluding Mathematics 301)
4	Science 201
32	Electives
2	Health Science 100A, Health Science 100B/Physical Education 100A, or Physical Education (B-H)

128 Total credits required

Minor

Mathematics

The purpose of the mathematics minor is to provide the student with an introduction to some of the topics of higher mathematics. This minor would be especially useful to those students who intend to pursue graduate programs in the sciences, economics, and various areas of business, since a knowledge of some higher mathematics is necessary for successful study in these fields.

^{*}Two courses in the same language.

Minor Course Sequence

Mathematics

Credits	Courses
10	Mathematics 202; 203; and 304
6	Two from: Mathematics 305; 309; 401; 403; 406; 408; 409; 412; and 415
16	Total credits required

Chemistry and Physics

The chemistry and physics program has three principal objectives: (1) to provide the necessary background in chemistry for students in programs such as premedicine, pre-dentistry, bio-medical science, medical technology, nursing, occupational therapy, radiologic science, and biology; (2) to provide the necessary background in chemistry for students in teacher training programs and (3) to provide non-science majors with the opportunity to acquire knowledge of our natural and technological environment as explained through chemical principles.

Minor

Chemistry

The minor in chemistry provides a systematic approach to the attainment of a strong background in the area.

Minor Course Sequence

Chemistry Credits Courses 22 Chemistry 101-102; 301; 302; and 401

22 Total credits required

Courses

Mathematics (MAT)

Students wishing to major in biology, chemistry, mathematics, or mathematics teaching (secondary school) must take a placement test. The test results will determine whether the student must take MAT 070 prior to taking MAT 202.

Students wishing to major in accounting, economics or management must take a placement test also. The results of this test will determine whether the student must take MAT 050 prior to taking MAT 109.

MAT 050 Algebra for Managerial Science 0 credits.

A remedial course for accounting, management, and economics majors designed to develop and/or strengthen basic topics in algebra that a student should master before taking a first course in business mathematics. Prerequisite: placement by examination. Three lecture and two recitation hours per week. Every semester. Day, evening.

MAT 070 Algebra and Trigonometry for Science Majors 0 credits. A remedial course for biology, chemistry, and mathematics majors designed to develop and/or strengthen those topics in algebra and trigonometry that a student should master before taking a first course in calculus. Prerequisite: placement by examination. Three lecture and two recitation hours per week. Every Spring. Day.

MAT 103 Foundations of Mathematics I 3 credits.

A general view of mathematics with an intuitive approach. A study of sets and logic, numbers, numeration and mathematic systems, the metric system, and an introduction to geometry. Every Fall. Day.

MAT 104 Foundations of Mathematics II 3 credits.

An introduction to algebra, matrices and some applications, probability statistics, calculators, and computers. *Every Spring. Day.*

MAT 109 Mathematics for Managerial Science I 3 credits.

The study of matrices and their application. Examples include the Leontief model and solution of systems in linear equations, inequalities in linear programming (graphical and algebraic approach), dual problems and economic interpretation. Prerequisite: MAT 105 or MAT 050 or placement by examination. Every semester. Day, evening.

MAT 110 Mathematics for Managerial Science II 3 credits.

Introduces the basic concepts of functional relationships, the basic skills of differentiation and integration, maxima and minima problems, and several other applications of calculus, especially models in business and economics; exponential models and mathematics of finance. *Prerequisite: MAT 109. Every semester. Day, evening.*

MAT 202 Calculus I 4 credits.

Emphasis given to calculus, including differentiation and integration of algebraic forms, areas, applications of the derivative, differentials, Rolle's theorem and the mean value theorem. *Prerequisite: MAT 107 or MAT 070 or placement by examination. Every fall. Day.*

MAT 203 Calculus II 3 credits.

Applications of integration, logarithmic, exponential and trigonometric functions. Methods of integration by partial fractions, trigonometric substitution, conic sections, rotation of axes and the general second degree equation, polar coordinates. Prerequisite: MAT 202. Every Spring. Day.

MAT 301 Statistics 3 credits.

Organization, description, and interpretation of data. Probability and probability distributions. Sampling distributions and estimation of population parameters. Testing hypothesis, linear regression, and correlation analysis, index numbers. *Every semester. Day, evening.*

MAT 304 Calculus III 3 credits.

Vectors and vector functions. Functions of several variables. Double and triple integrals with applications. Sequences and infinite series. *Prerequisite: MAT 203. Every Fall. Day.*

MAT 305 Theory of Equations 3 credits.

Complex numbers. Polynomials and algebraic equations. Solutions of cubic and biquadratic equations. Cardan's and Ferrari's formulas. Ruler and compass

constructions. Determinants and matrices. Prerequisite: MAT 202. Fall 1989. Day.

MAT 309 College Geometry 3 credits.

Topics of higher Euclidean geometry and geometric constructions. Geometrical transformations and different kinds of geometries. Projective and hyperbolic geometries. *Spring 1990. Day.*

MAT 401 Differential Equations I 3 credits.

Methods of solving ordinary differential equations with applications. Linear differential equations of first, second, and higher order applications. Systems of linear differential equations. *Prerequisite: MAT 203. Fall 1990. Day.*

MAT 402 Differential Equations II 3 credits.

Fourier series and Laplace transformations: applications. Series solutions of differential equations. Legendre's and Bessel's equations. Partial differential equations. *Prerequisite: MAT 401. Spring 1991. Day.*

MAT 403 Advanced Calculus I 3 credits.

Axiom of continuity, least upper bounds and greatest lower bounds; nested intervals; continuous functions; point sets, maxima, and minima for functions of two or more variables; the method of Lagrange; implicit function theorems and general theorems of partial differential. *Prerequisite: MAT 304. Fall 1989. Day.*

MAT 404 Advanced Calculus II 3 credits.

Transformations and mappings; point set theory; uniform continuity and fundamental theorems of continuous functions; the theory of integration; infinite series and uniform convergence; power series; improper integrals and a study of the gamma functions. *Prerequisite: MAT 403. Spring 1990. Day.*

MAT 406 Theory of Numbers 3 credits.

An introductory course dealing mainly with divisibility, number theorems, theory and congruences, quadratic residues, and Diophantine equations. *Prerequisite: MAT 202. Spring 1989. Day.*

MAT 408 Numerical Analysis 3 credits.

Numerical solutions of equations, difference tables, operator methods; numerical differentiation and integration; numerical solution of ordinary differential equations; systems of linear equations; solutions by iterative methods. *Prerequisites: MAT 304 or 401 and SCI 201. Offered as needed. Day.*

MAT 409 Modern Algebra 3 credits.

Sets and mappings; theory of groups, rings, and fields; isomorphism; the field of real numbers and the field of complete numbers. *Prerequisite: MAT 304. Spring 1990. Day.*

MAT 410 Functions of a Complex Variable 3 credits.

Point set theory; algebra of complex numbers; complex analysis; Cauchy-Riemann partial differential equation; Cauchy-Goursat theorem; conformal maps. *Prerequisite:* MAT 403. Offered as needed. Day.

MAT 411 Real Variables 3 credits.

The real numbers and the concepts of limit sequence, and series; functions of one real variable, continuity, derivative integrals. *Prerequisite: MAT 403. Offered as needed. Day.*

MAT 412 Linear Algebra 3 credits.

Vector spaces; basis; dimensions; systems of linear equation; matrices and determinants; scalar product; orthogonality and eigen-values. *Prerequisite: MAT 304. Fall 1990. Day.*

MAT 414 Topology 3 credits.

Set theory; definition of topology and topological space; homeomorphism and homeomorphic spaces; compactness and connectedness; separation axioms; metric spaces and completion of a metric space. *Prerequisite: MAT 403. Offered as needed. Day.*

MAT 415 Mathematical Statistics I (formerly MAT 307) 3 credits. Discrete and continuous random variables and their probability distributions. Multivariate probability distributions. Functions of random variables. Limit theorems and estimation. This course is recommended for students interested in an actuarial career. Prerequisite: MAT 304. Fall 1989. Day.

MAT 416 Mathematical Statistics II (formerly MAT 308) 3 credits. Methods of estimation and hypothesis testing. Linear models and estimation by least squares. The analysis of variance and enumerative data. *Prerequisite: MAT 415. Spring 1990. Day.*

Courses

Chemistry (CHE)

CHE 003-004 Chemistry and Life 8 credits.

Intended for non-science majors. Introduction to basic principles of chemistry; emphasis on application of these principles to living systems and their impact on present-day living. Prerequisite: MAT 070 or placement by examination. Two lecture hours, one conference, and three lab hours per week. Fall 1990, Spring 1991. Day.

CHE 101-102 General Chemistry 8 credits.

Intended for science majors. Emphasis on quantitative aspects of chemistry at a more specialized level than in Chemistry 003-004. Two lectures, one conference, and three lab hours per week. Every year. Day.

CHE 201 Analytical Chemistry 4 credits.

Quantitative study of gravimetric and volumetric analysis; solubility product, acidbase, oxidation-reduction and complex-formation phenomena considered with emphasis upon precision, resourcefulness, and chemical calculations. *Prerequisite:* CHE 102. Two lectures, one conference, and three lab hours per week. Offered as needed. Day.

CHE 301, 302 Organic Chemistry 5 credits per semester.

Aromatic and aliphatic compounds; reaction mechanisms based on electronic theory; preparation of representative compounds and quantitative analysis.

Prerequisite: CHE 102. Three lectures, one conference, and four lab hours per week. Every year. Day.

CHE 303 Inorganic Chemistry 3 credits.

The study of bonding, structure, and reactions of inorganic compounds based on modern physical chemical concepts; coordination compounds and organometallic compounds. Prerequisite: department approval. Three lecture hours per week. Offered as needed. Day.

CHE 304 Biochemistry 4 credits.

Physio-chemical approach; amino acids, proteins, carbohydrates, lipids, enzymes, intermediate metabolisms; modern techniques for isolation, identification, and determination of biochemical significance. Prerequisite or corequisite: CHE 302. Three lectures and three lab hours per week. Every Spring. Day.

CHE 401-402 Physical Chemistry 8 credits. Atomic, molecular, and crystal structure; thermodynamics; solution properties; chemical kinetics; electrochemistry. Prerequisites: MAT 202; CHE 302; and PHY 102. Three lectures and four lab hours per week. Fall 1990, Spring 1991. Day.

CHE 403 Advanced Physical Chemistry 3 credits. An advanced treatment of some of the topics introduced in Chemistry 401 and 402; quantum mechanics and statistical mechanics emphasized; application of these topics to thermodynamics, chemical bonding, and kinetics. Prerequisite: CHE 402. Three lecture hours per week. Offered as needed. Day.

CHE 404 Instrumental Methods of Analysis 4 credits.

Theory and laboratory work in spectroscopy, absorption, and emission; electroanalytical chemistry and chromatography as they apply to analytical chemistry. Prerequisite: department approval. Two lectures and five lab hours per week. Offered as needed. Day.

CHE 405 Advanced Organic Chemistry 3 credits.

Physical organic chemistry; emphasis on structure and reaction mechanisms; free radical chemistry. *Prerequisite: CHE 302. Three lecture hours per week. Offered as needed. Day.*

CHE 501, 502 Chemical Research 1 credit per semester. Independent research under faculty guidance. A required written report of the work may be considered part of the comprehensive examination required of all chemistry majors. Prerequisite: department approval. Every year. Day.

Course

Physics (PHY)

PHY 101-102 General Physics 8 credits.

An elementary consideration of the fundamental laws and concepts of mechanics, heat, sound, light, electricity, and magnetism; experimental study of various topics made in the laboratory. Prerequisite or corequisite: MAT 202. Two lectures, two recitations, and two lab hours per week. Every year. Day.

Courses

Science (SCI)

SCI 201 Fortran 4 credits.

The functions and capabilities of a digital computer and the FORTRAN programming language. Lab fee. Every Spring. Day.

SCI 301, 302 General Earth Science 3 credits per semester. A study of the solar system; basic concepts of climate; study of the structure and composition of the earth. Two lectures and two hours of laboratory and demonstration each week. Every year. Day.

SCI 303 General Earth Science for Teachers 3 credits. A study of the solar system; basic concepts of climate; study of the structure and composition of the earth. Laboratory experiments and demonstrations exemplify techniques suitable for elementary science instruction. This course is for elementary and special education teacher training students. Every Fall. Day.

SCI 501 Oceanography 3 credits.

A study of the sea from biological, chemical, geological, and physical viewpoints; ocean sediments and their origin; composition of sea water, currents, tides, beaches, waves, economic potential of oceans; explorations as an energy sorce. *Every Fall. Evening*.

SCI 601 Environmental Science 3 credits.

The ecology of natural systems; resources and energy; formation and consumption of fossil fuels, nuclear energy, and the environment; pollution; the problems associated with air and water pollution, sold waste, noise, legal and economic verifications of governmental policy towards pollution. Every Spring. Evening.

Communications

Chairman: Edward Setrakian

Professors: Setrakian, Vigliano; Associate Professor: Berleth; Assistant

Professor: Jackson; Adjuncts: Gioseffi, Munroe, Levy.

The program aims to contribute significantly to a sound liberal arts education, offering a range of courses in the communication fields of advertising, film and broadcasting, and speech and theatre. From these three areas of study, students prepare for careers in the creative and business aspects of advertising, public relations, television and film production, business communications and such theatre arts and crafts as producing, playwriting, directing, and acting. The department curriculum also prepares students for graduate work in these communications disciplines. The department offers a major in communications with three possible areas of concentration: advertising, film and broadcasting, and speech and theater.

Major in Communications, Concentration in Advertising

Course Sequence

Credits	Courses
42	Core Curriculum including English 373 (see pg. 31)
12	English 371 or 372, and three from: 384; 385; 386; or 392
3	Psychology 201
3	Sociology 309
6	Two from: any Foreign Language; Mathematics 301; Sociology 406; and Computer Information Systems 101
6	Administration 210 and 315
3	Business 101
6	Marketing 201 and 202
39	Communications 205; 302; 303; 304; 305 or 306; 307; 308; 309; 401; 404; 410; 502; and 503
6	Electives
2	Health Science 100A, Health Science 100B/Physical Education 100A or Physical Education 100 (B-H)

Major in Communications, Concentration in Film and Broadcasting

Course Sequence

Total credits required

128

Credits	Courses
42	Core Curriculum including English 373 (see page 31)
12	English 374; 384; 385; and 386
3	Psychology 201
3	Sociology 309
6	Two from: any Foreign Language; Mathematics 301; Sociology 406; and Computer Information Systems 101
45	Communications 205; 302; 303; 304; 305; 306; 308; 309; 401; 402; 404; 405; 407; 409; and 410
15	Electives
2	Health Science 100A, Health Science 100B/Physical Education 100A or Physical Education 100 (B-H)
128	Total credits required

Major in Communications, Concentration in Speech and Theatre

Course Sequence

Credits	Courses
42	Core curriculum including English 373 (see page 31)
15	English 254; 371; 372; 374; and 391
3	Psychology 201
3	Sociology 309
6	Two from: any Foreign Language; Mathematics 301; Sociology 406; and Computer Information Systems 101
45	Communications 205; 301; 302; 303; 304; 305 or 306; 308; 401; 404; 405; 407; 409; 410; 503; and 505
12	Electives
2	Health Science 100A, Health Science 100B/Physical Education 100A or Physical Education 100 (B-H)
128	Total credits required

Courses

Communications (COM)

COM 203 Fundamentals of Speech 3 credits.

An introduction to phonetics, basic diction, and the practice of extemporaneous speaking, organized according to purpose, such as speaking to persuade, to inform

or to entertain. Students receive an analysis and correction of individual speech problems. Every semester. Day, evening.

COM 205 Voice and Diction 3 credits.

A study of speech production designed to improve voice and diction, and specific speech problems such as proper breathing, voice production, tone, articulation and foreign accents. The International Phonetic Alphabet is studied and utilized in this course. Strongly recommended to correct foreign dialects. Every semester. Day, evening.

COM 301 Oral Interpretation 3 credits.

Presentation and analysis of selections from prose, poetry, and plays. The objective of the course is to broaden oral communication skills by teaching the student to comprehend and interpret these forms of literature for the purpose of effectively communicating them in oral presentations. *Prerequisite: COM 203. Every Fall. Day, evening.*

COM 302 Persuasion 3 credits.

A study of classic and current persuasive theory as applied in advertising, public relations, law, politics, and media campaigns. This course emphasizes analysis of messages, their rhetorical and psychological structure, while also teaching tactics and strategies by applied example. Uses and abuses of persuasive methods are considered, as well as the impact of media developments on modern communications and traditional thought processes. *Prerequisite: COM 203. Every Fall. Day.*

COM 303 Interpersonal Communication 3 credits. Introduction to basic principles of interpersonal communication. The course presents both a theoretical perspective and a practical application of the concepts through student activities and exercises. Areas of investigation include communication theory, communication models, perception, language, communication breakdowns, non-verbal communication, self concept, social roles, listening, and conflict management. Prerequisite: COM 203. Every Spring. Day, evening.

COM 304 Mass Communications 3 credits.

A survey of the electronic and print media in America, including radio, television, cable, commercial filmmaking, newspapers, and magazines; examining their history, economic functions and social roles. Current political controversies regarding the media are examined, as is the impact of social and technological change upon the media. *Every Fall. Day, evening*.

COM 305 History of Film 3 credits.

A survey of major film styles, directors and movements in international cinema from 1890 to the present. The basic techniques of filmmaking are explored, as are fundamental topics in film theory and criticism. Every Fall. Day, evening.

COM 306 Studies in Film 3 credits.

A study of selected topics, filmmakers, and film genres in cinema history, emphasizing the techniques employed which are specific to film and the contribution of film directors, writers, and cinematographers. *Every Spring. Day, evening.*

COM 307 Advertising 3 credits.

A survey of advertising techniques and functions, as viewed from the communications perspective. This course stresses copy writing, media planning, campaign development, and strategy. Strong emphasis is placed on analysis of TV, radio, and print commercials, with additional focus on direct mail, sales promotion, and display advertising. The relationship between budgetary, creative, and planning functions is investigated, as is advertising's impact on popular thought and culture. Prerequisite: COM 203. Every Fall. Day.

COM 308 Television Studio Production 3 credits.

The study of radio and television directing and camera work, floor supervision, audio operation, and control room operation. Students produce several television segments such as news, commercials, and dramatic programs. *Prerequisite: COM 304. Lab fee. Every semester. Day.*

COM 309 Topics in Mass Communication 3 credits.

An advanced course which investigates selected problems and controversies in the contemporary mass media. Topics include censorship and legal issues, the artistic strategies of popular culture forms, and new technologies and opportunities in the electronic media. *Prerequisite: COM 304. Spring 1990. Day, evening.*

COM 401 Basic Film and Video Production 3 credits.

An introduction to Super 8 filmmaking and half-inch portable video production. Students produce several individual projects in both film and video, mastering the skills of scriptwriting, storyboarding, cinematography, editing, and sound mixing. Prerequisite: COM 305 or COM 306. Lab fee. Every semester. Day, evening.

COM 402 Advanced Film and Video Production 3 credits.

An advanced course in film and portable video production, emphasizing the application of more complex production and post-production techniques in both dramatic and documentary projects. Prerequisite: COM 401. Lab fee. Every Spring. Day.

COM 403 Film Criticism 3 credits.

An advanced course in film analysis and writing, examining the relationship between film theory, criticism, and production. Emphasis is placed on close analysis of specific films and examples of film literature. Students write several critical essays on films seen both inside and outside of class. *Prerequisites: COM 305 and COM 306. Fall 1990. Day, evening.*

COM 404 Acting I 3 credits.

An introduction to the basic techniques and theories of acting. Students perform exercises in the fundamentals of voice, movement and concentration. Performance of contemporary dramatic scenes provides students with the opportunity to practice scene and character analysis. *Prerequisite: COM 203. Every Fall. Day, evening.*

COM 405 Film, Television, and Theatre Production 3 credits. A study of the production process. Similarities and differences of production methods are examined and analyzed. Although creative functions of production are explored, the course also emphasizes funding, administration, pre-production, and post-production aspects of film, television, and theatre. The course is conducted through lectures, reading, oral reports, and discussion. It is not in a production workshop format. Spring 1990. Day.

COM 407 Acting II 3 credits.

A study of various acting techniques employed in theater, radio, television, and film. Contemporary scenes are video-taped and played for discussion and analysis. Scenes from classic dramatic literature are also performed, directed and evaluated. Radio acting techniques are also examined. Conducted as a workshop. *Prerequisite: COM 404. Every Spring. Day, evening.*

COM 408 Theater in Performance 3 credits.

Performance style and techniques in modern theater. The class meets alternately at St. Francis College and a specified New York theater or studio. At least five professional productions are seen. The productions represent a variety of performance styles from the convention to the avant garde. In addition to tuition, theater ticket fees will vary with productions. All St. Francis meetings analyze the productions in light of modern trends. Depending upon availability, guest performers, writers and directors associated with the productions are interviewed by the class. Grade is determined by written examination. Fall 1989. Evening.

3 credits. COM 409 Directing

A study of directing in film, radio, television, and theater. Students direct documentaries, commercials, new features, and special film and television features. Prerequisites: COM 308 and COM 401. Fall 1990. Day.

3 credits. Writing for Performance

An introductory survey of the writing techniques and skills for theater, film and television. Students study format, characterization, scene construction, dialogue, narrative, and basic structure of those media. The course includes analysis of plays, screenplays, documentaries, industrials, and commercials. Student scripts are read and analyzed. Prerequisites: ENG 103; 391; and COM 304 or 306. Spring 1990. Day, evening.

Independent Study 3 credits. COM 500

A research project concentrating in one area of communication. A written and an oral report is required at the end of the study. Offered as students qualify. Day, evening.

Documentary Film and Video Workshop An advanced course in the special problems and techniques of documentary film and video production, covering areas of direction, script writing, and pre-production and the specific production and post-production skills used in a documentary. Students in the course collaborate on several production products as well as analyze examples of documentary formats in film and television. Prerequisites: COM 401 and 402. Lab fee. Spring 1991. Day.

Public Relations in Modern Media 3 credits. COM 502

Introduction to the basic skills and creative techniques employed in the development of public relations campaigns. Special emphasis is placed on the creation of messages and the selection of media. Applications include the crafting of press releases; development of video and film releases; speech writing and oral presentations. Examples examined are drawn from government, industry, and politics. The goal of the course is to present the public relations function against a backdrop of social dynamics and essential communication processes contributing to its effectiveness. Prerequisite: COM 203. Every Spring. Day.

Small Group Discussion 3 credits. COM 503

An examination of the dynamics of small group communication theory and process in actual day-to-day small group experiences. The course focuses primarily on problem-solving groups using the case-study approach. Areas of exploration include leadership, participation, roles, norms, conflicts, cohesiveness, consensus, productivity, member satisfaction, group formats, problem-solving agenda systems, and group discussion techniques. Every Fall. Day, evening.

Theater Production Workshop Although open to all students this is a theater production course designed for students in the speech and theater concentration of the communications major. Students produce, direct, and perform in a series of scenes and/or plays that will evolve as a complete production. Although the entire production process is supervised and moderated by the course instructor, the students are responsible for the creative process. When available, professional actors, writers, and directors participate in the workshop. The course meets once weekly. The completed production is open to the public in the last session. Prerequisite: COM 404. Fall 1990. Day.

3-9 credits. Field Experience COM 600

A student with significant accomplishments in the department may be granted permission by the department chairman to engage in field experience. Assignments depend on the availability of suitable programs. The instructor assigned to consult

in the study agrees to guide and evaluate the quality of work and research undertaken. The field experiences must relate to the area of communication in which the student has specialized in the department. The number of credits awarded is determined by the department chairman. The student must maintain a comprehensive daily log of work activities, and must attend a series of seminars during the field experience period. *Prerequisites: permission of department chairman.* Offered as students qualify. Day.



Computer Information Systems

Chairman: Art Farrell

Assistant Professor: Farrell; Adjuncts: Kuc, Luby, Moini.

The department offers an Associate in Science in Electronic Data Processing, a minor in Computer Systems, and an Advanced Business Certificate Program in Electronic Data Processing.

Associate in Science

Electronic Data Processing

The sequences in Electronic Data Processing are designed to broaden the student's understanding of computers while preparing the student for entry-level positions either as a Systems Analyst/Programmer or as an Information Center Specialist. The student can focus either on the skills required to analyze and design and program information systems for various organization levels or the knowledge required to incorporate end-user needs, utilizing centralized and localized computing capabilities and communications.

The Systems Analyst/Programming sequence provides the student with knowledge and classroom experience in the use of computers in business, specifically, analyzing, designing, and programming organizational systems using computers for data processing tasks; assessing system needs and writing system specifications; understanding the relationships between computing and the individual, departmental and enterprise-wide levels of an organization; and project management techniques through a project simulation.

The Information Center Specialist sequence is designed to broaden the student's understanding of computers while preparing the student for an entry-level position as an Information Support Specialist. After completing this track, students should be able to formulate and write specifications for department-level computer systems, including evaluating and select software; design and develop business database applications; work with design teams to integrate a variety of computers and applications into an organization-wide system; and serve as liaison among individual users, systems analysts, mainframe managers and technical personnel.

Associate in Science Course Sequence

Electronic Data Processing

Credits	Courses
30	Core curriculum, including Mathematics 109 and 301 (see pg. 32)
15	Computer Information Systems 101; 111; 201; 202; and 301
6	Accounting 101 and 102
3	Economics 201

3	Business 101
3	Marketing 201 and one of the following sequences:
Systems An 6	alysis/Programming Computer Information Systems 302 and 460 or
Information 6	Center Specialists Computer Information Systems 319 and 419
66	Total credits required

Minor

Computer Systems

The minor in computer systems introduces students to the world of computers. It provides them with the basic skills necessary to function productively in today's computerized office and workplace environments. The focus is on microcomputers and their applications to real-world problems. Students study programming, hardware, systems software, and applications designed for personal productivity, data communications, database management, and other tasks.

Minor Course Sequence

Computer Systems

Credits	Courses
18	Computer Information Systems 101; 111; 201; 301; 460; and 302 or 319
18	Total credits required

Advanced Business Certificate

Electronic Data Processing

The Certificate program is designed to introduce students to the broad concepts of computer usage in the workplace. Students learn a programming language commonly used in many business environments.

To qualify for a Certificate, a minimum of fifteen of the required credits (excluding transfers and experiential credit) must be taken in residence at St. Francis College. Non-matriculated status and possession of a high school diploma or its equivalent are required for entry into the program. St. Francis students matriculated in degree programs may not pursue this program. A minimum grade of C is required in each course. The possession of basic skills in mathematics is required of all certificate program students.

Advanced Business Certificate Course Sequence

Electronic Data Processing

Credits	Courses
3	Accounting 150
3	Business 101
18	Computer Systems Information 101; 111; 201; 202; 301; and 302
24	Total credits required

Courses

Computer Information Systems (CIS)

CIS 050 Introduction To LOTUS 1-2-3 1 credit.

Introduces students to LOTUS 1-2-3 commands, concepts, and techniques through step-by-step development of practical models. Emphasis is on basic concepts of spreadsheets, data base operations, graphic functions and basic macro functions. Additional LOTUS utilities and program "add-ons" such as: HAL, 1-2-3 Forecast, Goal seek, and Harvard Presentation Graphics are also introduced to illustrate the full extent of LOTUS's capabilities. *Prerequisite: CIS 101. Lab fee. Offered as needed.*

CIS 052 LOTUS for Finance 1 credit.

Introduces students to advanced spreadsheet capabilities — model building and the creation of macros which automate and simplify the development and use of custom applications. Emphasis is on multiple worksheet applications, the creation of

applications. Emphasis is on multiple worksheet applications, the creation of "automated" customized menu-driven programs, and real-life managerial problems which cut across disciplines. *Prerequisite: CIS 101. Lab fee. Offered as needed.*

CIS 060 Introduction to dBASE III Plus 1 credit.

Introduces students to the basics of a database management system. Emphasis is on design of database schemes and the creation, editing, and reporting featurs of dBase III Plus utilizing the "ASSISTANCE" command. *Prerequisite: CIS 101. Lab fee. Offered as needed.*

CIS 062 Advanced dBASE III Plus 1 credit.

Emphasis is on the use of database compliers and database programming techniques, i.e., custom report generation, screen formatting and multiple file handling. *Prerequisite: CIS 101. Lab fee. Offered as needed.*

CIS 070 Desktop Publishing l credit

Introduces the student to the techniques and software required to produce type and graphic layouts for brochures, posters, newsletters, and books using a personal computer. Emphasis is on producing camera ready copy, construction of mechanicals, and the production of the finished product. *Prerequisite: CIS 101. Lab fee. Offered as needed.*

CIS 101 Introduction to Computers 3 credits.

An introduction to computers and their applications. Designed to provide computing literacy and a foundation for further study of computers and information systems. Students learn what a computer is, what it can do, and how it is used in today's modern workplace environment. They are provided with an understanding of all major computer devices. Students also learn to utilize "computer application packages" for wordprocessing, spreadsheet analysis and database processing. Other

topics include: microcomputer systems and hardware, computer terminology and DOS. Prerequisites: MAT 050 or exemption from MAT 050. Lab fee. Every semester. Day, evening.

CIS 111 Introduction to Application Programming 3 credits. An introduction to program design and development. Students apply a structure program development process which features a series of steps involving understanding of the problem, formal problem definition, graphic design methodologies (structured charts), and program specification through pseudocoding. Programs are designed and developed without regard to individual language constraints or limitations. Coding, which may be done in any of a number of languages (COBOL, Pascal, BASIC, etc.), does not begin until the program is fully designed and its logic has been tested extensively. This approach lends itself to helping students to build multilingual programming capabilities. Prerequisite: CIS 101. Lab fee. Every Spring. Evening.

CIS 201 COBOL 3 credits.

Programming techniques, knowledge, and skill in COBOL. Topics include: data representation, structure, storage and processing; sequential file processing using disk storage; use of procedural verbs including input-output handling, arithmetic manipulation and decision making; editing and validation of data. Emphasis is placed on programming working with relative, direct, and indexed files. The students are also introduced to interactive programming. *Prerequisite: CIS 111. Lab fee. Every Fall. Evening.*

CIS 202 Advanced COBOL 3 credits.

A second semester of work in COBOL. Emphasis is on the implementation of a business computer application using the full breadth of COBOL. Students code and test a semester project. Project requires the use of multidimensional array/table processing; transaction validation and sorting; non-sequential file creation and updating using both indexed and direct organizations. Advanced COBOL features necessary to complete the project are presented to include: indexing and searching, the SORT feature and use of debugging aids. Topics of emphasis include clear documentation, development of test files/data, stub testing, system testing, interactive program development and continued emphasis on structured programming and design. *Prerequisite: CIS 201. Lab fee. Every Spring. Evening.*

CIS 301 Systems Development Methodologies 3 credits. Traditional analysis, design, and implementation of information systems through data flow analysis and the systems development life cycle approach. The fundamentals of systems analysis and how it is applied to the development of information systems in the business environment. Major topics include: methods of systems investigation, feasibility study, input-output design, system documentation, communication, implementation of new systems, control and security. Also treated is data structures, data definition, normalization of data and the use of Computer Aided Software Engineering software. Prerequisite: CIS 111. Every Fall. Evening.

CIS 302 Systems Development Project 3 credits.

Continuation of CIS 301. Emphasis is on the development of a computer application using either traditional life cycle methodology and/or the latest prototype methodology including Computer Aided Software Engineering tools. Students work in teams to devise a logical and physical design for a new system. Each team analyzes, designs, programs, and writes documentation to implement its project. Prerequisite: CIS 301. Every Spring. Evening.

CIS 319 Information Center Functions 3 credits.

Stresses information center methods for building systems in direct collaboration between users and analysts. An information center is a facility which makes

available the services of qualified professionals, software tools, and associated hardware from which new systems can be assembled and tested by prospective users. Students learn how information center techniques can replace some or all phases of traditional life-cycle development methodologies for appropriate business problems; how to identify which problems are appropriate; and how to select alternate methods within the CIS systems development spectrum. *Prerequisite: CIS 301. Fall 1990. Evening.*

CIS 460 Database Management 3 credits.

Design, structure, and applications of database systems. Deals with problems associated with management of information. The course considers concepts such as logical and physical database organization, data security and database life cycle. Stresses application development through fourth-generation programming techniques. Contents of the course emphasizes basic knowledge in data structures, normalization of data, modeling, and database methods. *Prerequisite: CIS 201. Lab fee. Every Spring. Evening.*

CIS 419 Information Center System Development Project 3 credits. The student designs and implements a system to run on a microcomputer in a database environment. Provides practical experience in the selection, initialization, modification, and implementation of software packages. The student will design (or be assigned) a project involving a database to run on a microcomputer. The challenge lies in designing the schema for organizing and navigating the database, loading the data and generating realistic outputs. Prerequisite: CIS 319. Spring 1991. Evening.



Economics

Chairman: Paddy Quick

Professor Emeritus: Casey; Associate Professor: Quick; Intructor: Marinelli;

Adjuncts: Holt, Mayhew, Weitzman.

Major

Economics

The major in economics provides students with solid training in this most vital aspect of the modern world, and as such it opens the door to a wide range of careers. Economics majors enjoy the benefits of a broad liberal arts education, which is increasingly valued for the flexibility it provides in a rapidly changing environment; in addition, students have many opportunities for more specialized training.

Within the economics curriculum, students will find courses which prepare them for careers in banking, insurance or brokerage firms; alternatively they may choose economics electives which focus on the role of government, or specialize in the study of the international economy. In addition, the large number of unrestricted elective credits (30) enables students to register for minors in one or more disciplines, based on their interests and career plans.

Economics also provides an excellent background for graduate work, not just in economics but also in business, law, and public administration.

Major Course Sequence

Total credits required

Economics

128

Core curriculum including Mathematics 109 and 110 (see page 31) A six-credit sequence in accounting, management, foreign languages, or mathematics Computer Information Systems 101
or mathematics Computer Information Systems 101
- '
History 101 - 1 100 401 1 400
History 101 and 102; or 401 and 402
Mathematics 301
Political Science 204
Economics 201; 202; 306; 400; 406; 411; and 300/400 level electives
Free electives
Health Science 100A, Health Science 100B/Physical Education 100A or Physical Education 100 (B-H)
F

Minor

Economics

A minor in economics provides students with an introduction to the basic principles of the discipline and an opportunity to explore their application to contemporary issues. As such it can provide a valuable supplement to the educational experience of students in both the professional programs and liberal arts.

Minor Course Sequence

Economics

Credits	Courses
Managem	ent majors:
9	Economics 201; 202; and 306
9	Three from: Economics 302; 303; 304; 307; 308; 309; 312; 400; 403; 406; 411; 417; 420
18	Total credits required
Accountin	g majors:
9	Economics 201; 202; and 306
9	Any three Economics courses with the exception of Economics 331/ Finance 301
18	Total credits required
All other	majors:
18	Economics 201; 202; 306; and any three other Economics courses
18	Total credits required

Courses

Economics (ECO)

ECO 201 Principles of Macroeconomics 3 credits. Macroeconomics; the foundation of economic analysis; national income, employment and economic growth; aggregate demand, saving and investment; economic fluctuations; monetary and fiscal policy; the international economy. Every Fall. Day, evening.

ECO 202 Principles of Microeconomics 3 credits.

Microeconomics; markets, the price system, and the allocation of resources; competition, monopoly, monopolistic competition, and oligopoly; government and business; the distribution of income. Every Spring. Day, evening.

ECO 302 Economic Development of the United States 3 credits.

American economic life, growth of business concentration; problems of agriculture; public utility and railroad regulation; labor organization and development; money, banking, and fiscal problems; capital formation and distribution of national income;

the depression and New Deal; the United States in the international economy. Fall 1989. Day.

ECO 303 Economics Issues Today 3 credits.

An examination of significant contemporary economic problems; the application of economic understanding of current issues, domestic and worldwide; typical relevant issues such as consumerism, environmental adjustments, national economic priorities; the monopoly threat, the United States in the world economy, etc. *Every Spring. Day, evening*.

ECO 304 Economics of Less Developed Countries 3 credits. Alternative theories of economic development and the policy alternatives facing less developed countries today, with particular emphasis on the Caribbean economies. Spring 1991. Day.

ECO 306 Money and Banking 3 credits.

Money and credit; commercial banking; central banking; monetary theory and monetary and fiscal policy; other banking and credit institutions. *Prerequisite: ECO 201. Every semester. Day, evening.*

ECO 307 Environmental Economics 3 credits.

An examination of basic ecological principles and economic principles as they relate to the problems of the environment; an analysis of programs of business and government to ameliorate the environmental effects of production and waste disposal to improve the quality of life. *Fall 1989. Day.*

ECO 308 Urban Economics 3 credits.

An examination of the economic foundations of contemporary urban problems, location of central places; the urban hierarchy; the urban economic base, urban land use, maps and patterns; problems of housing, urban renewal, mass transportation, industrial relocation, population shifts, ghetto unemployment, inflation, pollution, and poverty as economic problems requiring economic solutions. Fall 1989, day, evening. Fall 1990, day.

ECO 309 Labor Economics 3 credits.

An examination of labor concepts, markets and problems; manpower economics, human resources, and labor markets; the development of the union movement and its impact on society; modern labor legislation, the development of collective bargaining, and full employment concepts; unemployment, insecurity, and the operations of the labor market; government in labor problems; the theories of wages and unemployment. *Fall 1990. Day, evening.*

ECO 312 Government Finance 3 credits.

Analysis of the role of government in the national economy; consideration is given to the growth of the public sector, the U.S. federal budget, the ordering of our national priorities among various public programs, the public debt and fiscal policy, the U.S. tax structure, personal and corporate income taxation, capital gains taxation and tax reform. *Spring 1990. Day.*

*ECO 331/FIN 301 Corporate Finance (formerly MGT 303) 3 credits. Aspects of financing corporate entities in the functioning of the economy; equity financing, capital structure; bond flotation, mergers and consolidations, holding companies, security underwriting and market rights, warrants, and options. Use of financial ratios, time value of money and other techniques of financial analysis. Prerequisites: MAT 050 or exemption from MAT 050, ACC 101 or 150, and ECO 306. Every semester. Day, evening.

*ECO 332/FIN 302 Managerial Finance (formerly MGT 403) 3 credits. Focuses on the efficient management of the financial resources of the firm. Consideration is given to the time value of money, the statistical analysis of risk, and

the use of financial ratios. Explores financial statement analysis, financial planning, working capital management, short and long term financing, and optimal capital structure. Lease vs. purchase and dividend policies are studied. *Prerequisite: FIN 301 or ECO 331. Every Fall, evening. Every Spring, day.*

*ECO 333/FIN 312 Security Analysis (formerly MGT 408) 3 credits. Quantitative and qualitative methods of analyzing industrial securities, with emphasis on common stock; principles underlying the selection and management of both individual and institutional portfolios; market timing and technical strategies. Prerequisite: FIN 301 or ECO 331. Every Fall, day. Every Spring, evening.

ECO 400 Seminar in Economics 3 credits.

Principles of research; bibliography; the application of statistical methods to a specific problem of individual research; recent developments in applied economics.

Prerequisite: ECO 201; 202; 306 and MAT 301. Every Spring. Day.

ECO 403 International Economics 3 credits.

Principles, practices, and problems of world trade; equilibriating the balance of payments through domestic and exchange rate adjustments; the effect of world trade on national income and output; international trade and domestic employment; regional economic integration; the International Monetary Fund and dollar depreciation; foreign direct investment and multinational corporations; reasons for leaving the gold standard; new problems such as floating exchange rates.

Prerequisite: ECO 201 or 202. Every Fall. Day.

*ECO 404/FIN 420 International Finance (formerly MGT 420) 3 credits.

Factors related to decision making in the area of finance by multinational corporations. Topics include: foreign exchange markets, Eurocurrency markets, foreign exchange risk management, governmental regulations and the multinational corporation. Cases and problems will be presented. *Prerequisite: ECO 332/FIN 302 or ECO 333/FIN 312. Spring 1990, day. Spring 1991, evening.*

ECO 406 Development of Economic Thought 3 credits. A survey of economic thought principally from the seventeenth century to the present day; mercantilism; physiocracy and the emergence of a science of economics; the Classical School; the rise of socialist protest; marginalism and the neo-classical synthesis; Keynes and post-Keynesian economics; monetarism; Prerequisite: ECO

201; 202; and 306. Every Spring. Day.

ECO 411 Concepts in Economic Analysis 3 credits. An analysis of the most important concepts in the representation of the operation of both the aggregate economy and price theory; general economic concepts; concepts concerned with the macroeconomic framework behavior and policy; concepts involved with market types, value, distribution, employment, cost-benefit analysis, and economic inequality. Prerequisite: ECO 201; 202; and 306. Every Fall. Day.

ECO 417 Contemporary Economic Systems (formerly ECO 317) 3 credits.

An examination of major economic systems in the contemporary world; the system of capitalism and the American form; the command economy of the Soviet Union; the mixed economies of Western Europe and Japan; the market socialism of Yugoslavia; the role of economic planning in various systems; evaluation of the performances of economic systems. *Prerequisites: ECO 201 or 202. Spring 1991. Day.*

ECO 420 Economics of Regulation (formerly ECO 320) 3 credits. Critical examination of economic arguments for and against anti-trust and other types of governmental regulation of business conduct. *Prerequisites: ECO 202. Spring 1990. Day.*

*ECO 433/FIN 412 Portfolio Management (formerly MGT 412) 3 credits.

The construction and analysis of both individual and institutional investment portfolios; portfolio objectives, strategies and constraints; economic and non-economic variables impacting portfolios; performance measurement. *Prerequisite: ECO 332/FIN 302 or ECO 333//FIN 312. Fall 1989, day. Fall 1990, evening.*

*ECO 434/FIN 422 Financial Institutions Management (formerly MGT 422) 3 credits.

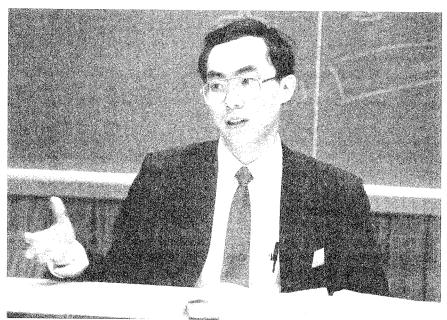
Analysis of the structure of corporations providing financial services. Course examines institutions such as commercial banks, security brokers and life insurance companies. Management problems unique to such firms are considered and performances are evaluated. Areas considered include: management of assets and liabilities, control of financial operations, impact of government regulations. Prerequisite: ECO 332/FIN 302 or ECO 333/FIN 312. Spring 1990, day. Spring 1991, evening.

ECO 500 Independent Studies 3 credits.

Individual research and study with the approval of the department of economics. Offered every semester as students qualify. Day.

*The following restrictions apply to the use of these cross-listed courses for the fulfillment of College or departmental requirements:

- 1. The courses may not be used to satisfy requirements for liberal arts electives in the core curriculum or departmental requirements.
- 2. The courses may not be used by accounting and management majors to satisfy their departments' requirements for elective credits in economics.
- Management majors may not use these courses to satisfy the requirements for a minor in economics.
- Accounting majors may not use ECO 331/FIN 301 Corporate Finance to satisfy the requirements for a minor in economics but may use the other cross-listed sources.



Education

Chairman: Anthony J. Bonanno

Professor: Healy; Associate Professor: Bonanno; Instructors: Hume, Meling;

Adjuncts; Casey, Moore.

The Education Department offers courses required for teacher certification by New York State and the Board of Education and the City of New York. Students are prepared to meet the Certificate of Qualification requirements for New York State Provisional Certification Elementary Education (N-6); Secondary Education (7-12) with a major in accounting and business practice, biology, English, mathematics, or social studies; Physical Education (K-12); or Special Education.

Students interested in teaching should consult with the chairman of the Education Department during the freshman year in order to discuss professional and subject requirements. Prior to being accepted into the Teacher Training Program, students must submit the results of a speech test to the chairman of the Education Department. Students entering the Teacher Training Program may not be on probation, must maintain a 2.5 overall index, and a 3.00 index in their major subject field and professional education studies. Students are urged to observe the program requirements in their chosen field and are held responsible for choice and successful completion of the programs as outlined for them.

All programs for students in teacher education must be approved by the chairman of the Education Department. The chairman is the official advisor for the department. Further guidance may be obtained from the members of the Education Department. Students must take the minimum number of semester hours in professional education, as indicated in each particular program.

Students are eligible for license examinations of the Board of Education of the City of New York. This license is recognized by the New York State Department of Education as sufficient for eligibility to teach in all school districts of New York State, except Buffalo.

The Education Department recommends those students who successfully complete the approved program in Competency-Based Teacher Preparation for certification to teach in elementary or secondary schools of New York State. In making this recommendation, the Education Department requires a balance of preparation in three areas of study: (1) general-liberal education; (2) academic or subject areas; (3) professional studies in education consisting of theory and field-based experiences (observation, peer teaching, micro teaching, tutoring, and supervised student teaching).

Prior to completing the Teacher Training Program, students must take the Core Battery of the National Teacher Examination to complete New York State Certification requirements.

Students completing one of the Competency-Based Teacher Preparation Programs will be eligible to complete the fifth year requirement of permanent certification at another institution on a full- or part-time basis.

A competent teacher is well trained in liberal arts, subject specialty and pedagogic behavior. The Competency-Based Program for teacher training students at St. Francis College is a threefold development of the individual person, as outlined below:

Liberal Arts Foundation Elementary and Secondary Programs

- Societal background: fine arts, history, English, speech, sociology, Spanish, and health studies
- 2. Scientific background: mathematics and science studies
- 3. Philosophic background: logic, theory of knowledge, and moral philosophy

Subject Specialty Foundation

- 1. Elementary program: English, mathematics, and social studies
- 2. Secondary program: accounting and business practice, biology, mathematics, English, and social studies
- 3. Physical Education (K-12)
- 4. Special Education program: English, mathematics, and social studies

Pedagogic Behavior

- 1. Theory
 - Elementary program: history and philosophy of education, curriculum, child psychology, special methods, public relations, and tests and measurements
 - Secondary program: history and philosophy of education, principles and problems of secondary education, special methods, educational psychology, and tests and measurements
 - c. Physical Education: history and philosophy of education, educational psychology, tests and measurements, special methods
 - d. Special Education program: history and philosophy of special education, psychology of the exceptional child, health for the special person, movement experience and games of low organization in special education, movement perspectives for exceptional children, special methods of teaching arts and crafts to special children, tests and measurements in special education
- 2. Field experience: observation, peer teaching, micro teaching, peer testing, micro testing, tutoring
- 3. Internship: student teaching

The courses in the Education Department include subject theory and field-centered experience in observation, peer teaching/micro teaching, or tutoring to demonstrate competency attainment. A performance index of 3.25 is required to demonstrate competency attainment in the field-centered experiences.

Programs

Education

Certification in Elementary Education

B.S. in English or Social Studies, with Elementary School Teacher Training Program (N-6 NY State Provisional Certification)

104 Education

B.S. in Mathematics with Elementary School Teacher Training Program (N-6 NY State Provisional Certification)

Certification in Secondary Education

B.A. in English or Social Studies with Secondary School Teacher Training Program (7-12 NY State Provisional Certification)

B.S. in Accounting and Business Practice, Biology and Mathematics with Secondary School Teacher Training Program (7-12 NY State Provisional Certification)

Certification in Physical Education (K-12)

B.S. in Physical Education Teacher Training Program (K-12 NY State Provisional Certification)

Certification in Special Education

B.A. in English or Social Studies with Special Education Teacher Training Program (N-6 NY State Provisional Certification)

B.S. in Mathematics with Special Education Teacher Training Program (N-6 NY State Provisional Certification)

Elementary School Teacher Training Curriculum

English Major

Course Sequence

Credits	Courses
42	Core curriculum including Mathematics 103; 104 (see pg. 31)
39	Education 201; 202; 312; 402; 404; 411A; 431 or 411E; 411F; 411G; 411H; 411J; 411K; and 434
27	English 252; 253; 254; 261; 262; 371 or 372 or 373 or 374; 381 or 382 or 383 or 384 or 391 or 392 and one course from 450A, 450B, 450C or 450D; 499
3 .	Psychology 203
3	Science 301; or 302; or 303
3	Biology 102
2	Health Science 100A; Health Science 100B/ Physical Education 100A; or Physical Education 100 (B-H)
9	Free electives
128	Total credits required

Mathematics Major

Course Sequence

Credits	Courses
44	Core curriculum including Physics 101-102 (see pg. 31)
39	Education 201; 202; 312; 402; 404; 411A; 411E or 431; 411F; 411G; 411H; 411I; 411J; 411K; and 434
32	Mathematics 202; 203; 301; 304; 305; 401; 415; 300/400 level electives
3	Psychology 203
3	Science 301; or 302; or 303
3	Biology 102
2	Health Science 100A, Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
2	Free electives
128	Total credits required

Social Studies Major

Course Sequence

Credits	Courses
42	Core curriculum including Mathematics 103 and 104 (see pg. 31)
6	Economics 201-202
39	Education 201; 202; 312; 402; 404; 411A; 411G; 411H; 411I; 411E or 431; 411F; 411J; 411K; and 434
18	History 101; 201; 307 or 311; 401; 402; and 303 or 406
6	Political Science 204; and any 300/400 level course
3	Psychology 203
3	Science 301; or 302; or 303
3	Biology 102
3	Sociology 301
2	Health Science 100A, Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
_3	Trob idectives such that the property
128	Total credits required

Secondary School Teacher Training Curriculum

Accounting and Business Practice Major

Course Sequence

106 Education

Credits	Courses
42	Core curriculum including Mathematics 109 and 110 (see pg. 31)
21	Accounting 101; 102; 201; 202; 303; 405; and 300/400 level electives
6	Business Law 201 and 202
12	Economics 201; 202; 306; and 311
23	Education 201; 301; 302; 401J; 401K; 402; and 404
3	History 401
3	Business 101
3	Computer Information Systems 101
3	Mathematics 301
2	Health Science 100A, Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
10	Free electives
128	Total credits required

Biology Major

Course Sequence

Credits	Courses
43	Core curriculum including Mathematics 202 and 203 (see pg. 31)
8	Chemistry 101-102
21	Education 201; 301; 302; 401H; 402; and 404
6	Foreign Language
8	Physics 101-102
6	Science 301-302
24	Biology 103-104; 109-110; 303; and 200/300/400 level electives
2	Health Science 100A, Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
10	Free electives
128	Total credits required

English Major

Course Sequence

Credits	Courses
42	Core curriculum (see page 31)
24	Education 201; 301; 302; 401C; 401G; 402; and 404

198	Total credits required
6	Free electives
2	Health Science 100A, Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
30	English 252; 253; 254; 261; 262; 371 or 372 or 373 or 374; 499; two courses from 381, 382, 383, 384, 391, 392; and one course from 450A, 450B, 450C, 450D
0.0	
3	Communications 301
6	Mathematics or Science*
3	History 401
12	Foreign Language

Total credits required

Mathematics Major

Course Sequence

Credits	Courses
48	Core curriculum including Biology 103-104 and 109-110 or Chemistry 101-102 (see pg. 31)
21	Education 201; 301; 302; 401E; 402; and 404
6	Foreign Language
8	Physics 101-102
37	Mathematics 202; 203; 304; 305; 309; 401; 415; and 300/400 level electives
4	Science 201
2	Health Science 100A, Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
6	Free electives
128	Total credits required

Social Studies Major

Course Sequence

Credits	Courses
42	Core curriculum (see pg. 31)
6	Economics 201 and 202
21	Education 201; 301; 302; 401F; 402; and 404
12	Foreign Language

^{*}If mathematics is used to satisfy the core curriculum requirement, then science must be selected or vice versa.

108	D8 Education	
24	History 101; 102; 305; 306; 307; 311; 401; and 303 or 406	
6	Mathematics or Science*	
6	Political Science 204 and 300/400 level electives	
3	Sociology 300/400 electives	
2	Health Science 100A, Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)	
6	Free electives	
128	Total credits required	

Physical Education (K-12) Teacher Training Curriculum

Physical Education Major

Course Sequence

Credits	Courses
44	Core curriculum including Biology 003-004 (see pg. 31)
8	Chemistry 003-004 or 101-102*
18	Education 201; 302; 402; 404; and 501B
3	Health Science elective
6	Psychology 201 and 203
38	Physical Education (four skills from I to X); 103; 105; 205; 208; 209;211; 301; 302; 304; 305; 308; 402; 403; and 450
2	Health Science 100A, Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
9	Free electives

128 Total credits required

Special Education Teacher Training Curriculum

English Major

Course Sequence

^{*}If mathematics is used to satisfy the core curriculum requirement, then science must be selected or vice versa.

^{*}Students planning to pursue work in physical therapy, physiology of exercise, or other science-related graduate programs are recommended to take Chemistry 101-102 (see the chairman).

Credits	Courses
42	Core curriculum including Science (Biology 005-006) (see pg. 31)
6	Education 411A and 411S
30	English 252; 253; 254; 261; 262; 371 or 372 or 373 or 374; 499; two courses from 381, 382, 383, 384, 391, 392; and one coursefrom 450A, 450B, 450C, 450D
6	Mathematics
3	Psychology 203
3	Science 303
6	Mathematics
30	Special Education 101; 201; 202; 301; 302; 401; 402; 403; and 404
2	Health Science 100A; Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
6	Liberal arts electives
128	Total credits required

Mathematics Major

Course Sequence

Credits	Courses
42	Core curriculum including Science (Biology 005-006) (see pg. 31)
6	Education 411A and 411S
31	Mathematics 202; 203; 301; 304; 305; 401; 415; and 300/400 electives
8	Physics 101-102
30	Special Education 101; 201; 202; 301; 302; 401; 402; 403; and 404
3	Psychology 203
3	Science 303
2	Health Science 100A, Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
3	Liberal arts electives
128	Total credits required

Social Studies Major

Course Sequence

Credits	Courses
42	Core curriculum including Science (Biology 005-006) (see pg. 31)
6	Education 411A and 411S

110	Education
6	Mathematics
18	History 101; 102; 307 or 311; 401; 402; and 406 or 303
6	Economics 201 and 202
3	Political Science 204
3	Sociology 301
30	Special Education 101; 201; 202; 301; 302; 401; 402; 403; and 404
3	Psychology 203
3	Science 303
2	Health Science 100A, Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
6	Liberal arts electives
128	Total credits required

Minors

Physical Education

Current legislative demands for physical education for the handicapped, the nation's concern to improve physical fitness levels of all individuals, and the need for athletic coaches in educational, as well as community settings, have created many job opportunities. St. Francis College has initiated curricula to prepare students to occupy these physical education related positions. Through course work and field experience in a selected area within physical education, students will be provided with the knowledge and skills required to function as professionals. Selecting one of the following minors in physical education may supplement studies in business, industry, the arts, or education.

Physical Education for the Handicapped

Course	Course Sequence	
Credits	Courses	
8	Prerequisite: Biology 003-004	
11	Physical Education 208; 302; 308; and 450	
3	Special Education 201	
22	Total credits required	
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Exercise and Fitness Specialist

Course Seguence

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Credits	Courses
12	Prerequisites: Biology 003-004, Chemistry 003
10	Physical Education 208; 305; 450 and one course selection from:

22

Total credits required

Athletic Coaching

Course Sequence

Credits	Courses
12	Prerequisites: Biology 003-004, Chemistry 003
10	Physical Education 304; 305; 316; and 403
22	Total credits required

Courses

Elementary Teacher Training Program (ED)

ED 101 Seminar Preparation of Life Experience Portfolio 1 credit. Required of students preparing to apply for life experience credits. An explanation of the procedures and instruction in the preparation of the portfolio. Prerequisite: matriculation in a Bachelor's degree program. Every semester. Evening.

ED 110 Seminar for Academic Success: Freshmen Orientation l credit. Required of all traditional incoming freshmen before the beginning of sophomore year.

ED 201 Foundations of Education: History and Philosophy 3 credits. The development of the various philosophies of education through a survey of ancient, medieval, and modern education; the ends and means in education; educational theory in the United States today. On Campus: 30 hrs. Field-centered experience: observation—15 hrs. Every semester. Day.

ED 202 Introduction to the Education of Children and Youth 3 credits. A study of individual differences among children; educationally disadvantaged children, elementary and secondary classroom techniques; basic school problems. On Campus: 30 hrs. Field-centered experience: observation—15 hrs. Every Fall. Day.

ED 312 Foundations of Curriculum in Elementary Education 3 credits.

Basic conceptual treatment of child growth and development; curriculum and methods as they apply to the elementary school and early education. On Campus: 45 hrs. Field-centered experience: peer teaching. Every Spring. Day.

ED 402 Tests and Measurements 3 credits.

Designed for future teachers. Principles of basic statistics related to collecting, treating and interpreting data; the use of standardized tests (intelligence, aptitude, achievement, etc.) in a school situation; the construction and the improvement of classroom tests, and the use of test results by the administrator, teacher, and guidance counselor. On Campus: 45 hrs. Field-centered experience: peer testing/micro

testing. Every semester. Day.

ED 404 Observation and Supervised Practice Teaching 6 credits.

During senior year, students in the teacher training program will spend a minimum of one term of full time, daily supervised instructional experience in an approved

secondary or elementary school. Students will complete a log of teaching experiences. Aside from the normal school experience, the student will be expected to attend individual and group conferences with the college supervisor and cooperating teacher. Prerequisite: approval of department chairman and completion of all other course work. On Campus: Seminar—20 hrs. Internship experience: Full-time teaching—410 hrs. Every semester. Day.

ED 411 Special Methods in Elementary School Teaching

General prerequisites (except for ED 411S): ED 201; 202; 312; and 402. Particular prerequisites: see individual course descriptions below.

ED 411A Reading 3 credits.

The basic principles of teaching reading; utilization of formal and informal diagnostic tools to appraise reading status; techniques of grouping for instruction; teaching specific reading skills; evaluating reading progress and appropriateness of reading programs; individualizing reading instruction. General prerequisites for Special Education students are ED 101; 201; and 202. On campus: 30 hrs. Field-centered experience: tutoring, 15 hrs. Every Fall. Evening.

ED 411E Individualized Reading 3 credits.

Each student will be required to collect, construct, and evaluate materials for use in a classroom situation, a small group situation, and individual instruction.

Prerequisite: Education 411A. On campus: 30 hrs. Field-centeredexperience: Tutoring, 15 hrs. Every Spring. Evening.

ED 411F Language Arts 2 credits.

The principles, methods, and materials employed in the teaching of listening and speaking skills, composition skills, and writing skills in the elementary school. Prerequisite: ENG 103 and 251. On campus: 20 hrs. Field-centeredexperience: peer/micro teaching, 10 hrs. Every Fall. Day.

ED 411G Mathematics 2 credits.

The principles and practices employed in teaching mathematics in elementary schools. Prerequisite: MAT 103 and 104. On campus: 20 hrs. Field-centered experience: peer/micro teaching, 10 hrs. Every Spring. Day.

ED 411H Literature 2 credits.

Children's literature and the techniques used in presenting it to children at different age levels; the use of audiovisual aids; illustrations of children's books. On campus: 20 hrs. Field-centered experience, 10 hrs. Every Fall. Day.

ED 4111 Social Studies 2 credits.

The instructional resources, methods, and materials of a sound social studies presentation in elementary and early adolescent classes; the history, culture, and sociology of various minority groups. Prerequisite: HIS 201 and SOC 203. On campus: 20 hrs. Field-centered experience: peer/micro teaching, 10 hrs. Every Spring. Day.

ED 411J Science 2 credits.

Principles and techniques employed in teaching science in the elementary schools. Prerequisite: SCI 303 and BIO 102. On campus: 20 hrs. Field-centered experience: peer/micro teaching, 10 hrs. Every Fall. Day.

ED 411K Music and Art 2 credits.

Principles and techniques employed in teaching music and art in the elementary schools. Prerequisite: FA 401-402. On campus: 30 hrs. Field-centered experience: museum trips. Every Spring. Day.

ED 411S General Methods for the Elementary School Curriculum 3 credits.

Methods and problems in the elementary school and their relationship to basic principles; the principles and practices employed in teaching in the elementary school, including methods in language arts; literature, mathematics; science and social studies; consideration of such topics as classroom management, lesson plans, methods of teaching; evaluation, discipline, and visual aids. Prerequisite: MAT 103-104, HIS 201, SOC 203, BIO 005-006, English core. On campus: 45 hrs. Field-centered experience: peer teaching/tutoring, 15 hrs. Every Fall for Special Education students only. Day.

ED 431 Diagnosis and Treatment of Reading Disabilities 3 credits. A study of formal and informal methods of diagnosis, special in-classroom procedures; analysis of the services rendered by clinics and other professional groups. Prerequisite: ED 411A or 401G. On campus: 30 hrs. Field-centered experience: tutoring, 15 hrs. Every Spring. Evening.

ED 434 School and Community 3 credits.

The school's role in relation to the community; "Inner City" education; the use of community resources in establishing good human relations and adjusting to the cultural and socio-economic changes of our time. On campus: 35 hrs. Field-centered experience: community school board meetings, 10 hrs. Every Fall. Day.

Courses

Secondary School Teacher Training Program (ED)

ED 201 Foundations of Education: History and Philosophy 3 credits. The development of the various philosophies of education through a survey of ancient, medieval and modern education; the ends and means in education; educational theory in the United States today. On campus: 30 hrs. Field-centered experience: observation, 15 hrs. Every semester. Day.

ED 301 Methods, Problems, and Principles in Secondary Education 3 credits.

Methods and problems in junior and senior high schools and their relationship to basic principles; consideration of such topics as problems of transition in junior high school, secondary school organization, classroom management, lesson plans, problem-project method, evaluation, discipline, visual aids. On campus: 45 hrs. Field-centered experience: peer teaching. Every Fall. Day.

ED 302 Educational Psychology 3 credits.

The application of educational psychology to the art of teaching and the science of learning with emphasis on growth and development, environmental influences, understanding of the individual pupils, nature and conditions of learning, transfer of past experiences, guiding pupils for personal adjustment and mental health. On campus: 45 hrs. Field-centered experience: tutoring, 15 hrs. Every Spring. Day.

ED 401 Special Methods in Secondary School Teaching

Prerequisites: ED 301 and 302. On campus: 30 hrs. Field-centered experience: peer/micro teaching, 15 hrs.

ED 401C English 3 credits.

Teaching various forms of writing, literature, and spelling at the secondary level; the general aims and purpose of these forms; audio-visual aids, projects, library materials and bibliographical references for the adolescent; the impact of mass media of communication on the secondary school curriculum. *Every Spring. Day.*

ED 401D Modern Languages 3 credits.

Aims, methods, and objectives of present-day modern language teaching in high schools and junior high schools; practical exercises; visits to local schools. *Every Spring. Day.*

ED 401E Mathematics 3 credits.

The teaching of mathematics in grades 7 through 12; procedures, techniques, and materials; opportunities for student presentations and discussion of strengths and weaknesses. *Every Spring. Day.*

ED 401F Social Studies 3 credits.

Specific methods and techniques useful to the social studies teacher on the secondary level; teaching aids, use of library, current events, and bibliographical references; subject materials for the exceptional, disadvantaged, and average student; the syllabi and aims in the various subject areas; model lessons. *Every Spring. Day.*

ED 401G Reading 3 credits.

Special methods, aims, and objectives in teaching reading on the secondary level; remedial and developmental techniques required for teachers on this level; use of developmental reading laboratory and audio-visual aids; individualized reading instruction. *Every Spring. Day.*

ED 401H Science 3 credits.

A study of basic principles, classroom practices and curriculum trends in secondary school science courses; experiences helpful to the prospective teacher in evaluating, selecting, preparing materials for teaching science; visual aids, laboratory methods for individual and group experiments, and the organization of materials for classroom use. *Every Spring. Day.*

ED 4011 Religion 3 credits.

Classroom management; general methods, positive approach to God; methods of teaching Sacred Scripture; adolescent psychology; group guidance; techniques of oral presentation. Offered as students qualify. Day.

ED 401J Accounting 3 credits.

The teaching of accounting by modern methods in accordance with present-day concepts in business education; general principles and techniques of teaching vocational business subjects, skills development and the correct methods and techniques that should be used in accounting procedures. *Prerequisite: ACC 101-102. Every Spring. Day.*

ED 401K Office Practice 2 credits.

The techniques and principles that are a necessary adjunct to the teaching of office practice and other business subjects; various plans of organization, methods and procedures of filing, indexing, systems, and controls, and the proper use of general office equipment. Prerequisite: permission of the instructor or the chairman of the department. Every Spring. Day.

F.D 402 Tests and Measurements 3 credits.

Designed for future teachers. Course work includes: principles of basic statistics related to collecting, treating, and interpreting data; the use of standardized tests (intelligence, aptitude, achievement, etc.) in a school situation; the construction and the improvement of classroom tests, and the use of test results by the administrator, teacher, and guidance counselor. On campus: 45 hrs. Field-centered experience: peer testing/micro testing. Every semester. Day.

ED 404 Observation and Supervised Practice Teaching 6 credits.

During senior year students in the teacher training program will have a minimum of one term of full-time, daily supervised instructional experience in an approved

secondary school. Students will complete a log of teaching experiences. Aside from the normal school experience, the student will be expected to attend individual and group conferences with the college supervisor and cooperating teacher. Prerequisite: approval of department chairman and completion of all other course work. On campus: seminar, 20 hrs. Internship experience: full-time teaching, 410 hrs. Every semester. Day.

ED 500 Independent Study 3 credits.

Independent study, field work, and readings in an area of specialization in education. Conferences, reports, and term paper. Prerequisite: senior standing; 3.0 major index; 2.8 overall index; departmental approval. Every semester. Day.

ED 501B Special Methods of Teaching Physical Education in Schools 3 credits.

Methods of teaching physical education in elementary and secondary schools; planned observation at both levels; preparation of lesson plans, selection and use of equipment, and instructional aids stressed. *Prerequisite: nine credits in education. Every Fall. Day.*

Courses

Physical Education Teacher Training Program (PE)

PE I Skills Activities 2 credits.

Theory, instruction, and practice in the fundamentals of team sports and games; techniques in soccer and volleyball including coaching techniques. *Four hours. Spring 1990. Day.*

PE II Skills Activities 2 credits.

Theory, instruction, and practice in the fundamentals of team sports and games; techniques in basketball, softball, and baseball including coaching methods. Four hours. Fall 1990. Day.

PE III Skills Activities 2 credits.

Theory and instruction in individual and dual sports techniques in badminton, paddleball, racquetball, and tennis including coaching methods. Four hours. Fall 1989. Day.

PE VI Skills Activities 2 credits.

Theory, instruction, and practice in the fundamentals of team sports and games; techniques in field hockey and lacrosse. Four hours. Fall 1991. Day.

PE VII Skills Activities 2 credits.

Theory, instruction, and practice in the fundamentals of team sports and games; techniques in football and rugby. Four hours. Fall 1989. Day.

PE VIII Skills Activities 2 credits.

Theory, instruction, and practice in the fundamentals of individual and dual sports; techniques in track, field, and golf. Four hours. Spring 1991. Day.

PE IX Skills Activities 2 credits.

Theory, instruction, and practice in fitness activities; techniques in aerobic training, weight training, and exercise program development. Four hours. Spring 1990. Day.

PE X Advanced Skills 2 credits.

Theory, instruction, and practice in officiating at team sports and individual and dual sports; techniques for indoor and outdoor sports; preparation towards local, state and national official ratings. *Four hours. Spring 1990. Day.*

PE 100 Physical Activities and Sports 2 credits.

requirement, required of all students for graduation. These courses are offered on a grade basis.

PE 100A/HS 100B Exercise, Fitness, and Weight Control

An interdisciplinary (Health Science and Physical Education) approach to the relationship of exercise to health, including weight control, stress reduction, and cardiovascular fitness. The course will include classroom work as well as participation in fitness assessment and activities. Every semester. Day, evening.

PE 100C Racquet Sports

Instruction in skills, strategies, and rules of paddleball, tennis, and badminton. Every Spring. Day.

PE 100D Team Sports: Football/Hockey

Instruction in skills, strategies and rules of touch/flag football and floor hockey. Not offered in 1989-91.

PE 100E Team Sports: Soccer/Volleyball

Instruction in skills, strategies, and rules of soccer and volleyball. Every Spring. Day.

PE 100F Beginning Swimming

Basic instruction in swimming for non-swimmers. Every Fall. Day.

PE 100G Advanced Lifesaving Course

Students will work toward American Red Cross Advanced Lifesaving Certificate. Prerequisite: intermediate swimming ability. Offered as students qualify. Day.

PE 100H Water Safety Instructor Course

Students will work toward American Red Cross Water Safety Instructor Certificate. Prerequisite: advanced swimming ability. Offered as students qualify. Day.

PE 100I Unarmed Self-defense: Tae Kwan Do, Karate, and Self-defense Instruction in the skill of unarmed self-defense. Every Fall. Day.

PE 103 Elementary Aquatics 1 credit.

Fundamentals and development of forms and style in stroke mechanics. Students must demonstrate basic swimming proficiency. *Physical education majors who hold current WSI Certification are exempt. Two hours. Fall 1989. Day.*

PE 105 Folk, Square, and Social Dance 1 credit.

Instruction and practice in the basic steps and techniques of folk, square, and social dance. Two hours. Every Fall. Day.

PE 106 Modern Dance 1 credit.

An introduction to the fundamental techniques of modern dance. Two hours. Offered as students qualify. Day.

PE 205 Elementary Gymnastics 1 credit.

Tumbling and apparatus development of basic skills; floor and mat stunts. Two hours. Fall 1989. Day.

PE 208 Kinesiology 3 credits.

An overview of the skeletal, muscular, and nervous systems in producing a purposeful human movement. Topics include movement analysis, techniques with emphasis on noncinematographical analysis. *Prerequisites: BIO 003-004. Three hours. Fall 1990. Day.*

PE 209 Biomechanics 2 credits.

The application of kinesiological concepts to the mechanical analysis of movement and motor skills. Topics include force, velocity, momentum, angular motion, and cinematographical analysis. *Prerequisite: PE 208. Two hours. Spring 1991. Day.*

PE 211 Movement Education and Physical Education in Elementary Schools 2 credits.

Techniques and methods in conducting elementary games; theory and practice in

rhythmic activities and movement education applicable to different age levels. Prerequisite: Any skills activities or departmental approval. Four hours. Spring 1990. Not open to Special Ed. Students. Day.

PE 301 History and Principles of Physical Education 2 credits.

Orientation to the history and principles of physical education; current trends and problems in physical education analyzed and evaluated. Two hours. Spring 1990. Day.

PE 302 Adapted Physical Education 3 credits.

Development of exercise programs and of modified athletic activities to meet the specific needs of the handicapped. Practical experiences are included. Prerequisite: PE 208. Three hours. Spring 1991. Not open to Special Ed. Students. Day.

PE 304 Organization and Administration of Physical Education 2 credits.

Emphasis on organization and administrative policies and procedures; purchase and care of equipment and supplies; public and professional relations; structural and functional aspects of a school program in physical education, athletics, and intramurals. *Prerequisite: any skills activities or departmental approval. Two hours. Fall 1990. Day.*

PE 305 Physiology of Exercise 3 credits.

An overview of the physiological effects of exercise on the human body. Topics include systematic response to the demands of exercise, testing and training procedures, and laboratory assessment of physiological function and status. *Prerequisite: BIO 004 or 104; CHE 003. Three hours. Spring 1991. Day.*

PE 308 Motor Learning 3 credits.

An introduction to the concepts, principles, and theories of movement and motor learning. *Three hours. Fall 1990. Day.*

PE 309/EDS 301 Movement Experience and Games of Low Organization in Special Education 3 credits.

Techniques and methods in conducting games of low organization; theory and practice in rhythmic activities and movement education for the exceptional child. On campus: 45 hrs. Field-centered experience: peer teaching. Spring 1990. Not open to PE students. Day.

PE 310/EDS 302 Movement Perspectives for Special Children 3 credits.

Knowledge and application, with specific reference to the special child, of professional and theoretical literature focusing on selected concepts from motor learning, kinesiology and psychology. Three hours. Not open to physical education majors. Offered as students qualify. Day.

PE 316 Psychology of Sport 2 credits.

An introduction to the psychological concepts of athletes; the social psychology of sports and effective coaching techniques of athletic skills. Orientation of personality tests employed in the field; the effects of behavior on athletic performance. *Spring* 1990. Day.

PE 402 Evaluation of Physical Education 2 credits. Methods and procedures used in the construction, administration, and interpretation of standardized testing in physical education; introduction to elementary statistical methods. Prerequisite: ED 402 and any skills activity. Two hours. Fall 1989. Day.

PE 403 Care and Prevention of Athletic Injuries 3 credits.

Study of the most common accidents and injuries in physical education; rehabilitation equipment; massage and training room procedures; current trends in sports medicine; first aid leading to American Red Cross Certification in standard

first aid and personal safety. Prerequisite or corequisite: PE 208 or departmental approval. Three hours. Fall 1989. Day.

PE 450 Field Experience 2 credits.

Observation and supervised experience in an area of student's expressed professional interest. Prerequisite: Junior/senior class standing; departmental approval. Six hours. Every semester. Day.

PE 500 Independent Study 2 credits.

Independent study and readings in an area of specialization in the discipline of physical education. Conferences, report or term paper. Prerequisite: senior class standing; 3.0 major index; 2.8 overall index; departmental approval. Every semester. Day.

Courses

Special Education Teacher Training Program (EDS)

EDS 101 Foundations of Special Education (History and Philosophy) 3 credits.

A survey of the historical development of the care of the special person from early man to the present. Emphasis is on the humanistic, metaphysical, epistemological, ethical, teleological, and etiological principles necessary and supportive to an understanding of the special person. On campus: 30 hours. Field-centered experience: observation, 14 hrs. Every semester. Day.

EDS 201/PSY 333 Psychology of the Exceptional Child 3 credits. Considers the physical, intellectual, emotional, and social characteristics of the atypical child. It emphasizes the discrepancies in growth and development, learning disabilities, the behavioral and societal problems of the gifted and handicapped, and the implications for education and remediation. On campus: 30 hrs. Field-centered experience: observation, 15 hrs. Offered as needed. Day.

EDS 202/HIS 407 Health Education for the Exceptional Child (formerly HS 505) 3 credits.

An exploration of the daily living problems of the special person with respect to self-realization and personal awareness. Emphasis deals with the health responsibilities of the individual as well as the community, parent and the teacher. On campus: 30 hrs. Field-centered experience: classroom aide, 15 hrs. Every Spring semester as students qualify. Day.

EDS 301/PE 309 Movement Experience and Games of Low Organization in Special Education 3 credits.

Techniques and methods in conducting games of low organization; theory and practice in rhythmic activities and movement education for the exceptional child. On campus: 45 hrs. Field-centered experience: peer teaching. Every Spring. Day.

EDS 302/PE 310 Movement Perspectives for Special Children 3 credits.

Knowledge and application, with specific references to the special child, of professional and theoretical literature focusing on selected concepts from motor learning, kinesiology, and psychology. Prerequisite: two years in special education program and Biology 005-006. On campus: 30 hrs. Field-centered experience: hospital tutor, 15 hrs. Offered as students qualify. Not open to PE students. Day.

EDS 401 Diagnosis and Treatment of Reading Disabilities in Special Education 3 credits.

A study of the etiology of reading difficulties, and the formal and informal methods

of diagnosing reading problems; special in-classroom procedures; analysis of the service rendered by clinics and other professional groups. Prerequisite: ED 411A. On campus: 30 hrs. Field-centered experience: tutoring, 15 hrs. Every Spring. Day.

EDS 402 Special Methods in Arts and Crafts for the Special Child 3 credits.

A study of the various types of arts and crafts projects appropriate to the needs and abilities of the special child. The course stresses the development of unit and lesson plans appropriate for different handicapping conditions. *Prerequisite: EDS 101. On campus: 30 hrs. Field-centered experience: tutoring, 10 hrs. Every Fall. Day.*

EDS 403 Tests and Measurements for Special Education 3 credits. Designed for future teachers of special education classes. Course work includes an introduction to the principles of education and psychological testing; basic statistics related to collecting, treating, analyzing, and interpreting data; the use of standardized tests (intelligence, aptitude, achievement, etc.) in a school situation; and the methods and instruments for diagnosing and evaluating strengths and weaknesses of exceptional individuals. On campus: 45 hrs. Field-centered experience: peer/micro testing. Every Spring. Day.

EDS 404 Observation and Supervised Practice Teaching 6 credits. During the senior year, students in the Teacher Training Program will have a minimum of one term of full-time, daily supervised practice teaching in an approved school. Students will complete a log of the teaching experiences. Students must be approved by the Chairman of the Education Department. Aside from the normal school experience, the student will be expected to attend individual and group conferences with the college supervisor and cooperating teacher. Prerequisite: approval of department chairman and completion of all other course work. On campus: seminar, 20 hrs. Internship experience: full-time teaching, 410 hrs. Every semester. Day.



English

Chairman: George E. Bush

Professors: Bush, Fox; Associate Professor: Caricato; Assistant Professor: Gill;

Adjuncts: Beitchman, Marino, Mescall, Scheiner, Witherspoon

Courses in English offer students a wide exposure to literature and culture as well as to the thinking of great creative minds from antiquity to the present.

Major

English

Graduates with a major in English may elect to pursue graduate studies or to enter careers in teaching, journalism, business, science, or any profession which requires a well-rounded liberally educated person. Since the student majoring in English may take 57 elective credits, he or she may combine this major with career-oriented courses in business and other areas.

Major Course Sequence

English

Credits	Courses
42	Core curriculum including English 251 (see pg. 31)
18	English 252; 253; 254; 261; 262; and 499
3	One from: English 371; 372; 373; 374
3	One from: English 381; 382; 383; 384; 385; 386; or 387; 391; or 392
3	One from: English 450A; 450B; 450C; or 450D
2	Health Science 100A; Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
57	Free electives

128 Total credits required

Those students who plan to pursue graduate studies in English are advised to take three additional credits in English electives and twelve credits in French.

Minor

English

An English minor enables students with other majors to gain the insights and understanding that a systematic exposure to literature provides. The writing and critical thinking skills developed in English classes can be profitably applied in any professional area or field.

Minor Course Sequence

English	
Credits	Courses
15	English 103; 251; 252; 253; and 254
3	One from: English 261; 262; 371; 372; 373; 374; 381; 382; or 383
18	Total credits required

Courses

English (ENG)

ENG 101 Fundamentals of English 3 credits.

Fundamental skills are stressed and practiced to correct deficiencies in written expression. Models of contemporary prose in English are read, analyzed and discussed as the basis of the students' own paragraphs and themes. (Not applicable to the core or to the English major or minor.) Every semester. Day, evening.

ENG 103 Writing for College and Career 3 credits.

All types of expository prose—description, narration, comparison and contrast, definition and argumentation—are incorporated in written themes. Methods of research, the business presentation and the critical apparatus expected of college students and entrants into the profession and the work force are covered. Required of all students except those in advanced placement. Every semester. Day, evening.

ENG 220 Modern Short Fiction 3 credits.

Readings in the short story and novella by select authors—American, English, and Continental—of the nineteenth and twentieth century. Offered as needed. Day.

ENG 251 English Survey I 3 credits.

Anglo-Saxon and medieval English literature. Major authors and works from the beginnings through the end of the fifteenth century. Special attention is given to the historical development of Anglo-Saxon into modern English. *Prerequisite: ENG 103. Fall 1990. Day, evening.*

ENG 252 English Survey II 3 credits.

The Renaissance and neo-classicism. Major authors and works from the sixteenth through the eighteenth century. *Prerequisite: ENG 103. Spring 1991. Day, evening.*

ENG 253 English Survey III 3 credits.

Romanticism and modernism. Major authors from the beginning of the nineteenth century to the present. *Prerequisite: ENG 103. Fall 1991. Day, evening.*

ENG 254 Shakespeare 3 credits.

A representative selection from Shakespeare's major works; histories, comedies, tragedies, non-dramatic poetry. Prerequisite: ENG 103. Every semester. Day, evening.

ENG 255 Modern Irish Fiction 3 credits.

A study of the fiction produced by Irish writers prior to the revolution and the works produced afterwards. Studies the rise and emergence of a new people as they attempt to identify themselves in their writings and seek to understand their nation and themselves in the 20th century. *Prerequisite: ENG 103. Every Fall. Day.*

ENG 261 Survey of American Literature I 3 credits.

Major writers in poetry and prose from Colonial America to the Civil War.

Prerequisite: ENG 103. Fall 1990. Day, evening.

ENG 262 Survey of American Literature II 3 credits.

Major writers in poetry and prose from post-Civil War to the present. Prerequisite: ENG 103. Spring 1991. Day, evening.

ENG 371 English Drama 3 credits.

Major dramas and theatrical landmarks from the miracle, mystery, and morality plays of the medieval period to the present. *Prerequisite: ENG 103. Fall 1990. Day, evening.*

ENG 372 American Drama 3 credits.

Major dramas and theatrical landmarks from the eighteenth century to the present. Prerequisite: ENG 103. Spring 1991. Day, evening.

ENG 373 Continental Drama 3 credits.

The drama from the fifth century B.C. to the present. Prerequisite: ENG 103. Fall 1991. Day, evening.

ENG 374 Irish Drama 3 credits.

An examination of the many plays written in Ireland and by Irish authors living outside Ireland. Prerequisite: ENG 103. Spring 1990. Day, evening.

ENG 381 Cultural Histories 3 credits.

An examination of the ideas and movements that shaped and formed the civilization of the Western World as reflected in those works which have achieved the status of literature. *Prerequisite: ENG 103. Fall 1990.*

ENG 382 Famous Biographies as Literature 3 credits.

A study of the lives of famous men and women of various national backgrounds from ancient times to the present. These biographies are examined for their literary value as well as for their relevance to history, philosophy, theology, communication skills, and the fine arts. *Prerequisite: ENG 103. Spring 1991. Day, evening.*

ENG 383 Great Voyage Literature 3 credits.

Selected readings from the literature of travel—factual and imaginative, literal and symbolic—from Homer to the present. Prorequisite: ENG 103. Fall 1991. Day, evening.

ENG 384 News Writing 3 credits.

A study of the fundamentals of reporting and writing the news, with emphasis on fact gathering, interviewing techniques, and writing under pressure. Attention is given to writing the news lead, developing the body of the story, handling the breaking news story, and covering beats (business, science, politics, the courts, and sports). Prerequisite: ENG 103. Fall 1989. Day, evening.

ENG 385 Copy Editing 3 credits.

Intensive practice in editing news and feature stories, rewriting faulty copy, and writing newspaper headlines. Page makeup is also covered. Students learn the basics of writing and editing on a word processor. *Prerequisite: ENG 103. Fall 1989. Day, evening.*

ENG 386 Reporting and Writing for the Business Press 3 credits. A close look at career opportunities in the rapidly growing field of business- and trade-press journalism. Students practice writing and editing assignments as if they were working for a specialized business newspaper or magazine (e.g. Business Week, The Wall Street Journal, Industry Week, etc.) Guest lectures and field trips are an integral part of the course. Prerequisite: ENG 103. Spring 1990. Day, evening.

ENG 387 Writing the News for TV and Radio 3 credits.

Intensive practice in writing news and human-interest segments under the pressure of split-second timing. Emphasis is on the differences between news writing for newspapers and for broadcast. The course also covers the behind-the-scenes operations of TV news assembly and programming as well as the mechanics and

techniques of reporting, writing, and delivery. Prerequisite: ENG 103. Spring 1990. Day, evening.

ENG 391 Critical Writing and Analysis 3 credits.

Instruction and practice in critical writing, centered on literature and the liberal arts; contemporary theater, painting, sculpture, and ballet criticism. *Prerequisite: ENG 103. Spring 1991. Day, evening.*

ENG 392 Technical Writing 3 credits.

An intensive writing course which covers the formats, style, and approaches to technical writing in industry, and the translation of technical language into ordinary language for the layman. Lab fee. Prerequisite: ENG 103. Spring 1991. Day, evening.

ENG 450A Seminar: Medieval-Renaissance Literature 3 credits. An intensive study of three major writers of the English-speaking world during these time periods, whose works are linked by a common theme. Continental and non-literary materials may be included. *Prerequisite: ENG 103. Fall 1990. Day, evening.*

ENG 450B Seminar: Neoclassical-Romantic Literature 3 credits. An examination of English, American, and continental authors (3-5 representative writers) from these periods who have some common theme or motif in their literary output. Sociological and political situations in England, America, and on the Continent may be included. *Prerequisite: ENG 103. Spring 1991. Day, evening.*

ENG 450C Seminar: Victorian-Edwardian Literature 3 credits. A study of three major Victorian-Edwardian authors of comedies of manners and other interesting genres. Attention is given to changes in lifestyles as a result of the industrial revolution and the rise of big business. *Prerequisite: ENG 103. Spring 1990. Day, evening.*

ENG 450D Seminar: Modern Literature 3 credits.

An examination of three modern writers from 1900 to the present who deal with one or more similar aspects of contemporary life. *Prerequisite: ENG 103. Fall 1991. Day, evening.*

ENG 499 English Seminar 3 credits.

A seminar for English majors. Instruction in literary research and in documentary writing, with the senior thesis the major project of the semester. *Prerequisites: 15 credits of English including ENG 103. Every semester. Day.*

ENG 500 Independent Study 3-15 credits.

The project must be a continuation of work already done in a previous course, or must combine life experience with a literary/linguistic theme. A prospectus, including an extensive annotated bibliography, must be submitted (2 copies) at the time of application. *Prerequisites: English major with senior status and a 3.0 index*.

Foreign Languages and Fine Arts

Chairman: Francis J. Greene

Professor Emeritus: Fiorenza; Professors: Garcia, Greene; Associate Professor: Orti; Assistant Professor: Juszczyk; Adjuncts: Anderson, Forsberg, S. Hughes, Mendoza, Schenk.

Courses in foreign languages and the fine arts provide an important part of the liberal arts background that defines an educated person. They offer unique vantage points from which to view and understand our civilization and those of other times and places.

Basic language skills are highly desirable in a wide range of areas including the business world, the transportation and travel industries, social work, all fields of teaching and counseling, social service agencies and all the humanities. A foundation in foreign languages also prepares the student for the language requirements of most graduate school degree programs and increases the students' chances for admission and for scholarships, fellowships and assistantships to superior graduate programs.

Minor

Foreign Languages

A minor in foreign languages (either French or Spanish) gives the student a set of foreign language skills (speaking, understanding, reading, and writing), which will serve as an excellent supplement to the student's general education and also increase the student's academic credibility when he or she applies for positions in a chosen career.

Note: The following course sequences are designed for students beginning these foreign languages at the college level. For students with advanced placement in French or Spanish, the language minor consists of 15 credits of French or Spanish courses above 101-102 as approved by the chairman of the department.

Minor Course Sequence

French

Credits	Courses
15	French 101-102; 103-104; and one other French course (except French 410)
15	Total credits required

Minor Course Sequence

Spanish

Credits	Courses
15	Spanish 101-102; 103-104; and one other Spanish course (except Spanish 119, 120)
15	Total credits required

Courses

Foreign Languages—French (FRE)

FRE 101-102 Elementary French 6 credits.

Total credits required

The attainment of audio-lingual skills. For students who have studied French for two years in high school or less. Every year. Day.

FRE 103-104 Intermediate French 6 credits.

The control of elementary audio-lingual skills and their further development; emphasis on developing reading skills. Prerequisite: FRE 101-102, or three years of language reading and conversation in high school, or passing a placement test (see chairman). Every year. Day.

FRE 201-202 Masterpieces of French Literature 6 credits. Reading and discussion of major works from the medieval period to the 20th century; composition. These works are read in modern versions of the original language. Prerequisite: FRE 104. Every year. Day.

Seventeenth-century French Literature 3 credits. A study of the social and philosophical movements, and discussion of the significant authors of this period as examples of the spirit of their age. Prerequisite: FRE 202. Not offered in 1989-91.

FRE 302 Advanced French Phonetics 3 credits. A systematic study of articulation and intonation intended for teachers. Prerequisite:

FRE 202. Not offered in 1989-91. FRE 303 Advanced French Conversation 3 credits. Designed to develop the technique and vocabulary of discussion as a supplement to

expression in the areas of experience. Prerequisite: FRE 202. Not offered in 1989-91. FRE 304 Nineteenth-century French Literature 3 credits. A study of the principal authors and literary movements of this period, exclusive of the poets. Prerequisite: FRE 202. Not offered in 1989-91.

Contemporary French Drama 3 credits. A survey of the development of French drama from 1870 to the present day; both the literary and technical character of its evolution will be studied in the most representative plays. Prerequisite: FRE 202. Not offered in 1989-91.

French Lyric Poetry in the Nineteenth Century A study and appreciation of the development of French poetry from Lamartine to Verlaine. This course is for French majors only. Prerequisite: FRE 202. Not offered in 1989-91.

FRE 403 Twentieth-century French Literature 3 credits. A study of the development of French literature from 1900 to the present. Prerequisite: FRE 202. Not offered in 1989-91.

FRE 404 Advanced French Prose Composition 3 credits.

A study of the stylistic structure of sentences and paragraphs; review of grammar when necessary. Prerequisite: FRE 202. Not offered in 1989-91.

FRE 405 French Civilization and Culture 3 credits.

A study of the characteristics of French culture based upon anthropological and sociological studies; humanistic and scientific contributions to civilization; readings and reports. *Not offered in 1989-91*.

FRE 408 Eighteenth-century French Literature 3 credits.

A study of the literature of the eighteenth century as a reflection of the historical, social, and cultural development of France. *Prerequisite: FRE 202. Not offered in 1989-91.*

FRE 410 Studies in French 3 credits.

Liberal arts credit; does not fulfill a language requirement. Conducted entirely in English and dealing with an aspect of French literature or civilization. Specific topic to be announced each semester.

FRE 410A The Theme of Love in French Literature (Middle Ages to 1800) 3 credits.

Not offered in 1989-91.

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FRE 410B The Theme of Love in French Literature (1800-1972) 3 credits.

Not offered in 1989-91.

Foreign Languages — Spanish (SPA)

SPA 101-102 Elementary Spanish 6 credits.

The attainment of audio-lingual skills. For students who have studied Spanish for two years in high school or less. Every year. Day.

SPA 103-104 Intermediate Spanish 6 credits.

The control of elementary audio-lingual skills and their further development; emphasis on developing reading skills. Prerequisite: SPA 101-102, or three years of language reading and conversation in high school, or passing a placement test (see chairman). Every year. Day.

SPA 115, 116 Basic Conversational Spanish I and II 6 credits.

Designed to promote the attainment of audio-lingual skills in the Spanish language, specifically speaking and understanding the language used in daily communications within the city service agencies. *Every year. Evening*.

SPA 119, 120 Spanish for Business 6 credits

Does not fulfill a language requirement. Intended to promote speaking, understanding, and reading skills in the Spanish language used in daily communications within the business world. Also an exploration of the cultural practices, customs, and traditions of the Latin American business and social world. A comparison will be made with the same practices in the United States. Every year. Day.

SPA 129, 130 Spanish for Medical Personnel I, II 6 credits.

Intended to promote speaking and understanding skills in the Spanish language used in daily communication within the medical field. The Hispanic cultural world will be presented in relation to the medical profession. Practical experience will be gained through classroom exercises. *Not offered in 1989-91*.

SPA 201, 202 Masterpieces of Spanish Literature 6 credits.

Reading and discussion of major works of Spanish literature. Every year. Day.

SPA 302 Contemporary Spanish Literature from 1898 to Present 3 credits.

A study of the outstanding authors of the twentieth century and their works. Prerequisite: SPA 202. Not offered in 1989-91.

SPA 305, 306 History of Spanish-American Literature to Modernisimo I, II 3 credits.

Selections from principal Spanish-American writers from the sixteenth century to the present. *Prerequisite: SPA 104. Not offered in 1989-91.*

SPA 308 Advanced Spanish Conversation 3 credits.

A course to develop the technique and vocabulary of discussion as a supplement to expression in the areas of expertise. *Prerequisite: SPA 202. Not offered in 1989-91.*

SPA 310 Advanced Prose Composition 3 credits.

A study of the stylistic structure of sentences and paragraphs, review of grammar when necessary. *Prerequisite: SPA 202. Not offered in 1989-91.*

SPA 401 Spanish Drama of the Golden Age 3 credits.

A study of the chief dramatists of the period. Prerequisite: SPA 202. Not offered in 1989-91.

SPA 402 Spanish Civilization and Culture 3 credits.

A study of the characteristics of Spanish culture based upon anthropological and sociological studies; humanistic and scientific contributions to civilization; readings and reports. *Prerequisite: SPA 202. Spring 1991. Day.*

SPA 405 Advanced Spanish Phonetics 3 credits.

A systematic study of articulation and intonation intended for teachers; peninsular Spanish; the development of divergent pronunciation patterns of Latin-American Spansh. *Not offered in 1989-91*.

SPA 406 The Novel and Poetry of the Golden Age 3 credits.

A study of the principal poets of the age; birth and development of the pastoral and picaresque novels; readings and discussions; reports. *Prerequisite: SPA 202. Not offered in 1989-91.*

SPA 407 Cervantes 3 credits.

An analysis of Cervantes' works and their importance in the literature of the Siglo de Oro; readings and discussions; reports. *Prerequisite: SPA 202. Not offered in 1989-91.*

SPA 410 Reading and Writing Skills for Bilingual Students 3 credits. This course is intended for students who are already fluent in Spanish and wish to improve their reading and writing skills. Not offered in 1989-91.

SPA 411 Spanish Literature of the Eighteenth and Nineteenth Centuries 3 credits.

Most important works from the Enlightenment to the Post-Romantic Period. *Prerequisite: SPA 202. Not offered in 1989-91.*

SPA 412 Contemporary Spanish-American Literature after World War II 3 credits.

Contemporary novels, poetry, and essays; the Nobel Prizes; Gabriela Mistral, Miguel Angel Asturias, and Pablo Neruda; the works of Borges, Garcia-Marquez, Carpentier, and others; women poets in the Spanish-American countries. *Prerequisite: SPA 202 or SPA 305-306. Fall 1990. Day.*

SPA 413 Hispanic Caribbean Cultures and Literature 3 credits. A study of the characteristics of the culture and literature of the three largest Hispanic ethnic groups of Metropolitan New York: Puerto Ricans, Cubans, and Dominicans; and their literary and humanistic contributions to the present United

States; comparisons with Mexican-American literature. Prerequisite: SPA 202 or permission of the chairman. Fall 1990. Day.

SPA 415 History of Puerto Rican Literature 3 credits. A survey course covering significant authors and works of the different literary movements of Puerto Rico from colonial times to the present. Prerequisite: SPA 202 or permission of the chairman. Spring 1991. Day.

SPA 419 Travel amd Study in Spain or Latin America 3 credits. Offered in conjunction with a trip to Spain or Latin America conducted by the department. Travel experience is supplemented by lectures before and during the trip. Each student also prepared a research paper on a topic approved by the instructor. Every Spring. Day.

SPA 420 Studies in Spanish 3 credits.

Conducted in English or Spanish. Deals with contemporary issues in Spanish and Spanish-American literature, culture, and civilization. Offered as needed. Day.

Courses

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Fine Arts (FA)

FA 401 Music of the Western World 3 credits.

A survey of the important music and musicians of the western world from the beginning of the Christian era to the present. Recorded illustrations and lectures. Every semester. Day, evening.

FA 402 Orientation in Art 3 credits.

A simple approach to the understanding of the plastic arts on a conceptual basis, including within its scope historical and aesthetic materials. *Every semester. Day, evening.*

FA 404 Modern Art 3 credits.

A study of the many factors leading to the art traditions of the last one hundred years—from impressionism to the present. Prerequisite: FA 402. Not offered in 1989-91.

FA 405 The Evolution of Grand Opera in Western Musical Tradition 3 credits.

An inquiry into the forces which gave rise to this musical art form, its nature, and development to modern times. *Prerequisite: FA 401. Not offered in 1989-91.*

FA 406 Ancient Egyptian Art 3 credits.

A study of Ancient Egyptian architecture, sculpture, painting, and crafts from the first through the twenty-second dynasties. Factors contributing to the art of the Old, Middle and New Kingdoms will be analyzed, including ancient Egyptian geography, history, culture, literature, and mythology. Slide lectures, classroom discussions, readings and museum visits will be included. *Prerequisite: FA 402. Not offered in 1989-91.*

EA 410 Women in the Arts and Sciences (Homors Seminar) 3 credits. The liberal arts curriculum familiarizes students with fundamental human concerns. In many disciplines, however, women's contributions (in both traditional and non-traditional forms) have historically been overlooked and underrepresented. This honors seminar will enrich the liberal arts curriculum by exploring women in literature, arts, sciences, philosophy. Guest lecturers, visits to museums and theater, as well as student presentations, form the basis for this course. Prerequisite: Honors student. Fall 1989. Day.

FA 412 Selected Readings in Honors (Honors Seminar) 3 credits. An interdisciplinary seminar course in which a variety of texts are read (novels, plays, essays, and criticism). Emphasis is on eliciting from the students a critical reading of the texts. Seminar discussions, written analysis, oral reports, as well as term papers are required for participants. Professors from various departments of the College participate. Prerequisite: honors program students. Offered as needed. Day.

FA 440 Studies in Architecture: The Building is the Book (Honors Seminar) 3 credits.

A study of the major architectural movements and monuments in the Western World with a view to developing the student's ability to "read" a building in correct architectural terms. Slide presentations, lectures, seminar oral reports, field trips, and a term paper required. *Prerequisite: honors program students. Offered as needed. Day.*



History, Political Science, and Social Studies

Chairman: Arthur J. Hughes

Professor Emeritus: Cuddy; Professors: Hughes, Sorrentino; Assistant Professor: Sparr; Adjuncts: Auerbach, Belonzi, Calcagno, Dziezynski, Gannon, Hogan, Rosenfeld.

The study of history, political science, and social studies inculcates or improves skills such as research, descriptive and analytical writing and critical reading. The department's course offerings provide an awareness of historical, political and social perspectives, and understanding of chronology and a capacity to study causation. The department offers majors in history, political science, and social studies.

Major

History

The history major prepares students to enter careers at all levels of education, law, religion, business, law enforcement, and government service. Graduates who received their B.A. in history have pursued higher degrees with great frequency.

Major Course Sequence

History

Credits	Courses
42	Core curriculum (see pg. 31)
3	Communication 300/400 level electives
6	Economics 201 and 202
12	Any combination of Foreign Language; Mathematics 301; Sociology 406; Computer Information Systems 101; 201; 202; Science 201
6	Mathematics or Science*
3	Political Science 204 or Sociology 404
30	History 202 or 301; 312 or 403 or 404; 400; 401; 402; and 300/400 level electives
24	Free electives
2	Health Science 100A; Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)

128 Total credits required

^{*}If mathematics is used to satisfy the core curriculum requirement, then science must be selected or vice versa.

Major

Political Science

The political science major provides the opportunity to study various areas of public policy, including foreign policy, urban policy, transportation policy, and public administration, one of the major subdivisions of the discipline.

While law schools do not require a specific major, political science is a natural prelaw major because of its emphasis on the study of law and institutions. The department offers courses in law, the courts, constitutional law, and various other areas that are directly related to the legal system.

Major Course Sequence

Political Science

Credits	Courses
42	Core curriculum (see page 31)
3	Communication 300/400 level elective
6	Economics 201 and 202
12	Any combination of Foreign Language; Mathematics 301; Sociology 406; Computer Information Systems 101; 201; 202; Science 201
15	History 101; 102; 303; 402; and 407
6	Mathematics or Science*
24	Political Science 202; 204; 301; 400; and 300/400 level electives
18	Free electives
2	Health Science 100A; Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)

128 Total credits required

Major

Social Studies

A major in social studies gives the student the opportunity to study a variety of subjects in the social sciences and to synthesize the material of these subjects in a meaningful way through a cohesive perspective.

Major Course Sequence

Social Studies

Credits	Courses
42	Core curriculum (see page 31)

^{*}If mathematics is used to satisfy the core curriculum requirement, then science must be selected or vice versa.

132	History, Political Science, and Social Studies
3	Communication 300/400 level elective
6	Economics 201 and 202
12	History 101; 102; and 202 or 300/400 level electives
6	Political Science 204 and 304
3	Sociology 301
21	Social Studies 400 and electives*
33	Free electives
2	Health Science 100A; Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
128	Total credits required
*Econ	nomics, history, political science, and sociology courses may be selected with

Minors

the approval of the advisor.

History and Political Science

These minors provide students with the opportunity to acquire a systematic overview of either history or political science.

Minor Course Sequence

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Credits_	Courses	
15	History 101; 102; 201; and two other History courses	
15	Total credits required	

Minor Course Sequence

Political Science

Credits	Courses
15	Political Science 202; 204; and three other Political Science courses
15	Total credits required

Courses

History (HIS)

HIS 101 Survey of Western Civilization (to 1500) 3 credits. A survey of the principal historical events, forces, and movements from the Dawn of Man to the Reformation; ancient, medieval, and early modern developments in this period. Every Fall. Day, evening.

HIS 102 Survey of Western Civilization (since 1500) 3 credits.

A survey of modern times, beginning with the Renaissance and Reformation; the rise of national states; the Enlightenment; the Age of Revolutions; and the nineteenth and twentieth centuries. *Every Spring. Day, evening.*

HIS 201 History of the United States: 1896 to Present 3 credits. The major economic, social, intellectual, and political movements of the twentieth century in the United States. Every semester. Day, evening.

HIS 202 Ancient History 3 credits.

A study of ancient history from the origin of man to the fall of Rome; contributions made by the ancient world to modern civilization. *Every Spring. Day.*

HIS 289/PSC 289 The French Revolution 3 credits.

A series of lectures in honor of the bicentennial of the French Revolution. Fall 1989. Day.

HIS 301 Medieval History 3 credits.

A survey of the history of the Middle Ages; feudalism, universities, monarchy, the Church, the Hundred Years' War. Fall 1990. Day.

HIS 303/PSC 312 The World in the Twentieth Century 3 credits. A study of the evolution of the nation-state system in the twentieth century. Concepts such as imperialism, nationalism, fascism, communism, neocolonialism, power politics and containment are studied in the actual time environment in which they developed. Every semester. Day.

HIS 305 Latin American History I 3 credits.

A survey of Latin American history from pre-conquest days through the independence movement; relationship of the period to present-day Latin America. Spring 1990. Day.

HIS 306 Latin American History II 3 credits.

A survey of contemporary Latin America; church-state relationships, land, labor, trade and culture. Spring 1991. Day.

HIS 307 American Minorities 3 credits.

A survey of the peoples of the North American continents, with particular emphasis upon the United States. *Every Spring. Day.*

HIS 308/PSC 310 Assassination Politics 3 credits.

An examination of the use of violence as a form of political behavior. Study of the origins of terror groups. Analysis of current trends and problems. *Offered in 1990-1991*. *Day*.

HIS 311 A History of the Black American 3 credits.

A study of the Black American from 1619 to the present, with emphasis placed on the Blacks in the United States during the twentieth century. Fall 1989. Evening.

HIS 312 Renaissance and Reformation 3 credits.

Intellectual and religious movements during the transition from the Middle Ages to modern times. Fall 1989. Day.

HIS 314 Nations of the Modern World 3 credits.

The nations of the world in modern times, offered in eight parts. Each nation is a separate course designated by letter as follows: a) France; b) Latin America—Argentina, Brazil, Mexico; c) China; d) Russia; e) Italy; f) England; g) Germany; h) Ireland. England and Ireland will be offered in 1990-1991. Day. France and Italy will be offered in 1989-1990. Day.

HIS 370 History of American Labor 3 credits.

Dedicated to the study of the American worker, this course begins with a study of colonial labor systems, the emergence of nineteenth-century Workingmen's parties,

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and the origin and development of industrial and craft unions. It also treats working class culture and the work ethic in American history. American labor leaders and labor ideologies are assessed. Labor-management relations and the federal role in labor-management disputes are also studied. *Spring 1990. Day.*

HIS 400 Historical Seminar 3 credits.

A thesis seminar. Emphasis placed on research and historical criticism. Divided into two separate seminars: Local History, and Problems of the Western Hemisphere. *Every Fall. Day.*

HIS 401 History of the United States: The Age of Discovery—1789 3 credits.

A survey from the earliest explorations and discoveries to government under the Constitution; the colonial struggles; the dominance of Great Britain; the Revolutionary War; the "Critical Period." *Every Fall. Day.*

HIS 402 History of the United States: 1789-1896 3 credits.

A study of the United States as it struggled to set the new government into motion; political, economic, cultural, and diplomatic developments in the nineteenth century. *Every Spring. Day.*

HIS 403 Modern European History: 1600-1763 3 credits.

A study of the history of Europe from the end of the religious revolts to the end of the Seven Years' War; the Thirty Years' War; the Commercial Revolution; the rise of the nation-state; the age of absolutism and enlightenment. Fall 1989. Day.

HIS 404 Modern European History: 1763-1900 3 credits.

A study of the cause and effects of the French Revolution; the era of Metternich; emphasis on the Franco-Prussian War; the growth of nationalism, socialism, and democracy. *Spring 1990. Day.*

HIS 406/PSC 311 Current Problems 3 credits.

An analysis of the major problems of the following world areas: Far East, Africa, Latin America, Middle East; a lecture course conducted by leading figures in academic, political, and diplomatic fields. Offered on a four-year cycle. *Every Spring. Day*.

HIS 407 Survey of United States Foreign Relations 3 credits.

A survey of American diplomacy from 1775 to present; "Manifest Destiny," the Civil War, the United States as a world power, and the United States after two world wars. *Every Fall. Day.*

HIS 409/PSC 409 The American Presidents 3 credits.

A study of the historical evolution of the Presidency from the eighteenth century to the present, emphasizing both the institution and the characters of the men who held the office. *Every Spring. Day.*

HIS 410 The American City 3 credits.

The historical evolution of the city from the foundation of Jamestown to the present day; the major trends in urban development; the importance of the city in American history, and the problems confronting urban America today. *Spring 1990. Day*.

HIS 412/PSC 407 United States Congress 3 credits.

This course examines the evolution of Congress, the principles on which it is based, its methods of operation, its struggles, and its place in America's future. *Fall 1990*. *Day*.

Courses

Political Science (PSC)

PSC 202 Introduction to Political Science—Scope and Method 3 credits.

This survey of the major contemporary trends in political science research enables the student to understand and work with a variety of analytical tools. *Every semester. Day.*

PSC 204 American National Government 3 credits.

The constitutional basis, structure and operations underlying political processes (elections, interest representation, political parties); special attention is given to their role in the economy and social welfare of the nation and in defense and foreign policy making. Every semester. Day, evening.

PSC 289/HIS 289 The French Revolution 3 credits.

A series of lectures in honor of the bicentennial of the French Revolution. Fall 1989. Day.

PSC 301 Comparative Government 3 credits.

A study of the basic political ideas and institutions of the major foreign powers; the evolution of the principles, methods, and problems of European and American governments. *Every Spring. Day.*

PSC 302 Government and Politics of Africa and Asia 3 credits. Regional approach on alternating basis between the two continents; stress on characteristics of the "third-world" nations; one-party government, military dictatorship, socio-economic underdevelopment, inter-group conflict, geographic impediment. Offered in 1990-1991. Day.

PSC 303 American Political Parties 3 credits.

The origins and nature of the two-party system; party organization on the federal, state and local levels; party politics and governmental institutions; the nomination and electoral processes through party; voters and special-interests. Every Fall. Day.

PSC 304 State and Local Government 3 credits

Historical background and constitution-making; structures and operations of both levels with an emphasis on the politics of public administration and services; federalism; federal-state-local intergovernmental relations. *Every semester. Day, evening.*

PSC 305 Politics and Administration in Latin America 3 credits. Contemporary government systems of representative nations of the Caribbean, Central and South American regions. The course combines a standard approach (governmental structures and operations) with special emphasis on particularly applicable topics (elite-mass relationship, political instability, economic development, inter-hemispheric politics). Offered in 1989-1990. Day.

PSC 306 Metropolitan Government and Politics 3 credits. Definition of the metropolitan region; traditional urban and suburban forms of government; the politics of reorganization; metropolitan forms of government; regional socio-economic problems and public policies. *Every semester. Day.*

PSC 309 Public Administration 3 credits.

A study of administration in terms of theory and practice. It will closely examine the interrelationships of Public Administration with the political, governmental, and private environments. In addition, it will survey decision-making, financial administration, personnel administration, administrative organization, legislative and judicial administration, and administrative responsibility. *Every Fall. Day.*

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PSC 310/HIS 308 Assassination Politics 3 credits.

An examination of the use of violence as a form of political behavior. Study of the origins of terror groups. Analysis of current trends and problems. Offered in 1990-1991. Day.

PSC 311/HIS 406 Current Problems 3 credits.

An analysis of the major problems of the following world areas: Far East, Africa, Latin America, Middle East; a lecture course conducted by leading figures in academic, political, and diplomatic fields. Offered on a four-year cycle. *Every Spring. Day*.

PSC 312/HIS 303 The World in the Twentieth Century 3 credits. A study of the evolution of the nation-state system in the twentieth century. Concepts such as imperialism, nationalism, fascism, Communism, neo-colonialism, power politics and Containment are studied in the actual time environment in which they developed. Every semester. Day.

PSC 350 The Government and Politics of the Soviet Union 3 credits. Investigates the role of ideology, governmental structure, the nationality component, the political culture, economic planning and decision making in the Soviet Union. In addition, the course investigates and explores Soviet Foreign Policy. Spring 1990. Day.

PSC 360 The Government and Politics of China 3 credits. Investigates the political culture, governmental structure, role of ideology, the historical setting, and the foreign policy of China. Spring 1991. Day.

PSC 400 Political Science Seminar 3 credits.

Each seminar is devoted to a particular theme within which the student selects a senior thesis topic. Seminar meetings are divided between instruction on thesis writing and discussions of assigned reading material on the seminar theme. Every Fall. Day.

PSC 402 American Constitutional Law 3 credits.

The shaping of constitutional law through interpretation of the federal constitution and views on American political theory by the United States Supreme Court; landmark cases dealing with governmental powers in the areas of national economy and security, and with civil liberties and rights and criminal procedure. *Every Spring. Day.*

PSC 404: Government and Business: 1865-Present 3 credits.

A study of the relation of government to business as a control and as an aid; the commerce clause as the source of extended power of government control; decisions of the courts; state police powers. Every semester. Day, evening.

PSC 405 Introduction to Law and the American Judicial Process 3 credits.

The nature of law and its role in society, the "politics" of the administration of justice: selections of judges, criminal and civil procedure, judicial and jury decision making, courtroom operations, etc. Every Fall. Day.

PSC 406 International Relations 3 credits.

Post World War II international politics viewed through concepts (sovereignty, national interest, power) and the instruments for the conduct of foreign policy (diplomacy, war, global economics, world organization, and international law). Offered in 1990-1991. Day.

PSC 407/HIS 412 United States Congress 3 credits.

This course examines the evolution of Congress, the principles on which it is based, its methods of operation, its struggles, and its place in America's future. Fall 1990. Day.

PSC 409/HIS 409 The American Presidents 3 credits.

A study of the historical evolution of the Presidency from the eighteenth century to the present, emphasizing both the institution and the characters of the men who held office. *Every Spring. Day.*

PSC 504, 505 Culture and Politics of the Soviet Union and China 3 credits per semester.

An interdisciplinary seminar which explores the interrelationship between culture and politics. It examines the history, ideology, education and creative arts and their impact on the government and politics of these two societies. Fall 1990, Spring 1991. Day.

Course

Social Studies (SS)

SS 400 Social Studies Seminar 3 credits.

A thesis seminar. Lectures will focus on a special subject, determined each year by the divisions. Students may determine the area in which they will write the thesis. *Every Fall. Day.*



Management

Chairman: Seymour Barcun

Professor Emeritus: Gonnoud; Professors: Barcun, Willing; Associate Professors: Goldberg, Petrucelli; Assistant Professors: Ehrensal, Gomori; Adjuncts: Anderer, Giglio, Hemminger, Honig, Kirrane, Luby, Lupo, Matteo, McCabe, McAllister, Reid, Sullivan, Tamparo.

The department offers a major in management, a minor in business, and a program leading to the A.A.S. degree in Business Administration. It also offers Advanced Business Certificate Programs in General Business, Finance, Human Resources, and Marketing.

Major

Management

The management major prepares students for careers and/or graduate study in any of the fields of business administration. Management majors find entry-level, professional positions in administration, finance, human resources administration, information management, international business, management, or marketing. Students are prepared for careers in business or not-for-profit organizations including governmental, hospital, educational, civic, and charitable enterprises. Students may choose to use their free-elective courses to develop a broad business background, a broad liberal arts background, or in-depth skills in some specialized fields of business. They may choose to use free electives to explore new areas of interest.

Note: Freshmen entering in or after the Fall 1990 semester who wish to major in management will be urged to purchase an IBM compatible portable computer.

Major Course Sequence

Management Credits Courses Core curriculum including Mathematics 109 and 110 (see page 31) 42 Accounting 101 and 102 6 Business Law 201 and 202 6 Economics 201; 202; and 306 9 Two courses from History, Political Science, Economics, or Psychology 6 Administration 201 3 Business 101 and 490 6 Computer Information Systems 101 3 Finance 301, and 302 or 312 6 Human Resources 210 and 304 6 Marketing 201 and 202 6

128	Total credits required
2	Health Science 100A; Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)
18	Free electives
3	Political Science 404
3	Mathematics 301
3	Quantitative Analysis 308

Concentrations in Specialty Areas

A student may elect to concentrate in marketing, finance, human resources, or electronic data processing in addition to his/her major in management. This would require the student to select courses from the following groups in addition to the required groups in management. There is a sufficient number of free electives in the program to allow for this.

Concentration Course Sequence

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Credits	Courses	
21	Marketing 201*; 202*; 307; 309; 316; 330; and 407	
21	Total credits required	

Concentration Course Sequence

Finance

Credits	Courses	
18	Finance 301*, 302*, 312; 412; 420; and 422	
18	Total credits required	

Concentration Course Sequence

Human Resources Management

Credits	Courses
12	Human Resources 201*; 304*; 409; and 461
6	Administration 304 and 405

18 Total credits required

^{*}Required course for B.S. in Management with or without the concentration.

Minor

Business

The minor in business introduces non-business majors to the various professions within the field of business and to the inter-relationships that exist among them. It allows students, independently of their major, to appreciate the dynamics of the work place. The minor enhances the student's ability to understand business systems and their function in the work place.

Minor Course Sequence

Business

Credits	Courses
3	Business 101
3	Administration 201
3	Marketing 201
3	Computer Information Systems 101
3	Accounting 150
3	One from: Business 250; Economics 201; or 202; or Human Resources 210
18	Total credits required

Associate in Applied Science

Business Administration

This degree program permits adults with work experience and others who do not expect to be able to complete a B.S. degree program to gain a broad understanding of the business environment in which they are employed or expect to be employed. The program also provides an introduction to the liberal arts.

Associate in Applied Science Course Sequence

Business Administration

Credits	Courses
30	Core curriculum including Mathematics 109 and 301 (see page 32)
6	Accounting 101 and 102
6	Business Law 201 and 202
3	Computer Information Systems 101
6	Economics 201 and 202

3	Administration 201		
3	Business 101		
3	Finance 301		
3	Marketing 201		
63	Total credits required	 	

Advanced Business Certificate Programs

To qualify for an Advanced Business Certificate, a minimum of 15 of the required credits (excluding transfer and experiential credit) must be taken in residence at St. Francis College. Non-matriculated status and possession of a high school diploma or its equivalent are required for entry into the program. St. Francis students matriculated into degree programs may not pursue these certificates. A minimum grade of C is required for each course. The possession of basic skills in mathematics is required of all certificate program students, with algebra required for the finance option.

Advanced Business Certificate

Finance

Finance

This certificate program is especially designed to give students the fundamental skills and basic understanding needed to function effectively in banking, real estate, securities, investment, brokerage houses, and other financial services institutions.

Advanced Business Certificate Course Sequence

Credits	Courses
3	Accounting 150
3	Business 101
3	Computer Information Systems 101
6	Economics 201 and 306
6	Finance 301; and 302 or 312
21	Total credits required

Advanced Business Certificate

General Business

This certificate program is especially designed to give students a basic understanding of the environment of business. It provides a strong foundation for later specialization.

Advanced Business Certificate Course Sequence

General Business

Credits	Courses
3	Accounting 150
6	Business 101 and 250
3	Computer Information Systems 101
3	Economics 201
3	Marketing 201
18	Total credits required

Advanced Business Certificate

Human Resources

This certificate program is especially designed to give students the basic skills needed to function in the area of personnel management.

Advanced Business Certificate Course Sequence

Human Resources

Credits	Courses
3	Administration 201
3	Accounting 150
3	Business 101
3	Computer Information Systems 101
6	Human Resources 210 and 304
18	Total credits required

Advanced Business Certificate

Marketing

Marketing activities employ more people than any other area of business. This certificate program is designed to give students an understanding of the marketing functions (sales, sales management, advertising, and distribution) and their relation to other business activities. This certificate is for anyone interested in pursuing or learning about careers in the marketing area.

Advanced Business Certificate Course Sequence

Marketing

Credits	Courses
3	Accounting 150
6	Business 101 and 250
3	Computer Information Systems 101
6	Marketing 201 and 202

18 Total credits required

Note: See Accounting section for information on the Advanced Business Certificate program in Corporate Accounting. See Computer Information Sciences section for information on the Advanced Business Certificate Program in Electronic Data Processing.

Courses

Administration (ADM)

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ADM 201 Management Theory and Practice 3 credits. Analyzes the functions of planning, organizing, directing, controlling, and communicating as exercised by managers of all enterprises. Students develop an understanding of the levels of management and their implications for the management function. Consideration is given to the conceptual, technical and human relations skills needed for effective management. Prerequisite: BUS 101; and MAT 050 or exemption from MAT 050. Every semester. Day, evening.

ADM 304 Business and Society 3 credits.

Provides the student with an understanding of the many organizations with which a business maintains a relationship. The student gains an awareness of the strategies and tactics businesses use to manage the diversity of demands of such groups as stockholders, workers, consumers, community groups and government regulators. *Prerequisite: ADM 201. Fall 1989, day. Fall 1990, evening.*

ADM 360/AV 360 Transportation Management 3 credits. Examines principles of rail, highway, air and waterway transportation and considers the impact the transportation on economic, political and social factors. The special impact of transportation on industrial development sites is examined. *Spring 1991. Day.*

ADM 405 Management of a Small Business 3 credits. Designed to introduce upper-division students to the principles and problems of managing a small business firm; the objectives, policies, facilities, finances, structure, and personnel required for operating the small business. *Prerequisite: junior or senior standing. Spring 1990, evening. Spring 1991, day.*

ADM 430/AV 430 Airport Management 3 credits. An analysis of the role of the airport manager and his involvement with day-to-day and long-term management and operations of an airport. Course includes planning, operations, role of government agencies, community involvement, environmental issues, and human relations management. Site visits to several airports and guest lecturers enhance the presentation. Prerequisite: BUS 101 and AV 320. Fall 1989. Day, evening.

Courses

Business (BUS)

BUS 101 Organization and Management 3 credits. Introduces the major areas of concern to business and not-for-profit enterprises today. The business environment, economic issues and the rising importance of ethical conduct are discussed. The roles of marketing, finance and management theory are introduced. The roles of such diverse components within the firm as human resources, the law, accounting and computers are considered. Every semester. Day, evening.

BUS 250 Business Communication 3 credits.

The key modes of managerial communication: interpersonal, personal and organizational; a study of interviewing, personnel evaluation, meeting participation, memo writing, and the making of business presentations; the communication structure of companies analyzed for areas of communication breakdown. Every Fall,

day. Every Spring, evening.

BUS 407 Business Research 3 credits.

An interdisciplinary approach to the study of recognizing and isolating business problems, while demonstrating the use of research as a management tool in guiding executive thinking and decision making; cases and problems employed with emphasis on quantitative and analytical techniques. Prerequisite: senior standing, or junior standing and permission of the instructor. Spring 1990, day. Spring 1991, evening. Students who have received credit for MKT 407 may not receive credits for BUS 407.

BUS 490 Business Policies 3 credits.

The use of previous studies in the areas of management science, finance, personnel, marketing and accounting, and of integrated case studies; analysis of specific problems within a company leading to recommended alternative courses of action; systems of integrated approach to analysis, with the student assuming the role of corporate executive in leading group decision-making. Prerequisite: graduating seniors. Every semester. Day, evening.

BUS 498 Independent Study (formerly MGT 510) 3 credits.
Individual research and study with the approval of the department of management.
Prerequisite: permission of instructor required. Every semester. Day, evening.

Courses

Finance (FIN)

*FIN 301/ECO 381 Comporate Finance 3 credits.

Aspects of financing corporate entities in the functioning of the economy; equity financing, capital structure; bond flotation, security underwriting and marketing rights, warrants, and options. The use of financial ratios, time value of money, and other techniques of financial analysis. Prerequisite: ACC 101 or 150; ECO 306; and MAT 050 or exemption from MAT 050. Every semester. Day, evening.

*FIN 302/ECO 332 Managerial Fimance 3 credits.

Focuses on the efficient management of the financial resources of the firm.

Consideration is given to the time value of money, the statistical analysis of risk, and the use of financial ratios. Explores financial statement analysis, financial planning, working capital management, short- and long-term financing and optimal capital structure. Lease vs. purchase and dividend policies are studied. Prerequisite: FIN 301/ECO 331. Every Fall, evening. Every Spring, day.

*FIN 312/ECO 333 Security Analysis 3 credits.

Quantitative and qualitative methods of analyzing industrial securities, with emphasis on common stock; principles underlying the selection and management of both individual and institutional portfolios; market timing and technical strategies. Prerequisite: FIN 301/ECO 331. Every Fall, day. Every Spring, evening.

*FIN 412/ECO 433 Portfolio Management 3 credits.

The construction and analysis of both individual and institutional investment portfolios; portfolio objectives, strategies and constraints; economic and non-economic variables impacting portfolios; performance measurement. *Prerequisite:* FIN 302/ECO 332 or FIN 312/ECO 333. Fall 1989, day. Fall 1990, evening.

*FIN 420/ECO 404 International Finance 3 credits.

Factors related to decision making in the area of finance by multinational corporations. Topics include: foreign exchange markets, Eurocurrency markets, foreign exchange risk management, governmental regulations and the multinational corporation. Cases and problems will be presented. Prerequisite: FIN 302/ECO 332 or FIN 312/ECO 333. Spring 1990, evening. Spring 1991, day.

*FIN 422/ECO 434 Financial Institutions Management 3 credits. Analysis of the structure of corporations providing financial services. Course examines institutions such as commercial banks, security brokers and life insurance companies. Management problems unique to such firms are considered and performances are evaluated. Areas considered include: management of assets and liabilities, control of financial operations, impact of government regulations. Prerequisite: FIN 302/ECO 332 or FIN 312/ECO 333. Spring 1990, day. Spring 1991, evening.

*The following restrictions apply to the use of these cross-listed courses for the fulfillment of College or departmental requirements.

- 1. The courses may not be used to satisfy requirements for liberal arts electives in the core curriculum or departmental requirements.
- 2. The courses may not be used by accounting and management majors to satisfy their departments' requirements for elective credits in economics.
- Management majors may not use these courses to satisfy the requirements for a minor in economics.
- Accounting majors may not use ECO 331/FIN 301 Corporate Finance to satisfy the requirements for a minor in economics but may use the other cross-listed courses.

Courses

Human Resources (HR)

HR 210 Behavioral Science 3 credits.

The fundamental concepts of psychology, sociology, cultural anthropology, and management for gaining a better understanding of the predictability and awareness of human behavior in organizational environments; individual and group reactions, motivation, perception, leadership roles, personality dynamics and stem culture differentiation. *Prerequisite: ADM 201. Every semester. Day, evening.*

HR 304 Personnel Management 3 credits.

A study of current personnel administration in various types of organizations; recruitment, testing, placement, motivation, and training of individuals; problems of

sensitivity training, the effect of cultural differences, governmental assistance and regulations, basic aspects of effective programs of wage administration, employee

benefits, and industrial judicial practices (grievances and arbitration). Prerequisite: HR 210. Every semester. Day, evening.

HR 330/AV 330 Aviation Personnel Practices 3 credits.

A study of human resources management in the aviation industry. Topics of study include industry hiring practices, management development, employee motivation, and labor relations practices. The course examines labor influence on industry economics, government regulations, and manpower allocation programs. The impact of participative management and employee ownership on human resource management are examined. Every Spring. Day, evening.

HR 409 Industrial Relations and Collective Bargaining 3 credits. The various factors including legislation involved in the negotiation of a contract between employers and employees; the aspects of the administration and interpretation of the contract analyzed through actual contracts and cases involving portions of the contract, appropriate legislation, and administrative rulings. Prerequisite: ADM 201. Every Fall, day. Every Spring, evening.

HR 461 Human Resource Laboratory 3 credits.

An applied seminar for students to work with various behavioral techniques such as attitude studies, resources planning, performance appraisals, succession planning, focus group approaches, career development, et al. The student will construct instruments for the implementation of these important areas. *Prerequisite: HR 304. Every Fall, evening. Every Spring, day.*

Courses

Marketing (MKT)

MKT 201 Marketing 3 credits.

An introductory course in the role of marketing within firms both domestically and internationally oriented. The marketing function is analyzed from the development of products or services through their distributive channels, promotion, and pricing. Students study brands, their life cycles, their advertising and sales promotion, and the methods used to obtain market research. *Prerequisite: BUS 101 and MAT 050 or exemption. Every semester. Day, evening.*

MKT 202 Marketing Management 3 credits.

An in-depth study using the case method of markets, market planning, and marketing decisions. Students learn to evaluate products in relation to consumer demand, market segments, competitive positioning, alternate distributive channels, and relative price lining. Managerial aspects of the marketing function are stressed. *Prerequisite: MKT 201. Every semester. Day, evening.*

MKT 307 Advertising and Sales Promotion 3 credits.

A study of contemporary advertising and sales promotion methods used by marketoriented business firms. Students gain an understanding of agency & client responsibilities, the media selection process, corporate advertising department operations, advertising campaign development and evaluation. The role of trade shows, business expositions, and other sales promotion methods are explored. Prerequisites: ADM 201 and MKT 202. Spring 1990, evening. Spring 1991, day.

MKT 309 The Sales Function 3 credits.

The role of the sales function in the total marketing program; salesmanship and selling methods; problems and methods of recruiting, selecting, training, building sales quotas, or sales programs; contribution of the behavioral sciences to typical sales situations. *Prerequisite: MKT 202. Spring 1990, day. Spring 1991, evening.*

MKT 310/AV 310 Aviation Marketing and Economics 3 credits. An examination of the marketing theory and practices of the major components of the air transportation industry; air carriers, aircraft manufacturers, F.B.O.'s, and aircraft components suppliers. Topics include market structure, strategy, advertising, and research. Every Fall. Day, evening.

MKT 315 Public Relations (formerly ADM 315) 3 credits. Provides a thorough grounding in the fundamentals of public relations. It combines techniques and strategies with practical examples of public relations case studies. Application of the public relation process to traditional publics is highlighted. Prerequisites: ADM 201 and MKT 201. Fall 1989, evening. Fall 1990, day.

MKT 316 Merchandising 3 credits.

The study of contemporary and futuristic merchandising problems, methods and policies with emphasis on the impact that economic, sociological, and physiological factors have on merchandising today and in the future. *Prerequisite: MKT 202. Fall 1989, day. Fall 1990, evening.*

MKT 330 International Marketing 3 credits.

This course presents the theory and practices of modern marketing techniques as they apply to U.S. corporations doing business in foreign countries. Topics covered include: socio-economic and legal-political factors and their use in marketing decision making. *Prerequisite: MKT 202. Fall 1989, evening. Fall 1990, day.*

Course

Quantitative Analysis (QA)

QA 308 Quantitative Methods in Business 3 credits. The employment of mathematical and statistical tools in the solution of business decision problems; techniques of linear programming, inventory theory, queuing theory, decision theory, and computer simulation. Prerequisites: MAT 110 or MAT 202 and 301. Every semester. Day, evening.



Philosophy

Chairman: Francis Slade

Professor Emeritus: O'Brien; Professors: Galgan, Langiulli; Associate Professors: Carpino, Slade; Adjuncts: Harrison, Nannery.

Nine credits in philosophy are part of the core curriculum. These required courses in philosophy constitute a program which seeks to develop in the student an awareness of fundamental conceptual alternatives and of the foundations and implications of the various types of discourse. Their purpose is to make available to students conceptual instruments and sources with which to begin to effect for themselves the structuring of their intellectual experience. Only insofar as the student achieves this has the College succeeded in attaining its primary aim as a liberal arts college: the formation of minds capable of responsible intellectual self-determination.

The core requirements in philosophy consist of the following courses taken in sequence: one 100-level course; one 200-level course; and one 300- or 400-level course.

Minor

Philosophy

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The minor in philosophy is intended for students who have the desire to increase their familiarity with, and command of, the issues and literature of philosophy. The required courses for the minor are scheduled so as to be available to all students whether attending classes primarily in the day or in the evening. The minor consists of twelve credits in philosophy in addition to the nine credits taken to satisfy the core requirement in philosophy. These twelve credits are to be distributed in the following manner:

Minor Course Sequence

Credits	Courses
6	Two courses from: Philosophy 431; 432; 441; or 442
6	Two courses from: Philosophy 309; 310; 313; 326; 327; 333; 340; 350; 403; or 404
12	Total credits required

Courses

Philosophy (PHI)

PHII 101 Basic Problems in Philosophy 3 credits.

An examination at a strictly introductory level of the character of philosophical questioning. Instances chosen for treatment are from the several areas of philosophy

such as ethics, epistemology, and metaphysics, and they are studied in the context of brief selections from the writings of philosophers between antiquity and the present. Every Fall; day, evening. Every Spring, day.

Every rail; aay, evening. Every Spring, a

PHI 114 Logic 3 credits.

An introduction to philosophical inquiry through the study of the structure of validity in reasoning. The study includes: analysis of terms, propositions, arguments and their linguistic contexts; common fallacies; induction and the logical structure of scientific inquiry; the status of universals. Every Fall, day. Every Spring; day, evening.

PHI 201 Theories of Human Nature 3 credits.

An inquiry into human nature by means of the analysis of fundamental philosophical issues such as mind and body, death and immortality, perception and conception, reason and emotion, freedom and determinism, as they appear in the writings of philosphers from antiquity to the present. Prerequisite: PHI 101 or PHI 114. Every Fall, day. Every Spring; day, evening.

PHI 203 Theories of Knowledge 3 credits.

An inquiry into the nature of knowledge by means of an examination of such explanations of knowledge as empiricism, idealism, skepticism, pragmatism, and realism (in its various versions). Readings from philosophers between antiquity and the present. Prerequisite: PHI 101 or PHI 114. Every Fall; day, evening. Every Spring, day.

PHI 309 Marxism 3 credits.

Concepts, sources, backgrounds of Marxism; dialectical and historical materialism; Hegel and Feuerbach; problem of history; meaning of work; notion of superstructure; concept of revolution. *Prerequisites: PHI 101 or 114 and PHI 201 or 203. Fall 1989. Day.*

PHI 310 American Philosophy 3 credits.

Distinctive characteristics of American philosophic thought analyzed and discussed; attention to the thought of Edwards, Emerson, Royce, Santayana, Peirce, James, Mead, Dewey. Prerequisites: PHI 101 or 114 and PHI 201 or 203. Fall 1990. Day.

PHI 326 Philosophy of Science 3 credits.

An examination of the epistemological and ontological requirements of natural science. This examination is carried out by means of a consideration of the idea of science in Greek philosophy, the emergence of modern natural science in the 17th century, logical positivism's account of natural science, and the recent criticisms of the logical positivist account. Readings from ancient, modern, and contemporary sources. *Prerequisites: PHI 101 or 114 and PHI 201 or 203. Fall 1990. Day.*

PHI 327 Metaphysics 3 credits.

An inquiry into the problem of being and into the concepts in terms of which it has been elucidated; the possibility of this question. Reading from ancient, medieval, modern and contemporary philosophers. *Prerequisites: PHI 101 or 114 and PHI 201 or 203. Spring 1991. Day.*

PHI 333 Philosophical Theology 3 credits.

An examination of the main themes in Western philosophical considerations of the existence and nture of God. Classical sources, Christian influences, modern treatments. *Prerequisites: PHI 101 or 114 and PHI 201 or 203. Spring 1990. Evening.*

PHI 340 Special Problems in Ethics 3 credits.

Examination of selected contemporary and traditional ethical problems, such as abortion, sex education, euthanasia, censorship, war and capital punishment; some study of the presuppositions, instruments, and procedures of ethical analysis will be involved. *Prerequisites: PHI 101 or 114 and PHI 201 or 203. Spring 1991. Evening.*

PHI 341 Philosophy of Law 3 credits.

An inquiry into the nature of law through a study of different explanations of what

150 Philosophy

law is. This course addresses itself to the issues that have been raised concerning the connection of law to justice and of legality to morality. *Prerequisites: PHI 101 or 114 and PHI 201 or 203. Fall 1989. Day.*

PHI 350 Philosophical Issues in Language and Logic 3 credits. An examination of some of the main philosophical questions concerning language and its uses as well as the relationship between language and logic. Prerequisites: PHI 101 or 114 and PHI 201 or 203. Spring 1990. Day.

PHI 403 Moral Philosophy 3 credits.

An examination of the basic questions of moral philosophy and the positions taken up in response to them with particular attention to the question of the relationship between a given ethic and its corresponding conceptions of man and being. Readings from philosophers between antiquity and the present. Prerequisites: PHI 101 or 114 and PHI 201 or 203. Every Fall; day, evening. Every Spring, day.

PHI 404 Political Philosophy 3 credits.

A study of the fundamental concepts and problems and political philosophy. Examination of such topics as: the city, regime, state and civil society, force, power, law, authority, right and freedom. Selected readings from major political philosophers. Prerequisites: PHI 101 or 114 and PHI 201 or 203. Every Fall, day. Every Spring; day, evening.

PHI 431 Greek Philosophy 3 credits.

Close examination and analysis of representative texts in ancient philosophy with particular emphasis on Plato and Aristotle. *Prerequisites: PHI 101 or 114 and PHI 201 or 203. Fall 1990. Day.*

PHI 432 Medieval Philosophy 3 credits.

Close examination and analysis of representative texts of major figures from Christian, Arabic, and Jewish traditions; particular attention to the question of the relation between philosophical inquiry and religious belief. *Prerequisites: PHI 101 or 114 and PHI 201 or 203. Spring 1991. Day.*

PHI 441 Modern Philosophy 3 credits.

Close examination and analysis of representative texts of some of the major figures in modern European philosophy from Descartes to J.S. Mill. *Prerequisites: PHI 101 or 114 and PHI 201 or 203. Fall 1989. Day.*

PHI 442 Contemporary Philosophy 3 credits.

Close examination and analysis of representative texts of one or more of the major figures in twentieth-century philosophy. *Prerequisites: PHI 101 or 114 and PHI 201 or 203. Spring 1990. Day.*

Psychology

Chairman: Uwe P. Gielen

Professor: Gielen; Associate Professor: Anolik; Assistant Professor: Mourer;

Adjuncts: Cirillo, Fantl, Quinlan.

Major

Psychology

The department offers a major in psychology. The program combines methodological and theoretical courses with field work and the development of applied skills. In addition, opportunities are provided for individualized independent research. A major in psychology, when combined with a broad program of other courses, prepares the student for future careers in business, law, mental health and government. The program provides a solid foundation for future graduate studies at the M.A. or Ph.D. level in areas such as clinical development, experimental, industrial and social psychology, as well as counseling.

Major Course Sequence

Psychology

Credits	Courses	
42	Core curriculum, including 6 credits of Natural Science (see page 31)	
6	Foreign Language	
3	Mathematics	
32	Psychology 201; 202; 203; 212; 302; 401; 411; 420; and 470	
7-8	Two courses from: Psychology 205; 206; or 207	
6	Two courses from: Psychology 307; 312; or 409	
29-30	Free electives	
2	Health Science 100A; Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)	

128 Total credits required

Minor Course Sequence

Psychology

Credits	Courses	
9	Psychology 201; 203; and 411	
6	Two courses from: Psychology 307; 312; 313; or 409	

3 One course from: Psychology 225/Health Care 305; 314; 317; or 333/ EDS 201

18 Total credits required

Courses

Psychology (PSY)

PSY 201 General Psychology 3 credits.

General introduction to the basic concepts, methods and findings of contemporary psychology. Every semester. Day, evening.

PSY 202 Statistical Methods in Psychology 4 credits.

Intended for freshmen and sophomores. The use of statistics in psychology; descriptive and inferential techniques, prediction and tests of significance. Prerequisite: PSY 201. Corequisite: PSY 302. Lab fee. Every Fall. Day.

PSY 203 Developmental Psychology I: Child Psychology 3 credits. Human development from conception to early adolescence; examination of physical, cognitive, emotional and behavioral changes. Every semester. Day, evening.

PSY 204 Developmental Psychology II: Adolescence and Maturity 3 credits.

A study of the life cycle from puberty to maturity. Special attention is given to the problems of adolescence, early adulthood and the changing needs of the mature adult. Offered as needed.

PSY 205 Psychology of Learning 4 credits.

Major theories of learning and significant research findings in the areas of learning, memory, motivation and behavior modification. *Prerequisite: PSY 201. Three lecture and two lab hours per week. Lab fee. Every Fall. Day.*

PSY 206 Information Processing 4 credits.

Analysis of sensory and perceptual systems, information processing, thinking, states of awareness. Prerequisites: PSY 201 and 202. Three lecture and two lab hours per week. Lab fee. Offered as needed.

PSY 207 Tests and Measurements 3 credits.

The theoretical framework, underlying principles and techniques of psychological tests; tests of aptitude, achievement, interest, and personality. *Prerequisites: PSY 201 and 202. Offered as needed.*

PSY 212/CIS 212 Computers in Scientific Research 4 credits. An introduction to the computer as a scientific instrument. Basic programming, interfacing, control of laboratory equipment, binary logic, and data acquisition are considered. Three lecture and two lab hours. Lab fee. Every Spring. day.

PSY 225/HIC 305 Coping with Stress 3 credits.

Interdisciplinary course exploring theory, research, and techniques related to the management of stress. Stress reduction techniques and class exercises such as progressive relaxation, desensitization, assertiveness training, biofeedback will be

management of stress. Stress reduction techniques and class exercises such as progressive relaxation, desensitization, assertiveness training, biofeedback will be emphasized. Offered as needed.

PSY 301/HS 301 Health Counseling 3 credits.

Intended for non-psychology majors. This tearn-taught interdisciplinary course focuses on both issues and techniques of health counseling. It investigates ways in which a health professional can detect needs of clients and work cooperatively to foster better health. It explores the helping relationship's impact on health behavior. Prerequisites:

HC 101-102 and PSY 201. Offered as needed. Day, evening.

PSY 302 Experimental Psychology 4 credits.

Research methodology emphasizing empiricism, scientific manipulation and functional relations. Scientific research as a decision-making process. Prerequisites: PSY 201; PSY 212. Corequisite: PSY 202. Three lecture and two lab hours a week. Lab fee. Every Fall. Day.

PSY 307 Theories of Personality 3 credits.

A comparison of major personality theories; methods for study and evaluation of personality. *Prerequisite: PSY 201. Every Spring. Day.*

PSY 312 Social Psychology 3 credits.

Selected topics in person perception, socialization, development of attitudes and values, group processes, communication and intergroup behavior. *Prerequisite: PSY 201. Every Spring. Day.*

PSY 313 Group Dynamics 3 credits.

A practically-oriented introduction to group processes. Current views and research findings, techniques of working with groups; participation in training and skills groups; role playing; observation and analysis of the small group as a social system in a miniature society created by the students. Offered as needed.

PSY 314 Human Sexuality 3 credits.

A social-psychological approach to the study of human sexual behavior. The emphasis will be placed upon the functional aspects of sexuality. All sexual behaviors (auto-erotic, bisexual, heterosexual, homosexual, and others) will be studied from a foundation of historical, anthropological, and moral perspectives. Every semester. Day, evening.

PSY 317 Industrial and Organizational Psychology 3 credits. Psychological theories, methods, research and specific applications concerning work behavior are discussed. Topics will include selection and evaluation of personnel, training and development, leadership, work motivation, psychological conditions of work, consumer psychology and the role of psychologists in business environments. Offered as needed.

PSY 329 Psychology of Women 3 credits.

A general survey of the role of women and current modes of psychological adjustment in the face of our changing social structure. Offered as needed.

PSY 330/CJ 209 Counseling the Drug User 3 credits.

Techniques for recognizing drug users; commonly used drugs and their effects; groups, organizations, services, and individuals providing referral care and therapy; counseling techniques for the layman. Outside sources will be used to supplement presentations. Offered as needed.

PSY 333/ EDS 201 The Psychology of the Exceptional Child 3 credits. Psychological, physiological, emotional and social characteristics of deviant, disturbed, handicapped, retarded and unusually gifted children will be considered. Procedures for evaluation and assisting development of exceptional children. Offered as needed.

PSY 352, 353/REL 352, 353 Images of Human Nature in Western, Primitive, and Eastern Cultures: An Interdisciplinary Honors Seminar I, II 3 credits per semester.

Students in this seminar are exposed to conceptions of human nature as they have existed in primitive, Eastern and Western cultures. The seminar focuses both upon universal aspects of human experience and upon unique historical and cultural conceptions of human identity. These conceptions may be expressed in art, myths, literature, sacred books, philosophical treatises, etc. and are in various ways

reflected in day-to-day living. The seminar is team-taught, stresses broad interdisciplinary perspectives and emphasizes original readings. Visits to plays, operas, movies and museums form an integral part of the seminar. For students in Honors Program only. Offered in 1989-91. Day.

PSY 401 Experimental Psychology II (formerly PSY 305) 4 credits. Research techniques applies in the laboratory and in the field. Students conduct and write up empirical research. Prerequisites: PSY 201, 202, 212, 302. Three lecture and two lab hours per week. Lab fee. Every Spring. Day.

PSY 409 Abnormal Psychology 3 credits.

Analysis of the origin, behavioral and emotional patterns, social relevance and treatment of deviant human behavior. Prerequisites: PSY 201; 213. Every Fall. Day.

PSY 411 History and Systems of Psychology 3 credits.

The history of psychology and its enduring problems, major figures and schools of thought. An advanced course designed to give an overall, long-term perspective. *Prerequisite: Four Psychology courses. Offered as needed.*

PSY 415 Clinical Psychology 3 credits.

A survey course dealing with the field of clinical psychology. The application of psychotherapeutic techniques will be stressed along with clinical testing in personality diagnosis and research methodology in clinical psychology. *Prerequisites: PSY 201 and 409. Offered as needed.*

PSY 420 Applied Psychology 4 credits.

Supervised experience in selected clinical, social, educational or industrial settings; participation in institutional staff meetings and training sessions. Application of theoretical principles to practical experience. Open to junior or senior psychology majors with permission of the instructor. Two lectures and six hours of supervised placement per week. Every Fall, day.

PSY 421, 422 Field Experience in Psychology 1-4 credits per semester. Observation and supervised experience in selected setting. *Prerequisite: PSY 420 or permission of the department chairman or instructor. Day.*

PSY 455, 456 Independent Research in Psychology I, II 3 credits per semester.

Individual investigation into some topic of research in psychology under the direction of a faculty member of the department, with approval of department chairman only. *Prerequisite: PSY 401. Day.*

PSY 470 Seminar in Psychology 3 credits.

The course will cover a number of selected topics in psychology. Topics will be chosen to reflect both the interest of the students and current areas of concern in psychology. Students will be required to complete a major project in the area of their choice. *Prerequisite: Four Psychology courses. Every Spring. Day.*

Religious Studies

Chairman: Gerald A. Largo

Professor: Largo; Adjuncts: Nash, Pedersen, Royer

As a liberal arts college, St. Francis is committed to the task of providing its students with the opportunity for a multi-faceted and liberating reflection on human experience. In this context, the function of the Religious Studies Department includes the following: (1) to enable students to understand and appreciate the religious beliefs of all people within the context of their cultural and historical development; (2) to provide academic opportunities for students to come to maturity of thinking and living, individually and socially, as persons involved in a pluralistic society; and (3) to contribute a religious component to the academic attempt to integrate human thinking and experience.

The department implements this role in three ways: (1) through the core curriculum course required of all students; (2) through electives open to all students; and (3) through a minor in Religious Studies for those who desire a more concentrated program.

Minor

Religious Studies

A minor concentration consists of a group of courses amounting to at least 18 credits.

Minor Course Sequence

Religious Studies

Credits	Courses
9	Religion 101; 202 or 203; and 204 or 205
9	Any other Religion courses
18	Total credits required

Courses

Religious Studies (REL)

The core curriculum requirement in Religious Studies is satisfied by completing one of the following courses: REL 101; 202; 203; 204; 205; 212; or 234.

REL 101 Survey of World Religions 3 credits. An introductory study of the religious beliefs and practices

An introductory study of the religious beliefs and practices in pre-literate societies, in the religions originating in India (Hinduism, Jainism, Buddhism, Sikhism), in China and Japan (Confucianism, Taoism, Shinto), and in the Middle East (Zoroastrianism, Judaism, Christianity, Islam). Every semester, day. Spring 1990, evening.

REL 202 Central Themes of the Old Testament 3 credits

A study of representative selections from the historical, legal, wisdom and prophetic literature of the Old Testament. Literary and historical criticism will be used to determined basic elements of Hebrew faith and practice. The period from the Exodus to the Restoration under Ezra and Nehemiah will be emphasized. Every Fall. Day, evening.

REL 203 Central Themes of the New Testament 3 credits.

A study of representative selections from the different types of literature found on the New Testament. Literary and historical criticism will be used to determine basic elements of the faith and practice of the earliest Christians. The synoptic gospels, the Johannine literature, the letters of Paul, and the book of Acts will be emphasized. Every Spring. Day, evening.

REL 204 Contemporary Moral Issues 3 credits.

Studies the views of prominent thinkers on selected moral problems of our time that find support within the Christian community today; reflections on economic injustice, truth in government, medical-moral issues; student participation and discussion of additional moral questions. *Every Fall. Day.*

REL 205 Moral Values and Health Issues 3 credits.

A study of contemporary religious thought concerning moral issues which arise in the practice of the health professions. Bio-medical procedures, such as abortion, sterilization, organ transplants, and euthanasia, as well as the bioethical aspects of genetic experimentation, fetal engineering, extrauterine insemination, cloning, the allocation of scarce resources, and behavior modification are examined. *Every Fall. Evening*.

REL 212 The Christian Tradition 3 credits.

A critical evaluation and analysis of selected themes of the Christian religion. Included will be a study on the major historical and doctrinal developments of Christianity and the Christiani's place in the modern world. *Every Spring. Day.*

REL 234 The American Religious Experience 3 credits. An inquiry into the mutual interaction of religion and American culture; the origin of distinctly American religious leaders and uniquely American religious expressions. Spring 1990, day. Spring 1991, evening.

REL 305 Marriage 3 credits.

A study of the biblical, historical, and contemporary views of marriage in the Judaic Christian tradition with application to modern cultural and psychological dimensions of human relationships. Consideration also will be given to modern challenges to the viability of monogamy and permanent commitment, as well as to the meaning of divorce and annulments. *Every Spring. Day.*

REL 352, 353/PSY 352, 353 Images of Human Nature in Western, Primitive, and Eastern Cultures: An Interdisciplinary Honors Seminar I, II 3 credits per semester.

Students in this seminar are exposed to conceptions of human nature as they have existed in primitive, Eastern, and Western cultures. The seminar focuses both upon universal aspects of human experience and upon unique historical and cultural conceptions of human identity. These conceptions may be expressed in art, myths, literature, sacred books, philosophical treatises, etc. and are in various ways reflected in day-to-day living. The seminar is team-taught, stresses broad interdisciplinary perspectives and emphasizes original readings. Visits to plays, operas, movies and museums form an integral part of the seminar. For students in College Honors Program only. Every year.

REL 361 Religion, Witchcraft, and the Occult 3 credits.

A study of the historical development of witchcraft and its relation to religion; the

aims, functions, and forms of divination and magic; occult practices past and present. Offered as needed.

REL 400 Seminar 3 credits.

The course deals intensively with specific subjects that will be announced. May be taken more than once. Offered as needed.

REL 401 Independent Study 3 credits.

The course is a directed investigation of some topic of research in religious studies selected by the student. Open to qualified juniors and seniors who have completed at least three courses (nine credit hours) in religious studies. Prerequisite: written permission of the chairman. May be taken more than once. Every semester. Day, evening.



Sociology and Criminal Justice

Professor Emeritus: O'Hern; Professor: Tawab; Adjuncts: Capela, Gussow, Rackmill.

Sociology is a dynamic field of contemporary study which seeks to analyze and understand societal structure and functioning. The field contributes substantially to the goals of liberal education. It provides the student with knowledge about society, and also with insight and understanding into society.

Major

Sociology

The sociology major is recommended both for students seeking the traditional liberal arts degree, and also for those students seeking an interdisciplinary program with emphasis on the contemporary urban situation. It trains the student to think analytically and critically. It fosters the values of competence and integrity which are necessary for moral citizenship. At the same time, the sociology curriculum provides an interdisciplinary program with emphasis on the contemporary urban situation. From this perspective, it is recommended for those students planning to enter the fields of law, law enforcement, community organization, probation and parole, and social service. The sociology curriculum, through its urban emphasis, assists students in making occupational choices. Field experience with academic credit is available to qualified students.

Major Course Sequence

Sociology

Credits	Courses
42	Core curriculum (see page 31)
6	Economics 201 or 202; and 308
6	Foreign Language or two courses in Computer Information Systems
6	Mathematics or Science*
3	Political Science 304 or 306 or Sociology 316
6	Psychology 201 and 312
21	Sociology 301; 311; 400; 404; 406; and 303A-303B or 308A-308B
9	Sociology electives 300/400 level
27	Free electives
2	Health Science 100A; Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)

128 Total credits required

^{*}If mathematics is used to satisfy the core curriculum requirement, then science must be selected or vice versa.

Minor

Sociology

Sociology has relevance for almost every other academic major. In the fields of business and accounting, graduates are expected to have some sociological sophistication. The other social and behavioral sciences—economics, political science, psychology—require basic sociological knowledge. Students aspiring to the world of communications also need more than a passing understanding of today's society. The sociology minor aims to provide these students with a concentration in sociology to complement their chosen major field.

Minor Course Sequence

Sociology Credits Courses 9 Sociology 203; 301; and 311 or 404 6 Two elective courses to be selected in consultation with Sociology Department faculty

Associate in Applied Science

Total credits required

Criminal Justice

15

The preservation of peace, the protection of life and property, the safe-guarding of civil liberties, the maintenance of social order and domestic tranquility are all essential to the survival of free society. The objectives of the criminal justice curriculum are to instruct the student in the systems and institutions of American society which function to implement these values, and to nurture respect for them. For both majors and non-majors, this curriculum aims to instruct concerning police, courts, probation, parole, institutionalization, i.e., the strengths and weaknesses of the American criminal justice system. Students who elect to pursue this degree often have vocational goals which include law and/or law enforcement, corrections in general, courts-related occupations, or private security. While this curriculum does not train students for specific occupations, it does provide a desirable background for students with such aspirations.

Associate of Applied Science Course Sequence

Criminal Justice

Credits	Courses
30	Core curriculum (see page 32)
6	Criminal Justice 200 and 201
9	Criminal Justice electives
3	Political Science 304; 306; or 405

Sociology and Criminal Justice

Psychology 201 and 312

Sociology 301

Free electives

Total credits required

Courses

Sociology (SOC)

SOC 203 Principles of Sociology 3 credits.

An analysis of the basic structure and dynamics of society; social interaction, social organization, social change, social processes; a summary of ideas of seminal sociologists. Every semester. Day, evening.

SOC 301 Social Problems 3 credits.

An inquiry into the nature of social problems, both causes and consequences, within complex industrial society, and in the perspective of social change. *Prerequisite: SOC 203. Every Fall, day. Every Spring, evening.*

SOC 303A/CJ 200 Criminology 3 credits.

The sociological approach to the study of crime causation and to patterns of criminal and delinquent behavior in contemporary society. Fall 1990. Day.

SOC 303B/CJ201 The Sociology of Corrections 3 credits. The study of the structure and functioning of the American system of corrections; law enforcement, courts, institutions, probation and parole. Spring 1991. Day.

SOC 305 Social Anthropology 3 credits.

An inquiry into the concept of culture as applied to both simple and complex societies; the ethnology of pre-literate peoples with emphasis on social, economic, and political organization. *Prerequisite: SOC 203. Offered as needed.*

SOC 308A Introduction to Social Work 3 credits.

Designed to introduce students to the field of social work; deals with the history and philosophy of social work; analyzes the three major areas of social work; case work, group work, and community organization; describes the major programs to special client groups: families, children, the elderly, the mentally ill, the handicapped, etc. *Prerequisite: SOC 203. Fall 1990. Day.*

SOC 308B Social Work Practicum 3 credits.

An intensive course in which the principles of social work are developed through careful examination of each participant's actual functioning and experience. In addition to the weekly class, each student of the practicum will receive a regular individual consultation. *Prerequisites: SOC 203 and SOC 308A. Spring 1991. Day.*

SOC 309 Sociology of Communication 3 credits. Primary and secondary communication systems; language in socialization, social organization, and social control; theories of communication; modern mass communication media; structure, content, and effects. Prerequisite: SOC 203. Every Fall. Day.

SOC 310/CJ 205 Child Welfare 3 credits.

Traces the development of rights of the child in relation to parental rights; explores the methods of care of dependent and neglected children in their own homes, foster

homes, institutions; reviews the adoption process and the social trends toward integration in family and child care. *Prerequisite: SOC 203. Fall 1989. Day.*

SOC 311 Social Research Methods 3 credits.

Preparation of a research proposal. Formulation of the problem; survey of relevant literature; definition of concepts; preparation of research design and research tools. *Prerequisite: SOC 203. Fall 1990. Day.*

SOC 312/CJ 206 Sociology of Minority Groups 3 credits. The analysis of interaction among racial, ethnic, and religious groups in the United States; the study of structure, dynamics, and problem aspects. Offered as needed.

SOC 316 Sociology of Public Administration 3 credits.

The course is designed to give the students a clear account of the field of administration at all levels of government; reviews the rise of the bureaucratic state, its impact on administrative theory and practice, and the nature of the new public bureaucracy. Special attention is given to the political environment and its pressure upon the public administrator. *Prerequisite: SOC 203. Offered as needed.*

SOC 400 Sociology Seminar 3 credits.

A coordinating seminar for senior sociology majors only, for the purpose of integrating sociological knowledge and for considering some of sociology's scientific status, the place of values in the study of society, the relationship of sociology to other academic fields. *Every semester. Day.*

SOC 402 Sociology of the Family 3 credits.

The structure and functions of the family; comparison of families in primitive and industrial societies in order to demonstrate the nature of problems associated with institutional change and civilization processes. *Prerequisite: SOC 203. Offered as needed.*

SOC 403 Industrial Sociology 3 credits.

Traces the development of the industrialization process and its impact on the social organization of work; surveys the array of industries constituting a modern economy, and the distribution of occupations within each; examines the corporation as a social institution, trade associations, unions, cooperatives, consumer organizations, and the major movements seeking to influence business behavior from within and without; forecasts directions of development. *Prerequisite: SOC 203. Offered as needed.*

SOC 404 Theory and History of Sociology 3 credits.

A systematic survey of the growth of sociological theory; a study of influential individuals and representative schools from Auguste Comte to the present day. *Prerequisite: SOC 203. Fall 1989. Day.*

SOC 406 Sociological Statistics 3 credits.

Statistical techniques most commonly used in the analysis of sociological data. Prerequisite: SOC 203. Offered as needed.

SOC 408 Complex Organizations: Structure and Process 3 credits. The course covers all types of organizations: business, government, social welfare, education, medicine, voluntary organization, etc.; examines how structure contributes to processes such as power and conflict, leadership and decision-making, communication and change, etc.; shows how organizations interact with each other and with society in general. *Prerequisite: SOC 203. Offered as needed.*

SOC 500 Independent Studies 3 credits.

Individual research or field work under the direction of a faculty member with the approval of the department chairperson only. Offered every semester as students qualify. Day.

Courses

Criminal Justice (CJ)

CJ 200/SOC 303A Criminology 3 credits.

The sociological approach to the study of crime causation and to patterns of criminal and delinquent behavior in contemporary society. Fall 1990. Day.

CJ 201/SOC 303B Sociology of Corrections 3 credits.

The study of the structure and functioning of the American system of corrections; law enforcement, courts, institutions, probation and parole. *Spring 1991. Day.*

CJ 202 Problems of Urban Law Enforcement (formerly CJ 461) 3 credits.

The role of the law enforcement officer and agency in the city of the 80's; the limitations and the extent of community cooperation necessary for proper law enforcement. Offered as needed.

CJ 203 Courts Management (formerly CJ 465) 3 credits.

Training in proper reading of documents, setting up procedures, proper handling of records and documents received, structure of courts system, and management function of various divisions. Offered as needed.

CJ 204 Prison Environment (formerly CJ 466) 3 credits.

Organization and functions of prison system; role of the corrections officer in the rehabilitative process; modern thought concerning prison reform; recent prison events analyzed and discussed; character of the modern prisoner; prisoner's rights and officer's rights and duties. Offered as needed.

CJ 205/SOC 310 Child Welfare 3 credits.

Traces the development of rights of the child in relation to parental rights; explores the methods of care of dependent and neglected children in their own homes, foster homes, institutions; reviews the adoption process and the social trends toward integration in family and child care. *Prerequisite: SOC 203. Fall 1989. Day.*

CJ 206/SOC 312 Sociology of Minority Groups 3 credits.

The analysis of interaction among racial, ethnic, and religious groups in the United States; the study of structure, dynamics, and problem aspects. Offered as needed.

CJ 208 Supervision and Administration of Police (formerly CJ 471) 3 credits.

A consideration of supervisory problems within a police organization and the implementation of sound principles of human relations and supervisory techniques for effective police performance; analysis of administration or large police departments, and of line, staff and auxiliary functions, the interrelationships and interdependence of each. Offered as needed.

CJ 209/PSY 330 Counseling the Drug User (formerly CJ 473) 3 credits.

Techniques for recognizing drug users; commonly used drugs and their effects; groups, organizations, services, and individuals providing referral care and therapy; counseling techniques for the layman. Offered as needed.

CJ 210 Forensic Science (formerly CJ 476) 3 credits.

An introduction to the problems and techniques of scientific criminal investigation with emphasis on the value of various scientific aids to the officer, detective, or field investigator. This course will examine techniques used in investigating major criminal cases such as kidnapping, arson, bombings, organized crime. Offered as needed.

CJ 211 Security and the Private Sector 3 credits.

An introduction to the security field. Overview of school and campus security, hospital security, housing security, etc. Security organization, policies, and personnel are explored. Emphasis on creating security awareness, relations with other organizations and security's place in the corporate structure. Offered as needed.

CJ 212/AV 355 Aviation Security 3 credits.

An overall review of the security measures required in the aviation industry. Topics include: regulations, passenger screening and protection, airport and fixed-base operator security, theft and pilferage protection, and security plan protection. *Fall 1990. Day*.

CJ 213 Organized Crime 3 credits.

Organized crime defined; its history and politics. Investigation and prosecution strategies; criminal defense and sentencing. Fall 1989. Day.

CJ 214 Juvenile Justice 3 credits.

The study of the nature, prevalence, and causality of juvenile delinquency; of predelinquent and postadjudication intervention; of community treatment and institutionalization. *Fall 1989. Evening*.

CJ 215 Probation and Parole 3 credits.

The history and legal foundations of probation and parole; supervision; terms and conditions; and the administration and organization of probation and parole system. Offered as needed. Day.

CJ 216 White Collar Crime 3 credits.

The study of occupational, corporate, and computer crime; their history and prevalence; investigation and prosecution strategies. Offered as needed.

CJ 217 Rights of the Accused 3 credits.

A consideration of the constitutional, statutory, and procedural rights of the accused in the matters of lawful arrest, fair trial, just sentence, and the rights of the victim in the criminal justice structure. Offered as needed.



Bachelor of Science in Special Studies

The Bachelor of Science in Special Studies degree is designed for the student seeking a flexible program of study tailored to individual needs. Students who are planning a career change or who are seeking to enhance previously acquired skills with academic attainment will find the opportunity to "tailor make" a curriculum especially beneficial.

At least half of the total 128 credits must be in the liberal arts and sciences. This requirement can be met through transfer credit, credit for Experiential Learning, or through study at St. Francis. Each student develops, with the help of an educational advisor, an individualized interdisciplinary program drawn from various academic departments with no more than 21 credits in any one department.

Candidates for admission should submit approximately two years, or 60 academic credits, of postsecondary education. Transfer credits will be awarded in accordance with college policy as approved by the faculty.

Students who have substantial experience through professional, community and personal endeavors may apply for credits through the Experiential Learning program.

Bachelor of Science Course Sequence

Special Studies

Credits	Courses
21	Core curriculum (see page 32)
42	Liberal Arts electives*
63	Free electives**
2	Health Science 100A; Health Science 100B/Physical Education 100A; or Physical Education 100 (B-H)

128 Total credits required

^{*}Credits must be earned at St. Francis College or other accredited college or university.

^{**}Credits may be earned at other institutions, through Experiential Learning or at St. Francis College.

Preparation for Professional Study

Pre-law

Law schools do not prescribe a definite pre-law curriculum for prospective students. Therefore, students will have to make their own selection of courses in undergraduate school which will assist them in achieving their goal. In choosing both courses and a major field of study, students should remember that law schools consistently indicate that they want applications and students who can think logically and express themselves clearly and cogently both orally and in written form.

The Law School Admissions Test is required of all applications by most law schools. This examination is administered by the Educational Testing Service, Princeton, NJ. It is suggested that students interested in studying law seek an interview with Pre-Legal Advisors, Dr. Arthur Hughes or Dr. Frank Sorrentino in the History, Political Science, and Social Studies Department. Law school material and catalogues may be found in that department's office.

Pre-medical, Pre-dental, and Pre-veterinary Medicine

It is advised that students contemplating admission to the study of medicine, dentistry, or veterinary medicine obtain the baccalaureate degree. Students should consult the catalogues of the professional schools they are interested in attending in their freshman year and fulfill academic prerequisites. Any junior or senior who intends to apply to a professional school must submit to a personal interview at a meeting of the Committee on Recommendations to Professional Schools. Recommendations may be obtained only at these times. Exact dates of such meetings will be posted.

Students are advised to take the appropriate professional school admission test in the spring of their junior year.

Pre-podiatry

Podiatry is a specialty which is concerned with the diagnosis, treatment and prevention of problems of the lower limb. St. Francis College, in an affiliation with the New York College of Podiatric Medicine, offers an accelerated Bio-medical Program. This program will allow students to earn a B.S. degree in Bio-medical Science from St. Francis College and a D.P.M. (Doctor of Podiatric Medicine) from the New York College of Podiatric Medicine in six years. During their two years of study at St. Francis College, students will complete liberal arts and science requirements and, if accepted, transfer to NYCPM, where they will receive clinical training and gradually, over the span of the next four years, assume responsibility for the care of patients.

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