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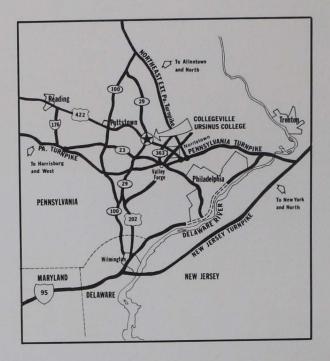


# URSINUS COLLEGE CATALOG

1978-1979

CATALOG VOLUME LXXVI

**IANUARY 1978** 



Ursinus College is located in Collegeville, a borough in Montgomery County, Pennsylvania, twenty-five miles northwest of Philadelphia and just a few miles from the Norristown and Valley Forge exits of the Pennsylvania Turnpike. U.S. Route 422 and Pennsylvania State Highway 29 intersect at Collegeville.

Vol. LXXVI

January 1978

#### **URSINUS COLLEGE CATALOG**

Published by Ursinus College, Collegeville, Penna. 19426, Telephone (215) 489-4111.



## URSINUS COLLEGE CATALOG

1978-1979

CATALOG NUMBER

For The

ONE HUNDRED AND NINTH ACADEMIC YEAR

COLLEGEVILLE, PENNSYLVANIA 19426 JANUARY 1978

#### CORRESPONDENCE WITH URSINUS COLLEGE

Communications with the College should be addressed to the appropriate administrative officer.

GENERAL COLLEGE MATTERS

The President, Vice President for Planning and Administration

DEVELOPMENT

Director of Development

PUBLICITY, PUBLICATIONS
Public Relations Director; Alumni Secretary

ACADEMIC STANDING OF STUDENTS AND REQUESTS FOR TRANSCRIPTS
The Dean of the College

ADMISSIONS The Dean of Admissions

FINANCIAL AID

The Financial Aid Officer

EVENING SCHOOL

The Director of the Evening School

PAYMENT OF BILLS The Treasurer's Office

STUDENT EMPLOYMENT
The Financial Aid Officer

PLACEMENT OF GRADUATES

The Director of Placement

STUDENT LIFE

The Dean of Men; The Dean of Women

SUMMER SCHOOL

The Dean of the College <sup>5</sup>

ALUMNI AFFAIRS Alumni Secretary

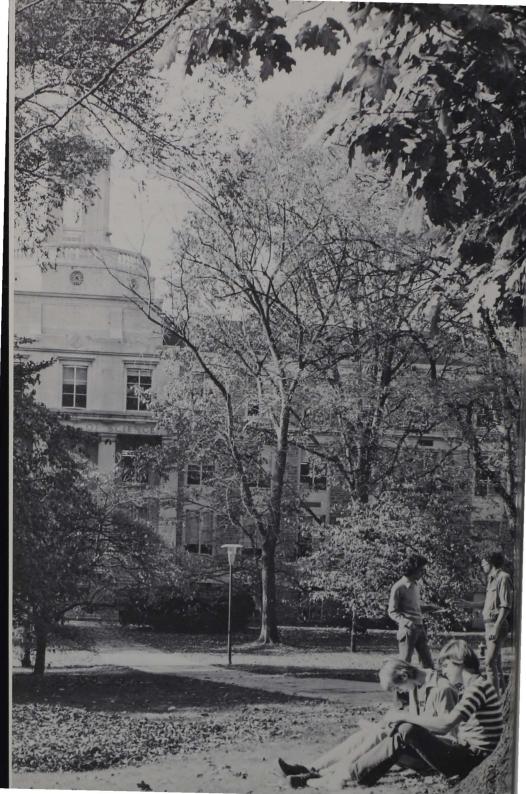
> The Post Office address is Collegeville, Pennsylvania 19426 The College telephone number is 489-4111 (Area Code 215)

Visitors to the College are welcome. Student guides are available when the College is in session. The offices of the College are open Monday through Friday 9-12 and 1-5. The Office of Admissions, located in the Administration Building (Corson Hall), is open on Saturdays 9-12, but closed on Saturdays from June 15 to Labor Day. Applicants for admission are expected to write for an appointment.

Information regarding highway routes to Collegeville will be found elsewhere in the Catalog.

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#### THIS IS URSINUS

#### THE COLLEGE IN BRIEF

Ursinus College is an independent, four-year liberal arts college with a tradition of academic excellence reaching back 109 years. It has about 1100 students, 60 per cent of whom are men. Nearly 900 students are residents in College dormitories. The others live at home and commute from surrounding areas.

Majors are offered in 14 departments, ranging from the classics to sciences. Under a curricular program called The Ursinus Plan, students are given the opportunity to attain academic breadth and still concentrate upon a major.

More than half of the members of the Faculty hold doctoral degrees. Faculty members, who engage in research, are committed first to teaching. Learning takes place in a friendly but challenging environment.

While the campus of some 125 acres lies beyond the metropolitan area, it is less than an hour from central Philadelphia by high-speed expressway.

In the past decade the physical facilities have undergone a dramatic improvement with the addition of a men's dormitory, library, life science building, administration building and physical education facilities.

Seven of every ten students of the College enter graduate schools. Graduates are leaders in civic and cultural life, and they are found in key positions in industry and the professions. Wherever they are, they bring a special attitude toward life, at once critical and creative, that marks them as Ursinus men and women

Ursinus College is related to the United Church of Christ and has been church-related since its founding in 1869. The College was established by pastors and laymen of the German Reformed Church, later known as the Reformed Church in the United States, from 1934 to 1957 known as the Evangelical and Reformed Church, and since 1957 known as the United Church of Christ.

#### **HOW URSINUS BEGAN**

The beginning of educational work on what is now the campus of Ursinus College dates back to the construction of a primitive schoolhouse built of logs two centuries ago. The ancient building was razed in 1832 when Todd's School was built in the town of Perkiomen Bridge, now Collegeville. In 1848 Freeland Seminary was opened on a tract adjacent to Todd's School. During the following two decades many hundreds of young men were educated here.

In 1867 a group of men, members of the German Reformed Church, actuated by a desire to serve the interests of higher education and of evangelical Christian religion, laid plans to establish a college where, to quote their words, young men could be "liberally educated under the benign influence of Christianity." They chose as the name of the College that of the distinguished sixteenth-century scholar and reformer, Zacharias Ursinus of the University of

Heidelberg. In 1869 the charter was granted by the Legislature of Pennsylvania. The buildings of Freeland Seminary were bought, and instruction was begun on September 6, 1870. Women were admitted to the College for the first time in 1881.

Coincident with the founding of the College was the establishment of a preparatory department as a successor to Freeland Seminary. The preparatory school was called Ursinus Academy and was operated as such until 1910, when it was discontinued.

#### **COLLEGE PRINCIPLES AND MISSION**

Ursinus College is a Christian, coeducational, liberal arts college which seeks to help the student to understand and to emulate excellence in scholarship and in conduct. Although in recent decades the College has extended its work to include the preparation of men and women for a variety of professions, the College continues to emphasize the fact that however varied and specialized the changing needs of the day, the fundamental needs of man remain constant. Each student, whatever his field of specialization, is required to study those subjects which are the core of our cultural heritage.

The mission of Ursinus College is to develop independent and responsible individuals who are prepared for a creative and productive role in a changing world through a program of liberal education that cultivates the following:

- (1) Familiarity with the subject matter and methods of the major divisions of learning, combined with intensive knowledge of at least one major discipline.
- (2) A facility for making independent and responsible value judgments.
- (3) A spirit of inquiry and intellectual flexibility.
- (4) Critical, logical and imaginative thinking.
- (5) A heightened understanding of human nature, enlarged by compassion and moral obligation.
- (6) Ideals of morality and service consonant with the Christian character.
- (7) A comprehension of our natural and social environment and our cultural heritage.
- (8) A sense of sharing in a community enterprise.

Ursinus College does not practice discrimination on the basis of sex, race, religion, color, creed or national origin in matters of admission, educational programs or activities, housing, financial aid, employment or employee benefits. Title IX requires that it not discriminate on the basis of sex. Title IX of the Educational Amendments of 1972 is a federal law designated to eliminate sex discrimination in educational programs and activities. The law provides that "no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education programs or activity..." Any person with a complaint regarding discrimination on the basis of sex is invited to make the complaint known to the Title IX Coordinator, Richard P. Richter, President of Ursinus College, Room 238, Corson Hall, 489-4111, Ext. 212.

Ursinus College complies with Section 504 of the Rehabilitation Act of 1973,

as amended, which provides that "no otherwise qualified handicapped individual...shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Any person with a complaint regarding discrimination on the basis of handicap is invited to communicate with Richard P. Richter, President of Ursinus College, Room 238, Corson Hall, 489-4111, Ext. 212.

Students at Ursinus share the freedom of inquiry and the respect for the individual which are at the heart of a good liberal education. They also share the responsibility for maintaining the order and civility needed for learning and for personal growth. The College expects that when a student decides to enroll, he will abide by all the rules of the College. Should a student find that he cannot willingly obey the rules, the College expects that he will wish to withdraw. The Dean's Office will assist any such student in good standing to transfer to a college of his choosing.

Ursinus College complies fully with the "Family Educational Rights and Privacy Act of 1974." The guidelines adopted by the College and a copy of the Act are available for inspection in the Office of the Dean of the College during regular business hours.

The College reserves the right, through its established procedures, to modify the requirements for admission and graduation; to change the arrangement or content of courses, the texts and other materials used, the tuition and other fees; to alter any regulation affecting the student body; to refuse admission or readmission to any student at any time, or to require the withdrawal of any student at any time, should it be deemed in the interest of the College or of the student.

Ursinus College is a member of the National Association of College Admissions Counselors and subscribes to the Statement of Principles of Good Practice.

#### **CULTURAL ENVIRONMENT**

Students at Ursinus have the advantages of living in the country, and at the same time they are close enough to New York and Philadelphia to have access to such additional opportunities for culture as the symphony orchestra, grand opera, legitimate theatres, museums, lectures, and exhibits.

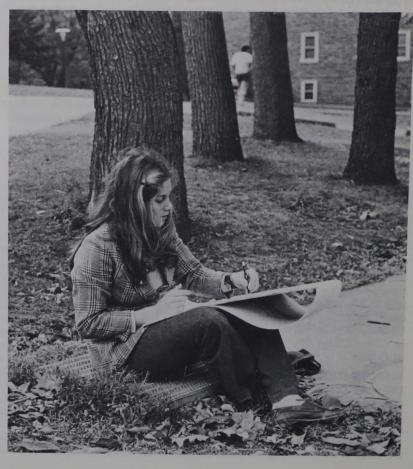
Ursinus is located in the heart of a region which is rich in historical tradition. In Colonial days this region was the center of the cultural and political development of America.

#### **ACCREDITATION**

Ursinus is a member of the Association of American Colleges and is on the approved list of the Middle States Association of Colleges and Secondary Schools, the American Association of University Women, the American Chemical Society, and has been given program approval by the Department of Education of the Commonwealth of Pennsylvania for the certification of teachers.

#### DEVELOPMENT

In July 1976, Ursinus began a four-year development program, AD-VANCE URSINUS 76/80, with a minimum goal of \$4,400,000. The purpose of the fund-raising effort is to increase the endowment and fund other improvement projects. It is led by a committee of the Board of Directors. The new program follows two earlier development campaigns, the All-Ursinus Anniversary Drive (1967-1970) and the Century II program (1970-1975).



#### STUDENT LIFE ON CAMPUS

Student life on campus is a kaleidoscope of activities, some formally planned by the many student organizations, others generated by individual students with common interests. The College Union gives coherence and momentum to student social activities. Through its all-student Program Board, the College Union offers a varied cultural, social and recreational program. The College Union serves as a unifying force in the lives of students and encourages an enduring regard for and loyalty to Ursinus. To bring even greater effectiveness to the non-curricular program, a special task force on student life was created to make recommendations during the 1977-78 academic year.

#### **RELIGIOUS LIFE**

Voluntary worship services and other religious programs are held on the campus under the direction of the Chaplain of the College. Student religious life centers in the Meditation Chapel, a convenient meeting place for worship and social gatherings in the newly restored Bomberger Hall.

Students are encouraged to attend services on Sunday in the church of their own choice.

#### MEDICAL SERVICE

Resident students are entitled to ordinary medical care for minor accidents and ailments contracted while enrolled at the College. All care for the sick is under the direction of the College physicians and their decisions concerning the disposition of cases are final. The College reserves the right to enforce quarantine, and to require the removal from the campus of students who require extraordinary care. Transportation to home or hospital is the student's responsibility.

College physicians will consult with students in the College Dispensary during regular office hours and will visit patients regularly who are confined to the infirmary where bed care is provided for up to six days per semester. Bed care in excess of six days in a semester will be charged for at the rate of \$15.00 per day.

Students requiring allergy injections must present a signed permission slip from their personal physician and from their parents. A charge of \$0.50 will be made for each allergy injection administered by infirmary personnel. Only medication prescribed by licensed physicians will be administered.

Students are responsible for the cost of laboratory tests, x-rays and prescription medications not carried by the College infirmary.

Regular infirmary hours are from 8:00 A.M. to 4:00 P.M. on weekdays. Nurses are available for emergency care 24 hours a day. Except for extreme emergencies the student seeking medical attention is responsible for reporting to the infirmary for treatment. When emergency treatment is required, the College will make every effort to provide it. The cost of treatment by physicians and nurses not on the College staff is to be borne by the student.

#### **ROOMS AND MEALS**

Pleasant community life is emphasized at Ursinus. Students who are not living in their own homes are required to room at the College and to take their meals in the College dining rooms.

Each resident student supplies his own towels, pillow, two pairs of sheets for a single bed, mattress protector, a pair of pillow cases, a pair of blankets, and a bedspread. Linen rental service is available

Students, except those whose presence is needed for service or attendance at commencement, are required to vacate their rooms immediately following the second-term examinations.

#### **ATHLETICS**

Ursinus recognizes the physical, social, and moral benefit derived from athletic activity and accordingly offers a well-balanced sports program open to all. Men's intercollegiate competition takes place in football (varsity and junior varsity), basketball (varsity and junior varsity), soccer (varsity and junior varsity), wrestling (varsity), swimming, cross country, golf, baseball (varsity and junior varsity), track and tennis. In addition to this intercollegiate program, intramural games are played. Intramural athletics for men include touch football, basketball, volleyball, wrestling, softball, water polo, track and tennis. Club programs are sponsored in indoor track, sailing, skiing, outing activities, karate and judo.

For women students, the College supports intercollegiate competition in hockey (varsity, junior varsity, third, and fourth teams), basketball (varsity, junior varsity, third, and fourth teams), softball (varsity and junior varsity), tennis (varsity and junior varsity), swimming (varsity and junior varsity), lacrosse (varsity and junior varsity), badminton (varsity and junior varsity), gymnastics and volleyball. The intramural program provided additional recreational opportunities in tennis and water polo with inter-dorm competition in volleyball and table tennis. Club programs are sponsored in dancing, sailing, skiing, and outing activities.

#### **ORGANIZATIONS**

Students find many opportunities for education and enjoyment through a large number of organizations. All are approved by the Faculty and are supervised by the Committee on Student Activities and the Director of Student Activities. In addition, members of the Faculty serve these groups as advisers. Student life on

campus is governed by the Ursinus Student Government Association under the direction of the Dean of Men and the Dean of Women. Members of the student governing organization are elected by the student body.

Numerous religious and social activities are planned and sponsored by religious groups under the direction of student leaders as well as by the administration of the Campus Minister.

Other organizations stimulate the interest of students in particular areas of study or in future occupations. Among them are the Brownback-Anders Pre-Medical Society, the Beardwood Chemical Society, the Spanish Club, the Haines-Barnard Pre-Legal Society, G. Leslie Omwake Education Club, Socratic Club, National German Honorary and Social Fraternity, Psychology Club and the Economics Club. Interest in athletics and campus spirit is fostered by the Women's Athletic Association, the Varsity Club, and the Spirit Committee. Psi Chi, the national honor society in psychology, and an affiliate of the American Psychological Association and the Association of College Honor Societies, honors psychology majors whose record is outstanding. Outstanding junior men may be elected to Cub and Key and junior women to the Whitians. Campus Gold is made up of a group of students who work on service projects on the campus and in the community.

A large and varied program of dramatics is sponsored and carried out by Protheatre, which presents two major productions a year in addition to various group productions. There is an Ursinus chapter of Alpha Psi Omega, a national honorary dramatics fraternity.

Music plays a large part in the life at Ursinus. Choral music is represented by the Meistersingers, which offers concerts on and off campus, including a one-week tour each year; the Ursinus College Choir, which offers a wide variety of literature from popular to major works, and whose annual presentation of Handel's Messiah is an outstanding musical event each year; and I Madrigalisti, a select, special-interest group. Instrumental music is offered by the College Band, both marching and concert, and by the Chamber Orchestra. Most groups include non-student members of the Ursinus community. Finally, there is a chapter of Pi Nu Epsilon, the national honorary music fraternity.

There are 12 local social organizations on the Ursinus campus. The fraternities are Sigma Rho Lambda, Zeta Chi, Alpha Phi Epsilon, Delta Mu Sigma, Beta Sigma Lambda, Delta Pi Sigma, and Alpha Phi Omega, the national service fraternity. The sororities are Omega Chi, Alpha Sigma Nu, Kappa Delta Kappa, Phi Alpha Psi, and Tau Sigma Gamma.

#### STUDENT COMMUNICATIONS

The Ursinus Weekly is the Ursinus newspaper. It is managed by a Board of Control consisting of student and faculty representatives and is edited and written entirely by the students. The Editor-in-Chief, the associate editors, and the Business Manager are elected by the board on the basis of merit and the staff is selected by the editors on the same basis. The paper is of interest to students and alumni as a record of life at Ursinus.

The Lantern serves as an outlet for those interested in creative writing and art. It is written and edited by an all-student staff under the direction of a member of the Faculty Committee on Student Publications. It is published twice a year.

The Ruby, the Ursinus yearbook, is published by the Senior Class each year. It is a volume presenting an intimate pictorial account of the year's activities, not only of the Class, but of the entire College.

The *Ursinus College Bulletin*, official publication of the College, appears four times a year and includes the annual report of officers.

The Catalog appears once each year.

WRUC, the campus radio station, presents a varied agenda of music, from classical to rock, and campus and world news.

#### THE CAMPUS SETTING

A major building program, undertaken to celebrate the Centennial of the College, in recent years has transformed the Ursinus campus into a modern and highly attractive setting for liberal education.

Wismer Hall, completed in 1965, is one of the chief points of activity on campus. It contains the student dining hall, a lounge, lecture hall and little theatre, language laboratory, and a number of classrooms and seminar rooms. The building led in 1966 to a citation for excellence from the Pennsylvania Society of the American Institute of Architects. It is named for the late Ralph F. Wismer, '05, former Treasurer of the College and member of the Board of Directors.

Bomberger Memorial Hall, built in 1891, provides classrooms for many courses in the humanities, languages and social sciences. It also houses the College chapel, study and recreation areas. This Romanesque hall, made of Pennsylvania blue marble, is named for the first President of Ursinus, Dr. J. H. A. Bomberger. The building was made possible by the benefactions of Robert Patterson. The building was completely renovated in 1972.

Pfahler Hall of Science, built in 1932, is named in honor of Dr. George E. Pfahler, famed radiologist. It houses classrooms and laboratories for work in chemistry, physics, mathematics and geology. The building is equipped with the Elihu Thomson Memorial Telescope for astronomical observation in the Walter W. Marsteller Memorial Observatory. The development plan of the College brought extensive renovation of the building in 1971, and the expansion of Chemistry, Mathematics and Physics Departments into areas formerly occupied by Psychology and Biology, now located in the Life Science Building.

The Life Science Building opened for use in September 1970. Along with the Myrin Library and the physical education building, completed in 1972, it was financed by a special All-Ursinus Anniversary Drive that coincided with the College's 100th year. As the new home of the Psychology Department and of

the Biology Department, it complements Pfahler Hall of Science. Both departments have been enabled to improve laboratory work in regular courses and to offer better opportunities for independent student research. It is the new home of the following endowed laboratories: Levi Jay Hammond Laboratory of Comparative Anatomy, the W. Wayne Babcock Laboratory of General Biology, the Anna Heinly Schellhamer Laboratory.

The Myrin Library, located at the center of the campus, is designed to support the liberal arts program of the College, as well as research and independent study. The open-stack structure houses more than 120,000 volumes, 97,000 microforms, 900 audio cassettes, 7,000 slides, and 700 current periodical subscriptions. It is also a selective depository for U. S. Government Documents.

Study facilities for 500 persons are provided in carrels, seminar rooms, and lounges. During the academic year the Library is open 100 hours per week. Audio-visual services, the Curriculum Materials Center, the Pennsylvania Folklife Society archives, and the Ursinusiana collection also are housed in the Library.

An experienced staff of librarians provides reference service 50 hours per week to assist students in the use and interpretation of Library collections. An on-going program of library instruction, in cooperation with the academic departments, is designed to familiarize students with research materials and appropriate search strategies.

Direct access to more than 2.3 million volumes is available through the Tri-State College Library Cooperative. A terminal connected to the Ohio College Library Center's network extends access to over 850 research collections across the U.S. The Interlibrary Delivery Service of Pennsylvania supports interlibrary loan functions.

An important feature of the Myrin Library is the Grumman-Dartmouth Time-Sharing computer center, opened in 1974. The center makes available to students the enormous capability of the Dartmouth College computer system. It consists of a number of teletype units that permit real-time interaction with the computer.

Corson Hall, the Administration Building, named in honor of Philip L. Corson, a member of the Board of Directors, and his wife, Helen Payson Corson, was dedicated in the spring of 1970. Located near the main entrance to the campus, it houses the Admissions Office, where candidates for entrance to the College make application. The main administrative offices are found here, in addition to a classroom and offices for some sixteen faculty members.

The D. L. Helfferich Hall of Health and Physical Education and The William Elliott Pool were dedicated October 21, 1972, Founders' Day, in honor respectively of the ninth president of Ursinus College, who now serves as Chancellor, and Dr. William Elliott, Board member, neighbor and benefactor of the College.

The new physical education complex serves both men and women with three full-size basketball courts, one of them a multi-purpose section; locker rooms

and team rooms; wrestling room; weight room; dance studio; classrooms; a regulation collegiate-sized swimming pool; and squash and handball courts.

Thompson-Gay Gymnasium, built in 1927, doubles as a free-play and intramural sports setting and a theatre. The building is a memorial to Robert W. Thompson, '12, and George H. Gay, '13, noted Ursinus athletes, both of whom died in their senior year at the College.

During construction of Helfferich Hall and The Elliott Pool, many outdoor playing fields and facilities were relocated and refurbished. Chief among these was Price Field, named for Dr. John Price, '05, one of the great athletes in Ursinus history; Price Field complex includes the soccer field, baseball diamond, softball diamonds and football practice ground.

A second hockey field was installed to supplement the Effie Brant Evans Hockey Field at the east end of campus near Stauffer Hall. An outdoor shuffle board court converts in winter to an outdoor ice skating rink. Eight tennis courts are located behind Helfferich Hall.

Varsity football games and track and field meets take place at Patterson Field, named for the College's first benefactor, Robert Patterson. An eight-lane all-weather track is installed around the field.

In the spring of 1973, the College Union opened a new chapter in the social life of the campus. Designed as "the living room of the campus," the College Union is in the old Alumni Memorial Library building, built in 1922. It includes large social lounges, a recreational area in the basement, meeting rooms, a snack shop and offices for student groups.

Other structures include Super House, a residence on Main Street opposite the campus, bequeathed to the College by the late Henry W. Super, D.D., L.L.D., Vice-President and Professor of Mathematics, 1870-1891, and President, 1892-1893; Sprankle Hall, on the east campus fronting Fifth Avenue, the infirmary; The Eger Gateway, erected through the generosity of George P. Eger, of Reading, Pennsylvania, at the entrance of the walk leading from Main Street to Myrin Library, The College Store; The Power Plant, a strikingly modern building put into operation in 1963; and 785 Main Street, former home of the late Dr. Edward Platte, College physician, now occupied by the President and his family.

#### **DORMITORIES FOR MEN**

The Brodbeck and Curtis Dormitories for Men are buildings in English Colonial style. Each building has four floors. They bear the names of esteemed benefactors of the College, Andrew R. Brodbeck and Cyrus H. K. Curtis.

Wilkinson Hall, which connects Brodbeck and Curtis Dormitories, provides a lounge for men as well as additional rooms for men. It was erected through the generosity of Mr. and Mrs. Joseph C. Wilkinson.

Maples, 512 Main Street; Schaff Hall, 646 Main Street; Omwake Hall, 701 Main Street; Isenberg Hall, 801 Main Street; 942 Main Street; and 944 Main Street are all residence halls for men.

The Men's Dormitory Complex at the north end of campus, completed in 1968, houses 252 men. The main building is Reimert Hall, named in honor of the late Dr. William D. Reimert, '24, President of the Board of Directors of the College from 1961 until his death in 1969. The Dean of Men's Office is located on the first floor of Reimert Hall.

#### **DORMITORIES FOR WOMEN**

Paisley Hall, Stauffer Hall and Beardwood Hall are three dormitories for women. The buildings house 241 women and are located on the east campus.

Hobson House is located at Sixth Avenue and Main Street. It is used as a residence for twenty-four women.

Shreiner Hall, fronting on Main Street and facing the College campus, is a residence hall for twenty-eight women.

Duryea Hall, 612 Main Street, is a residence hall for seventeen women.

Clamer Hall, Main Street, the gift of Dr. Guilliam H. Clamer, is a residence hall for twenty-five women.

777 Main Street houses nine women.

Keigwin Hall is a residence for ten women.

Olevian Hall, 640 Main Street, is a residence hall for twelve women.

South Hall, Sixth Avenue, is a residence hall for fifteen women.

Todd Hall, 724 Main Street, is a residence hall for twenty women.

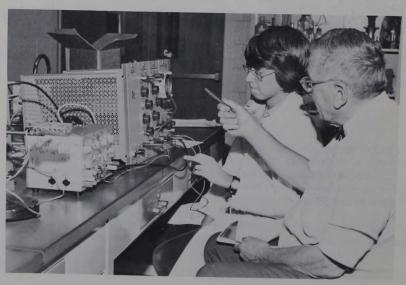
#### SHIPMENT OF BELONGINGS

The Maintenance Department will accept Railway Express shipments at the Maintenance Department between the hours of 8 A.M. and 4:30 P.M., Monday through Friday, providing:

- the Maintenance Department has been notified in writing when to expect the shipment and from whom;
- 2. the shipment arrives prepaid.

The Maintenance Department can a cept no responsibility for the condition of the shipment.





#### **ADMISSION**

The first step in seeking admission to Ursinus College is to file an application. A form for this purpose may be obtained from the Office of Admissions. After the completed form has been returned to the College, accompanied by the \$20 application fee, the applicant should then request his principal or headmaster to send an official transcript of the applicant's secondary school records for the ninth grade through at least the first marking period of the senior year, including class rank, personality rating, and recommendation.

All applicants must arrange for a personal interview on campus, unless, of course, the distance makes such a visit impracticable. This requirement must be completed before the application is presented to the Committee on Admissions.

Applications for financial aid should be filed at the time the candidate applies for admission. Forms are available through the Office of Admissions.

It is the responsibility of the candidate to make arrangements to take the Scholastic Aptitude Tests of the College Entrance Examination Board and to have the test results sent to the Dean of Admissions.

#### TESTS

Candidates for admission to the Freshman Class are required to take the Scholastic Aptitude Tests. Foreign students must, in addition, take the TOEFL test. It is recommended that applicants take the November or December Scholastic Aptitude Tests in the senior year. Although not required, Achievement tests are strongly recommended, especially in English Composition and mathematics. Full information concerning the dates of administering these tests can be obtained by writing directly to the College Entrance Examination Board, P.O. Box 592, Princeton, New Jersey 08540. The C.E.E.B. number for Ursinus College is 2931.

#### **PREPARATION**

A candidate for admission to the Freshman Class must be a graduate of an approved secondary school.

If the applicant is a graduate of a four-year high school he should offer for admission at least sixteen units which are to be distributed as follows:

#### BASIC ACADEMIC CREDITS (10 units)

English, Four years, Four Units Elementary Mathematics (Algebra and/or Geometry) Two Units Science. One Unit

Social Studies, One Unit

Foreign Language, Two Units in One Language

#### ADDITIONAL ACADEMIC CREDITS (at least 21/2 Units)

Advanced Mathematics

Solid Geometry

Plane Trigonometry

Science

Social Studies

Foreign Language

#### ELECTIVES (Maximum 31/2 Units)

Not more than one unit will be granted for any single elective.

Bookkeeping

Drawing (Mechanical, Prepared Course)

Geology

Stenography

Junior Business Training

Music and Art (History or Appreciation)

Commercial Law

Commercial Geography

If the candidate is a graduate of a three-year high school, he should offer at least twelve units, which should include the basic credits above. Not more than one unit may be presented from the group designated as electives.

Applicants whose preparation does not coincide precisely with the foregoing outline may in exceptional cases be admitted to the College if, in the judgment of the Committee on Admissions, they are qualified to do college work satisfactorily.

#### **FARLY ADMISSION**

A limited number of outstanding juniors who have completed all or nearly all requirements for graduation from high school may be considered for early admission. Such students will be considered only upon the strong written recommendation of the guidance counselor and with the assurance that the student will receive his high school diploma either before or upon successful

completion of the freshman year in college. It is the responsibility of the applicant to have the recommendation sent to the Office of Admissions.

The admissions process is identical with the following EARLY DECISION procedure.

#### **EARLY DECISION**

Outstanding juniors may apply for admission in the late spring or during the summer preceding the senior year. The applicant should have his counselor send a transcript for the ninth through eleventh grade together with class rank, personality rating, and recommendation. He should also have junior year Scholastic Aptitude Test scores sent and arrange for an interview, preferably prior to October 1. We strongly recommend that all candidates take Achievement tests: Early decisions will be made and applicants notified in the late summer and early fall.

#### SPECIAL PROGRAM FOR HIGH SCHOOL STUDENTS AND SENIOR CITIZENS

Area high school juniors with good records and strong recommendations and senior citizens (those 62 years of age and over) may take regular courses for half-tuition during summer, fall, or spring terms, both day and evening. Such students must commute. Information is available in the Office of Admissions.

#### **ENGINEERING PROGRAM**

Arrangements have been made with the Engineering Schools of the University of Pennsylvania, the University of Southern California, and the Georgia Institute of Technology, to which a student may transfer after completing three years of prescribed work toward the B.A. degree at Ursinus College.

Ursinus College will grant the B.A. degree after the student has satisfied the requirements for that degree. The engineering school will grant the engineering degree on satisfactory completion of the fifth year. For the outline of the program see *Suggested Programs*.

The candidate for the Engineering program must present 4 years of entrance credit in Mathematics.

His background in foreign language must be such that he will be capable of entering the second year of language in college. If he is not so prepared he must make up the deficiency in foreign language in summer school.

#### PLACEMENT IN FOREIGN LANGUAGES

If an entering student wishes to study in college the same language he studied in high school, the following conditions apply:

If a student has taken two or three years of a foreign language in high school he must enroll in the intermediate level of that language in College. If he is unable to master the work at the intermediate level, he may drop back to the elementary level, but only with the permission of his instructor. Those with four

or five years of a language will be assigned to an advanced course unless the requirement is waived by Advance Placement examination.

#### ADVANCED PLACEMENT

Students who wish to be considered for advanced courses upon admission may submit the results of the Advanced Placement Examinations as given by the College Board. If the scores are satisfactory, the student may be advanced beyond the basic course and credit may be given toward the degree. Certain courses offer no advanced placement; therefore it is suggested that a candidate consult the Dean of Admissions if any question arises. After acceptance for degree standing, a student who wishes to receive transfer credits must receive written permission from the Dean of the College or the Dean of Admissions to take a course at another college.

#### COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Another means by which incoming students may earn advance credit is through the College Level Examination Program (CLEP). These are examinations offered by the College Entrance Examination Board as a means by which colleges may offer advance credit to students who have completed the equivalent of specified college courses through special experience or study. Ursinus College offers credit only in the Subject Examinations and not in the General Examinations. The examinations are given at centers throughout the country. Applicants interested in the CLEP Program should write for a CLEP Bulletin of Information for Candidates to the Program Director, College-Level Examination Program, Box 1821, Princeton, New Jersey 08540.

#### **SPECIAL STUDENTS**

A limited number of applicants who are not candidates for degrees may be admitted as special students, providing that they have satisfactory preparation for the college courses which they wish to pursue. Special students who reside at the College must register for at least twelve hours of work in each semester. They are subject to the same regulations as other students.

#### TRANSFER STUDENTS

To enter the Sophomore or Junior Class at Ursinus College, an applicant must support his application by requesting each institution he has attended subsequent to graduation from secondary school to send to the Dean of Admissions a transcript of his record at the institution of higher learning and a letter from the Dean of Men or Women indicating that the applicant is entitled to honorable dismissal insofar as character and personality are concerned. It will be helpful if the candidate will send a catalog of the college he has been attending, marked to indicate the course he has taken. There will be no credit for grades below C.

A maximum of sixty hours of work taken elsewhere will be credited to students transferring to Ursinus College.

#### **PART-TIME STUDENTS**

Non-resident students who are candidates for a degree and who wish to pursue fewer than twelve hours of work may be classified as part-time students upon the written approval of the Dean of the College.

#### NOTIFICATION OF ADMISSION

When a candidate for admission is notified of his acceptance by the College, he must make an advance payment of one hundred dollars in accordance with the provisions of the letter of acceptance. This payment is credited on his bill for the first term. If he fails to complete his matriculation, the payment is forfeited.

#### THE SUMMER SCHOOL

The curriculum of the Summer School is announced in the Spring, and information concerning course offerings is released. In the day sessions, courses are offered over a period of 12 weeks. A student carries only one course at a time but may enroll for a full program. The plan permits the completion of a three-semester-hour course in three weeks, two three-semester-hour courses in six weeks, four three-semester-hour courses in twelve weeks and two four-semester-hour courses in eight weeks. It is possible to carry two years of work in a language in twelve weeks for twelve semester credits.

In the evening sessions, three-semester-hour courses meet two evenings a week for  $7\frac{1}{2}$  weeks. Two courses may be carried simultaneously. However, a student may not be enrolled in the evening session if he is also enrolled in either of the first two day sessions.

Ursinus College Summer School (day or evening) is open to candidates who may be classified in the categories below upon approval of the Director.

- 1. College Graduate (two-year and four-year).
- Degree Candidates (Bachelor and Associate), including recent high school graduates accepted as freshmen by Ursinus or other accredited schools.
  - Applicants from other institutions must have written permission from their respective institutions indicating that they will be given transfer credit for successful work in the courses selected.
- Evening School students at Ursinus or elsewhere, with a high school diploma and with a minimum of 15 semester hours of work successfully completed (equivalent of 70 average).

Applications of those whose qualifications do not fit the above categories must be acted upon by the Committee on Admissions.

Ursinus College Summer School (day or evening) is not open to the following:

- 1. Students who were not graduated from approved secondary schools.
- 2. Students who have been dismissed or suspended from any academic institution during the previous academic year.

Admission to the Summer School does not carry with it an assurance of transfer to degree standing at Ursinus College. For information and application forms, address the Director, Summer School, Ursinus College, Collegeville, Pa., 19426.

#### THE EVENING SCHOOL

The Evening School is organized to make college work available to men and women employed in business, industry or teaching, and to others who may be interested. The degree programs generally emphasize courses in accounting, business administration and economics, but a strong liberal arts component is required. A considerable range of courses in English composition, English literature, history, mathematics, foreign languages and other disciplines is available.

Full-time Ursinus students enrolled in the College may register for Evening School courses, with permission of their advisors and the Dean of the College. Evening School registration procedures must be followed.

For information and catalog for the Evening School, address The Director, Evening School, Ursinus College, Collegeville, Pa., 19426.

#### CAREER OPPORTUNITIES

Ursinus College helps its students to relate their broad liberal education to the many opportunities for careers available to them. Through the advice of faculty members, the services of the Placement Bureau, and individualized career counseling by alumni of Ursinus, a student is guided toward his life's work. Among the many careers pursued by Ursinus graduates are the following.

ACCOUNTING. Through a combination of courses in the day and evening, Ursinus College offers a complete series of courses in accounting and prepares students to sit for the examination for Certified Public Accountants. An increasing number of business-oriented students are preparing themselves for accounting careers.

BUSINESS. Graduates in Economics and Business Administration and other departments are employed by many types of industrial concerns, banking institutions, public utilities, transportation companies, department stores, chain stores, etc. By electing languages, students majoring in Economics and Business Administration may prepare for the growing opportunities in world trade.

CHEMICAL RESEARCH: INDUSTRIAL CHEMISTRY. The College provides opportunities for students desiring to major in Chemistry with a view to devoting their lives to some type of chemical research. Graduates find employment in the chemical industry doing pioneer work in the field of chemical research and development.

DENTISTRY. Many graduates of the College have entered the field of den-

tistry. Ursinus provides the basic science program prescribed by the Council on Education of the American Dental Association.

EDUCATIONAL ADMINISTRATION. Basic courses in Education are provided which are prerequisite to the professional courses in Educational Administration offered in graduate schools of education of leading universities.

ENGINEERING. Students who wish to study Chemical, Civil, Electrical, Mechanical or Metallurgical Engineering may avail themselves of a program which is being offered at Ursinus College in cooperation with engineering schools. A student at Ursinus College may transfer to an engineering school after completing three years of prescribed work toward the B.A. degree at Ursinus.

Ursinus College will grant the B.A. degree after the student has satisfied the requirements for that degree. The engineering school will grant the engineering degree upon completion of the fifth year.

Under another program a student, after graduating from Ursinus with a major in chemistry or physics, may earn an M.S. from an engineering school in one to one and one-half years.

FOREICN SERVICE. The American foreign service presents attractive opportunities to a limited number of young people who are willing to prepare themselves adequately for service abroad. The history and social science courses, together with offerings available in the modern languages, provide preparation for the examinations required of applicants for positions in foreign service. Upon graduation students are urged to pursue additional work at a recognized graduate school.

GRADUATE STUDY. One purpose of the curriculum of the modern liberal arts college is to prepare students for advanced study in various fields of knowledge. Preliminary study is done by the student at the undergraduate level in his chosen major field. Those intending to enter graduate schools should have a thorough grounding in their chosen field. As a reading knowledge of French and German is essential for most higher degrees, this knowledge should be acquired in the undergraduate school.

HEALTH AND PHYSICAL EDUCATION. It is possible to specialize in health and physical education and at the same time obtain a general cultural education. Health and physical education graduates meet the requirements for certification to teach in this field in Pennsylvania and other states.

JOURNALISM. A student interested in journalism should enroll in the departments of history, political science, or English and elect widely in other fields. A year at a professional school of journalism is recommended.

LAW. Leading law schools require a baccalaureate degree as one of the conditions for acceptance of candidates. A broad, cultural education is considered the best preparation for legal study. A major in such departments as history, psychology, or political science is recommended.

MEDICINE. Concentration in biology or chemistry is recommended in order

to prepare students who are interested in the various aspects of medicine. Preparation for schools of osteopathy and of veterinary medicine, as well as for the regular medical schools, is provided. Students should also investigate the opportunities in the allied medical fields, such as occupational and physical therapy, in which many opportunities are being offered.

MUSIC. Although a considerable number of courses in music are available at Ursinus, no major in music is offered. Those who wish to follow music as a career should plan to attend graduate school after completing their work at Ursinus.

*NURSING*. Students who plan to enter the profession of nursing should register for courses in biology, chemistry, and liberal arts in order to qualify for consideration by schools of nursing. Ursinus does not give a degree in nursing but recommends transfer, after two years, to a university school of nursing.

PHYSICAL RESEARCH. A program of concentration in physics and mathematics is offered to students interested in physics as a career.

PSYCHOLOGY. Undergraduate work in psychology is designed for those who seek admission to graduate schools or who wish to enter personnel work in industry. Undergraduate study in psychology is of assistance in the fields of teaching, guidance, law, clinical psychology, personnel and social work, nursing, and preparation for medicine.

SOCIAL WORK. A professional career in social work requires two years of graduate education in one of the approved schools of social work associated with a number of universities. There are, however, many opportunities for the untrained person holding a baccalaureate degree to find employment in both public welfare and voluntary social agencies; the former is entered through civil service examination. Positions are open in work with individuals and with groups. Many of these situations offer funded plans for graduate study upon satisfactory completion of a year of employment.

TEACHING. Secondary school teaching preparation which meets the requirements of the State Department of Education in Pennsylvania and of many other states is offered to those who look forward to a career in education. Ursinus offers programs for secondary school certification in English, French, Spanish, German, Latin, Mathematics, Mathematics-Physics, Biology, Chemistry, Physics, General Science and Social Studies. Students seeking certification in Social Studies will specialize in Economics and Business Administration, History, Political Science, or Psychology. Advisers should be consulted in each of these areas early in the student's college career. The program for certification for Health and Physical Education covers both the elementary and secondary fields. Students should follow the curricula which have been approved by the Pennsylvania Department of Education, a copy of which is in the hands of the advisers.

CHURCH VOCATIONS. Most leading theological schools have as a requirement for consideration for admission a degree in liberal arts. Students

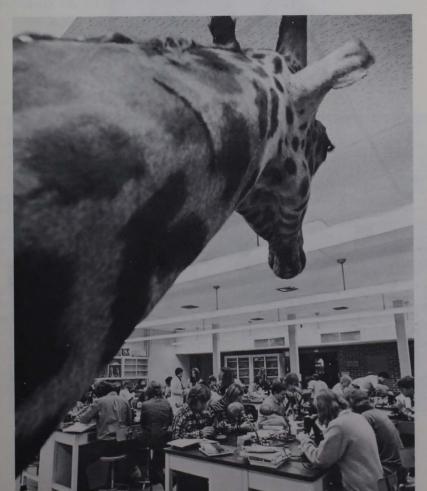
who are preparing for church vocations should plan a broad course of study which will include history, languages, literature, religion, and philosophy.

#### PLACEMENT BUREAU

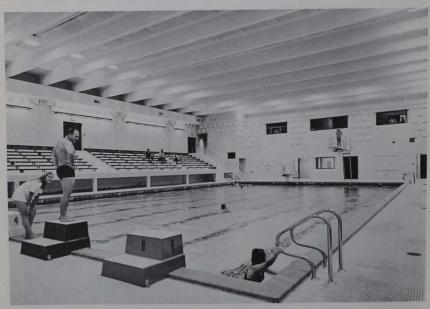
Ursinus College conducts a placement bureau to assist students and graduates in finding positions for which they qualify. Its function is to serve as a point of contact for students and alumni with educational institutions, business, and industry. Resumes and references of seniors and alumni are compiled and are available for all prospective employers.

#### THE COLLEGE YEAR

The College year consists of two semesters of fifteen weeks each and a summer session of twelve weeks. Students are admitted to the College at the beginning of either semester or at the beginning of the summer session. Those who wish to accelerate their college program may attend the summer session in addition to the Fall and Spring semesters. The summer session is available to all students who wish to take advantage of it.







#### FINANCIAL INFORMATION

#### TUITION, BOARD, FEES

#### STUDENT CHARGES PER YEAR

Tuition	\$3300
Room and Board	\$1450
Activities fee	\$ 20
College Union fee	\$ 25

#### PAYMENTS ARE TO BE MADE AS FOLLOWS:

New Students

Advance Payment—as requested	\$ 100
Breakage Deposit—As indicated on bill	\$ 50
Students	

Old All Students

September-One-half annual charges, less credit for Advance Payment.

One-half Activities and College Union Fees.

-One-half annual charges. January

One-half Activities and College Union Fees.

Charges quoted are made on an annual basis. Billings are presented semiannually and are due for payment no later than the date indicated on the billing. A \$10 fee is charged for late payment.

When the student is a recipient of an Ursinus College scholarship award. credit will be applied in the amount of one-half the value of the annual award to each semester bill. THE COLLEGE HAS NO PLAN FOR INSTALLMENT PAYMENTS.

For those who prefer to pay tuition in monthly installments, the College offers special arrangements made with the Girard Bank of Philadelphia, the Insured Tuition Payment Plan of Boston and/or The Tuition Plan. These arrangements should be made early enough to assure payment of bills no later than the date indicated on the billing.

#### **EXPLANATION OF CHARGES**

APPLICATION FEE. A fee of \$20 is paid by the candidate at the time he files his application. This fee is not refundable and is not applied toward the student's bill.

Special and Part-Time Students are charged at the rate of \$100.00 per semester hour. If registered for twelve or more hours, full tuition will be charged.

ADVANCE PAYMENT. (a) Upon his acceptance by the College an applicant must make an advance payment of \$100. This payment is credited on his bill for the first term. If he fails to complete his matriculation, this payment is forfeited. (b) All regularly enrolled students must make an advance payment of \$100 at such time as may be designated by the College. This payment is forfeited if the student fails to complete his registration.

FEE FOR TUITION covers classroom instruction, use of libraries, gymnasium, and the infirmary; ordinary medical attention; care by the resident nurse. Room and Board charges cover lodging for school year, exclusive of Thanksgiving, Christmas and Spring recesses.

The College reserves the right to make reasonable adjustments in the comprehensive fee at the beginning of any term to cover possible unforeseen costs.

ACTIVITIES FEE is charged to all full-time students, and to all Special and Part-Time Students enrolled for six or more semester hours of credit. This fee covers subscription to the *Ursinus Weekly*, the Ursinus College Forum, admission without further charge to all athletic contests at the College, to College dances, and use of College athletic facilities as scheduled.

COLLEGE UNION FEE. All students enrolled in the College pay a fee of \$12.50 per semester which supports the operation of the College Union program and the maintenance of the College Union Building, and includes membership in the College Union for the period covered by the fee.

STUDENT ACCIDENT INSURANCE PLAN. A mandatory insurance plan for accidental injury is billed to each full-time student on the bill for the fall term, unless the student is first enrolled for the spring term, when a pro-rata billing will appear on the student's bill.

ROOM DRAWING. A previously enrolled student must pay \$10 in order to qualify for drawing a room. Credit for this amount will be applied to the charge for Room and Board for the following term, and is forfeited if the student fails to complete his registration.

SCIENCE FEE. \$100.00 per semester: All students majoring in Biology, Chemistry, Physics, Pre-Engineering and Freshmen who are enrolled in Undesignated Natural Science. \$25.00 per semester: All Sophomores, Juniors and Seniors majoring in Psychology.

FINE ARTS FEE. A fee of \$15 per semester is charged for students enrolled in Fine Arts 303 and 304.

BREAKAGE DEPOSIT. A deposit of \$50 is required of each new student to defray expense incurred by damage to College property. This is included in the bill for the first term. Billings are rendered as assessments are made against the deposit balance. Any unexpended balance is returned upon graduation or withdrawal from the College.

STUDENT TEACHING. An additional fee of \$75 is required of each student engaged in student teaching. This is payable upon presentation of the bill.

GRADUATION FEE. A graduation fee of \$25 is charged each student on the last bill of his senior year. An additional deposit of \$25 will be required for the use of cap, gown, and hood. This deposit will be refunded upon return of the equipment.

TRANSCRIPT FEE. A charge of \$2.00 is made for each transcript of a student's record after the first. Requests for transcripts should be made to the Office of the Dean.

ID CARD FEE. A charge of \$1.00 is made for the issuance of an ID card. If the card is lost a charge of \$5.00 will be made for its replacement.

CHANGE OF STATUS FEE. When a student changes his resident/day status, a new ID card must be issued. There is a \$5.00 change of status fee.

#### REGULATIONS

Bills for student fees are issued approximately thirty days before the beginning of each term. A student's bill must be settled no later than the date indicated on the statement.

No student who is indebted to the College or to any of its departments or agencies will be permitted to register at the beginning of any term, and all items due the College from a candidate for graduation must be paid before the candidate may be presented for a degree.

A student who is absent from College because of sickness and retains his place in class pays student fees in full during his absence, except that when the absence is continuous over a period exceeding four weeks, resident students are allowed a prorata rebate for each full week of absence.

Refunds allowed because of a student's dismissal or withdrawal from the College are determined according to a policy available in the Office of the Treasurer.

A student who voluntarily withdraws from College must notify the Dean of the College *in writing* and settle all bills within thirty days or be liable to dishonorable dismissal.

The possession or use of alcoholic beverages, illegal drugs or firearms on the campus is forbidden.

Students who have attained an 80 cumulative average in the preceding year may operate a motor vehicle or maintain one on campus or in the College vicinity while in attendance at College. A vehicle may not be operated or maintained by students who hold financial grants or positions under the Bureau

of Student Employment. This does not apply to students who are commuting. Students who marry must notify the College of their change in status.

The College reserves the right to exclude at any time students whose conduct or academic standing renders them undesirable members of the College community, and in such cases the fees due or paid in advance to the College will be refunded according to a policy available in the Office of the Treasurer. Other regulations and procedures of vital concern to students are contained in the pamphlet, *Ursinus College Student Handbook*.

#### SCHOLARSHIPS AND FINANCIAL AID

#### FINANCIAL AID OFFICE

The Financial Aid Office, in cooperation with the Office of Admissions, administers financial assistance to students. The sources of Ursinus College aid funds are permanent scholarship funds, current operating income, Federal student aid programs, state aid programs, as well as other corporate and private sources.

#### HONORS UPON ENTRANCE

Honors upon entrance are conferred by the President of Ursinus College upon those incoming Freshmen who present outstanding academic entrance credentials. These awards carry no stipend.

#### CENTENNIAL SCHOLARSHIPS

In honor of the thousands who have worked for and served her so faithfully during her first century, Ursinus College each year grants Centennial Scholarships, in amounts which vary according to need, to those freshmen whose records and scores clearly indicate that they are outstanding students. These scholarships are subject to yearly review and may be renewed if the holder's scholastic work and conduct remain satisfactory and financial need continues.

#### PRESIDENTIAL SCHOLARSHIPS

The President of Ursinus College may award scholarships, in amounts which vary according to need, each year to those students who have demonstrated outstanding leadership, service, and ability during their secondary school or college years. These awards may be granted to incoming freshmen or upperclassmen and may be renewed for continued service to Ursinus College.

#### **FINANCIAL GRANTS**

Financial grants are awarded for one year on the basis of financial need. Ursinus College participates in the College Scholarship Service (CSS) of the College Entrance Examination Board. Participants in CSS subscribe to the principle that the amount of financial aid granted a student should be based upon financial need. The CSS assists colleges and universities and other agengies in determining the student's need for assistance.

Applications for scholarships and grants must be filed by March 1, on forms available from the Office of Admissions.

Entering students seeking financial assistance are required to submit a copy of the Financial Aid Form (FAF) by March I to the College Scholarship Service, designating Ursinus College as a recipient. The forms may be obtained from the secondary school or the College Scholarship Service, P.O. Box 176, Princeton, New Jersey 08540, or P.O. Box 1501, Berkeley, California 94701.

All financial grants are reviewed annually. Eligibility for renewal is based upon relative need, satisfactory conduct, and the maintenance of the required scholastic average.

Upperclass students wishing assistance or the renewal of an existing grant are required to submit a new Financial Aid Form (FAF) to the College Scholarship Service. Forms may be obtained from the Financial Aid Office and should be filed by March 1.

Students receiving aid from sources outside the College are required to report the amount to the Financial Aid Office. The College reserves the right to adjust previously offered Ursinus grants and awards accordingly.

Students receiving financial aid will be required to return a notarized copy of their parents' IRS 1040 form for 1977 with their aid acceptance letter. Awards are considered tentative until we receive this income verification.

#### PERMANENT SCHOLARSHIP FUNDS

The College possesses a number of permanent scholarship funds. The income of each fund is assigned annually to a student demonstrating need, designated by the College.

#### STUDENT EMPLOYMENT AND COLLEGE WORK-STUDY PROGRAM

The Bureau of Student Employment, conducted by the College, provides opportunity for a student to earn a part of his expenses by working as a waiter, laboratory assistant, library assistant, typist, or clerk in the College Store. The College Union also offers opportunities for student employment in the Snack Bar and the Recreation or Game Room. These positions are standardized so as not to overburden the student or to interfere with his studies. Positions accepted under the Bureau of Student Employment must, however, always take precedence over any other extra-curricular activities. A standard position, such as that of waiter in the dining room, pays approximately four hundred dollars per year. Approximately two hundred positions, representing varying amounts

of compensation and types of work, are now open to students.

Students are employed on a contractual basis. Earnings may be applied directly to the student's account at the end of each semester of work or the student may be paid on the bi-weekly payroll.

Ursinus College also participates in the Federally funded College Work-Study Program. This summer and term-time program is designed to provide students with working experience coordinated with their academic work and earnings to help meet college costs.

Letters of application, as well as those requesting information, should be addressed to the Director of Financial Aid.

#### FEDERAL EDUCATIONAL OPPORTUNITY GRANTS

Basic Educational Opportunity Grants: These grants will average \$450 and will be available to freshmen, sophomore, junior and senior students in 1977. Applications may be obtained from high school guidance officers, public libraries, U.S. Post Offices or Ursinus College.

Supplemental Educational Opportunity Grants: These grants may not exceed \$4,000 for the undergraduate years. They are administered by the college for students "of exceptional financial need," as determined from the Financial Aid Form.

#### STATE SCHOLARSHIPS

All students in need of financial assistance are urged to consult their guidance counselors for information about state scholarships, and to be sure to make application for state scholarship help.

#### NATIONAL MERIT SCHOLARSHIPS

Ursinus College sponsors four National Merit Scholarships each year. These scholarships are awarded through the National Merit Scholarship Corporation and are open to any National Merit Finalist who has selected Ursinus College as his first choice. The awards do not limit in any way the number of finalists who may be sponsored by other contributing organizations. Application should be made to the National Merit Scholarship Corporation through the secondary school.

#### STUDENT LOANS

National Direct Student Loan Program: Loans up to \$1,250 per year not to exceed \$5,000 for undergraduate study are available. Need for the loan must be substantiated by a Financial Aid Form. Application forms are available from the Financial Aid Office.

Guaranteed Loan Program: This program is administered by the Pennsylvania Higher Education Assistance Agency in Pennsylvania and by similar state agencies or the United Student Aid Funds, Inc. in other states. The maximum

loan ranges from \$1500 to \$2500 per year depending upon the state and the student's year in college. Total loans for undergraduate work may not exceed \$7500. Federal interest subsidy is available to families who meet prescribed Federal eligibility requirements. The family desiring to apply for interest subsidy must file a Financial Aid Form (FAF). Loan application forms should be available at your local bank or state agency.

#### **GULF OIL STUDENT LOAN PROGRAM**

The Gulf Oil Student Loan Fund will be made available to upperclass women and men with consideration given to juniors and seniors. Total loans for undergraduate work may not exceed \$1,000. All students who receive Gulf loans must be degree candidates and maintain a satisfactory academic average. Need for the loan must be substantiated by a Financial Aid Form. Application forms are available from the Financial Aid Office.

#### **TUITION EXCHANGE PROGRAM**

Ursinus College is a member of the Tuition Exchange. Requests of children of Faculty members of other member institutions for tuition remission will be considered upon application. Because of the necessity for maintaining a balance of imports and exports, it may not always be possible to honor such requests. Applications for tuition remission should be made through the liaison officer of the institution with which the applicant's parent is associated. Those who receive aid through the Tuition Exchange Program are not eligible for additional grants.



### FDUCATIONAL PROGRAM

The departmental system is employed in the organization and administration of instruction. By this system, the courses of instruction are offered in fourteen departments: Biology, Chemistry, Classical Studies, English, Economics and Business Administration, German, Health and Physical Education, History, Mathematics, Philosophy and Religion, Physics, Political Science, Psychology, Romance Languages. The adviser is the medium of communication between the Faculty and students of his department. The approval of the adviser is necessary before a student may register for or enter upon any course of study, or discontinue any work.

A student, at matriculation, chooses the subject of major concentration he wants to pursue, and with the advice and consent of the adviser selects his studies for the year and reports his selection to the Dean on a blank provided for the purpose. A student who is uncertain of his future plans, and therefore undecided about his major field, may choose to be registered in an "Undesignated major" for the first year; but he must designate the broad choice of Humanities, Social Sciences, or Natural and Physical Sciences.

It has become necessary to limit the number of students in scientific programs. In order to follow a curriculum in Science, a candidate must indicate his intention to do so upon application for admission to the College. If the student applies for and is admitted to a program in the Humanities, Social Sciences, or Languages, he may subsequently transfer to a program in the Sciences only upon approval of the Committee on Standing. Request for such a change in major should be addressed to the Dean of the College.

### **SUMMER READING PROGRAM**

In order to stress the importance of good reading and to develop the student's appreciation of good writing, the Faculty has approved the Program in Summer Reading which is recommended for all students. It begins with the summer preceding the freshman year and continues through succeeding summers. The paper-bound volumes assigned for reading are mailed to the student upon his request. These books are discussed formally and informally during the early weeks of the first semester.

### **CHOICE OF STUDIES**

The work of every student is composed of three parts: (1) courses which are, in the judgment of the Faculty, essential to a liberal education and are required of all students before graduation; (2) courses required by the department in which the student is registered, and which comprise his major field of concentration; (3) elective courses chosen by the student as a means of further individualizing his course of study, and adapting it to his own intellectual tastes and future purposes. (See Ursinus Plan.)

### SERVICE ACTIVITIES

The College, through many of its departmental major programs as well as through student organizations, strongly encourages students to participate in community activities and projects. Many students volunteer their services as tutors or as part-time aides at nearby hospitals, schools, and welfare organizations. These services provide valuable field experience to supplement classroom work.

### REGISTRATION

All students must register at the beginning of the Fall Term for the work of the Fall and Spring Terms. Changes in course of study may be made during the first week of a term with the written approval of the adviser. After the first week, courses may be added or dropped only by joint permission of the Dean, the adviser, and the instructors involved. A student who withdraws from a course without such permission will receive the grade of F. A fee is charged for the adding or dropping of courses at times other than those appointed in the College Calendar.

In registering, students must present to their department adviser a complete list of studies, both prescribed and elective, for the *whole year*. Courses prescribed as degree or departmental requirements or to satisfy conditions must take precedence over and be scheduled before elective courses. When students change to another major department, they must fulfill the requirements of that department in order to be graduated.

Students wishing credit for courses taken elsewhere while they are an Ursinus student must make *prior* application for permission through the Office of the Dean to the Committee on Standing of the College. Such application must be accompanied by the official catalogue entry from the other institution.

### WITHDRAWAL

Students who seek to withdraw from the College must notify the Dean of the College in writing of this intention and its effective date, and must satisfy all obligations (including bills, the return of keys, equipment, and other College property). Failure to meet any such obligations will render the student liable to dishonorable dismissal.

### REQUIREMENTS FOR GRADUATION

The requirement for the degree of Bachelor of Arts or Bachelor of Science is the completion of one hundred and twenty semester hours which must include all the courses required by the Faculty of all students for graduation and the courses required by the department to which the student belongs. At least sixty semester hours of this work must be completed at Ursinus College, and this must include the work of the senior year.

To qualify for the degree of Bachelor of Arts or Bachelor of Science and to receive a diploma from the College, not the Evening School, a student must be

registered for a minimum of 60 semester hours of credit at Ursinus and must have spent a minimum of the two terms of the senior year as a full-time student in the day sessions, taking at least 12 credits during each of the last two semesters before graduation.

A regular student may not take in any one term fewer than twelve semester hours of work. The normal maximum for a term is five courses or fifteen semester hours. Two semester hours above the normal maximum may be scheduled with the approval of the adviser. Three semester hours above the normal maximum may be scheduled with the approval of the adviser and the Dean of the College, provided the student's average fro the preceding term is eighty-five or higher (Exception: Engineering and Physical Education majors are permitted to schedule in each term three hours more than the normal maximum). All fourth-year students shall enroll as full-time students.

All requirements for graduation must be satisfied before the end of the last day of examination week preceding commencement. Each student must bear responsibility for fulfilling the requirements for graduation.

### **USE OF LANGUAGE LABORATORIES**

The language laboratory is used regularly in either or both of the first two years in languages according to a schedule posted early in each academic year. The laboratory hours are required in addition to the regularly-scheduled class meetings. There is no semester-hour credit for language laboratory.

### **CLASS ATTENDANCE**

Ursinus College is committed to the principle that class attendance is a vital part of its academic program, making possible that dialogue between student and teacher which is the foundation of the educational process. Students should therefore recognize that absence from class denies them access to the full measure of college education. While urging regular class attendance, the College at the same time wishes to allow students an opportunity to develop a personal responsibility toward academic work. In keeping with these convictions, the following policies govern class attendance:

Each student is expected to exercise reasonable judgment regarding class attendance. Every student is accountable for all work missed because of class absence. Instructors, however, are under no obligation to make special arrangements for students who are absent. A student for whom an academic warning is issued in a course must limit his future absences in that course to the number of times that the course meets per week. If the student then exceeds the allowed number of absences, he will be dropped from the course and be assigned a grade of F unless the Dean, after consultation with the instructor, permits the student to be reinstated. A reinstatement fee of \$10.00 will be charged.

A first-year student who is absent from a course for a total of more than two weeks' meetings may be excluded from the course with a grade of F.

### GRADES OF SCHOLARSHIP

When a course has been completed, the standing of the student is expressed, according to his proficiency, by one of five grades: A, B, C, D, or F. Letter A denotes grades between 100% and 90%, B between 90% and 80%, C between 80% and 70%, D between 70% and 60%, and F denotes 45%. Any grade of less than 60% denotes a failure in the course. Students who have received passing grades are not permitted to take re-examinations for the purpose of raising their grades.

The mark I, which may be given only with the written permission of the Dean, is reserved for cases of incomplete work or of failure under extenuating circumstances. When the removal of the mark I requires an examination, a fee of ten dollars (\$10.00) will be charged. If the mark of I is not removed within one month after the beginning of the following regular term, the grade F will be assigned for the course.

A student is required to have an average of 70% at the end of each term in College. A student who fails to do so may be restricted in his extra-curricular activities, and will be reported to the Faculty.

A student whose average at the end of the first term or second term is below 65%, whose cumulative average is below 65% at the end of the first year, or whose cumulative average is below 70% at the end of the third term or thereafter will be dropped from the College unless, as a result of mitigating circumstances, the Faculty votes that such student be permitted to continue. The action of the Faculty in all such cases is final.

Employment under the Bureau of Student Employment is not allowed to a student whose average for the preceding term is below 70%. A student under discipline may be barred by the Committee on Discipline from all extracurricular activities.

Through correspondence and conferences, the cooperation of parents is sought in the endeavor to obtain the best possible results in the work of students.

Any student may be dismissed from the College for cause by the Faculty, regardless of the student's academic average.

### **DEGREES**

Ursinus College confers three degrees in course: Bachelor of Arts, Bachelor of Science, and Bachelor of Business Administration (Evening School only). For specific requirements of the curricula leading to each of these degrees, see Departmental Requirements and the catalog of the Evening School. Degrees are conferred only at convocations and candidates must present themselves in person.

A student in good standing who has earned a minimum of ninety semester hours of credit and who withdraws from the College to enter an accredited graduate or professional school may, with the approval of the Faculty, receive a baccalaureate degree from Ursinus after earning any doctoral degree from an accredited institution.

The College may confer the honorary degrees of Doctor of Divinity, Doctor

of Humane Letters, Doctor of Pedagogy, Doctor of Science, Doctor of Letters, and Doctor of Laws on persons whose distinguished ability and service have been deemed worthy of such recognition by the Faculty and the Board of Directors.

### **HONORS**

### COMMENCEMENT

Two Commencement honors are assigned: one, the Valedictory, to the person attaining the highest standing in the graduating class; the other, the Salutatory, to the person attaining the next highest standing.

### GRADUATION WITH DISTINCTION

Members of the graduating class who have shown great proficiency in their first seven semesters may be graduated with distinction if, in the opinion of the Faculty, their attainments warrant such honors. These distinctions, *Summa Cum Laude*, a cumulative average of 94.50 or above; *Magna Cum Laude*, 92.50 to 94.49; and *Cum Laude*, 89.50 to 92.49, are given only for unusual excellence in all the subjects pursued by the candidate. Graduation Honors will be based on the student's cumulative average at the end of the first seven (7) terms of college studies.

### **DEAN'S HONOR LIST**

All regular or full-time students achieving an average of 87.50 for a semester are announced at the end of that semester as members of the Dean's Honor List. It is an Ursinus tradition to publish at the Founders' Day Convocation in November the names of those students who have been carried on the Dean's Honor List for the preceding two semesters.

### THE CHAPTER

The Chapter, a society of faculty members with Phi Beta Kappa membership, is especially concerned with cultivating the arts and sciences at Ursinus College.

Each year The Chapter designates certain seniors as "Chapter Scholars" on the basis of the quality and range of their intellectual interests and attainments.

### SOCIETY OF THE SIGMA XI

The Society of the Sigma Xi, national honorary fraternity for the recognition and encouragement of scientific research, was founded at Cornell University in 1886. The Society was incorporated in 1942. The Ursinus College Sigma Xi Club was installed on October 27, 1966. Election to the Club is based on achievement in original research, and limited to Juniors, Seniors, and Faculty. Election is held once a year, the nominations coming from faculty members.

### PI GAMMA MU

Pi Gamma Mu, the national Social Science Honorary Society for the recognition of scholarship in the social sciences, was founded in 1924. It is affiliated with the American Association for the Advancement of Science. The

Ursinus Chapter, Pennsylvania Sigma, was installed January 1, 1950. Election to the society is based on academic achievement in the social sciences. Election of eligible Juniors and Seniors is held once a year, the nominations coming from faculty members.

### **IUNIOR YEAR ABROAD**

Ursinus College Students may spend the Junior Year at a foreign university, provided that they have maintained an average of 85 at Ursinus College and, in the opinion of the Dean and the Faculty, will be worthy representatives of the College and will profit from this experience. The course of study abroad must be approved at the time that permission is given. An examination covering the year's work may be required by the department chairman upon the student's return. Upon evidence of successful completion of the program, a maximum of fifteen (15) credits per term will be given for studies pursued in a program abroad.

Ursinus College is a member of the United Colleges for Foreign Study and Exchange. This organization is committed to a multilateral sponsoring of study opportunities at foreign institutions and aims to maintain academic standards which are comparable to those in effect on the local campus. At present the agency makes possible the participation of Ursinus students in programs in England, France, Germany and Mexico. In addition, a consultative service is provided, which furnishes information regarding foreign study opportunities in various other countries of the world. Detailed information concerning the opportunities afforded and the qualifications for participation may be obtained from the Dean.

The College sponsors its own program of travel and study in France and Spain for a limited number of students during the summer. Information may be obtained from the Chairman of the Romance Languages Department.

### **PROJECT AHEAD**

Ursinus College is a participating institution in the College Entrance/Army Enlistment Program called "Project Ahead" (Army Help for Education and Development). The College admits qualified individuals as they start their enlistment in the military service. Enlistees should write to the Dean of Admissions to arrange for an interview and consultation about the program.

### **FOREIGN STUDENTS**

Foreign Students, under guidance of the Foreign Student Adviser, are usually classified by the College as a Special Student, at least for the first year. They may then be admitted to degree candidacy for subsequent years. Although facility in understanding spoken English will be a requisite for admission, foreign students would do well to arrive in the United States before the opening of the college year in order to become familiar with American English. A "homestay" of one month as arranged through the Experiment in International Living, Putney, Vermont, U.S.A., is highly recommended to anyone whose native tongue is not English. Further information can be obtained directly from

the organization. A foreign student whose native language is not English will be considered to have fulfilled the foreign language requirement for graduation.

Foreign students should make sure that their visa is valid for more than a single entry into the United States, since on vacation trips they may wish to cross the borders into Canada or Mexico.

All foreign students who wish to apply to Ursinus College are required to take the Test of English as a Foreign Language (TOEFL). For information, write to TOEFL, Box 899, Princeton, New Jersey, USA, 08540.

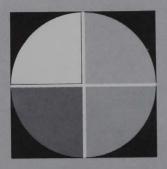
No foreign student should arrive at the Ursinus campus until all credentials are complete and a formal letter of acceptance has been received.

Dormitories and dining halls are not in operation during college holidays.

Transporation should be arranged via Philadelphia to Collegeville. Foreign students may telephone the Foreign Student Adviser at 215-489-4111 if they need assistance.



### THE URSINUS PLAN



A Pivotal, Radial, and Complementary
Program of Liberal Education
in a World Setting
at a Four-Year College

- 1. Curricular Program
  - A. Divisional Groupings of Course Offerings
    Language Division
    Humanities Division
    Social Science Division

Science and Mathematics Division

- 1. Pivotal Courses: Breadth in Liberal Education. Selection of required representative courses from each Division.
- Radial Courses. Further breadth in Liberal Education. Selection of Elective courses assuring distribution among Divisions not related to the Student's Major.
- 3. Departmental Courses and Departmental Honors. Depth in Specialty.
- 4. Interdepartmental Courses of Study.
- B. Senior Symposium and College Honors.
  - Symposium. Open to all Seniors. Students are enabled to integrate their particular departmental interests collectively in dealing with current issues.
  - 2. College Honors. Open to exceptional Students. Guided independent study.
- II. Complementary Program
  - A. Cultural Activities
  - B. Student Activities
  - C. Physical Activities

In the fall of 1966, the students at Ursinus College began their participation in the URSINUS PLAN, subtitled "A Pivotal, Radial, and Complementary

Program of Liberal Education." The College has always placed emphasis upon a broad liberal arts background, and the URSINUS PLAN provides even greater breadth, depth and freedom of choice. Learning takes place beyond the classroom, the lecture hall, and the laboratory; challenging and varied perspectives on learning itself are revealed by new groupings of related disciplines and course offerings.

Implicit in the URSINUS PLAN are four divisions, all of which are vital to the Liberal Arts student, who must learn the importance of pursuing and discerning truth through several methods of inquiry. These divisions are Language, Humanities, Social Science, and Science and Mathematics. Thus, all students at Ursinus College select certain Pivotal Courses, at least one from each division. These Pivotal Courses introduce the student to the characteristic subject matter and intellectual viewpoint of the particular division. In addition, each student elects a minimum of twelve credit hours of Radial Courses, chosen from a division or divisions outside the area of his departmental major. These Radial Courses add further breadth to the understanding gained from the Pivotal Courses. Every student is required to take a minimum of one full year of a foreign language beyond the introductory level while at Ursinus.

All students are also encouraged to participate in complementary activities, which, while not required, are nonetheless understood to be an integral part of the learning process. These activities provide many opportunities for social, educational, and cultural enrichment.

Finally, under the URSINUS PLAN all students may participate in the Senior Symposium, which provides them with an opportunity to integrate their various departmental specializations into the context of the world into which they are to be graduated, a world in which no one perspective on truth can be said to deal adequately with all the issues which they will encounter in these complex times. The Senior Symposium, with its unique emphasis upon guided independent study and interdisciplinary analyses of problems, heightens the perspectives of all who participate.

Exceptional students are given a further opportunity to pursue special interests in depth through the present program of *Departmental Honors*, as well as through the *College Scholars' Program*, which is open to Sophomores, Juniors, Seniors, and qualified Freshmen in their second term.

Thus, in various ways and at several levels, the URSINUS PLAN provides the industrious and the gifted student alike with a course of study in which will be found all kinds of learning, general and specialized, required and elective, theoretical and practical. The Plan opens the way to an education which is truly liberal and establishes a firm basis for continuing intellectual growth.

### **PIVOTAL COURSES**

Each student, regardless of his choice of major and of his Department Requirements, is required to take the following Pivotal Courses:

### LANGUAGE DIVISION:

Unless exempt in the manner prescribed, every student is required to take ENGLISH COMPOSITION 101, 102, and TWO FULL YEARS OF A FOREIGN LANGUAGE (to the 203, 204 level or one full year beyond 204). FOREIGN LANGUAGE choices include courses in Classical Studies, Germanic and Slavic Languages, and Romance Languages.

Exemption from either English Composition or two years of a foreign language will be granted to those students who give evidence of having achieved proficiency in English Composition or in a foreign language comparable to that expected of students engaged in the same studies at Ursinus College. Proficiency will be measured by scores attained in Advanced Placement Examinations or the appropriate Achievement Test of the College Entrance Examination Board, or by an examination devised by the departments concerned. Each department will determine the level of proficiency required.

### **HUMANITIES DIVISION:**

Every student is required to take one of the following full-year sequences of courses: HISTORY 101, 102; PHILOSOPHY 101, 102; or two courses in WORLD LITERATURE.

### SOCIAL SCIENCE DIVISION:

Every student is required to take one of the following full-year sequences of courses: PSYCHOLOGY 101, 102; ECONOMICS 101, 102; POLITICAL SCIENCE 101, 102; or SOCIOLOGY 201, 202.

### SCIENCE AND MATHEMATICS DIVISION:

Science majors are required to take the sequences recommended by departments. Non-Science majors are required to take one of the following full-year sequences of courses: Biology 101, 102; Chemistry 101, 102; Physics 101, 102 or Geology 101, 102.

### RADIAL COURSES IN NON-MAJOR DISCIPLINES

Every student shall elect twelve (12) credit hours of Radial Courses offered by one or more Departments in one or more Divisions in which his own departmental major is NOT found. Election of Radial credit hours can be made from the following courses:

Language Division:

Advanced English Composition

Classical Studies Dramatic Arts German

Romance Languages

Humanities Division:

Speech

English Literature Fine Arts

Foreign Literature

History Music

Pennsylvania Dutch Studies

Philosophy-Religion

Social Science Division:

Anthropology Economics

Education 202, 444, 446

Geography
Political Science
Psychology
Sociology

Science and Mathematics Division:

Biology Chemistry Computer Science

Geology

Health & Phys. Ed. 132m 132w Mathematics

Physics

Note: Senior Symposium 401, 402 are counted as radial credits for all students.

### **DEPARTMENTAL COURSES**

(See Departmental Requirements for each major)

### COLLEGE SCHOLARS' PROGRAM

Qualified Freshmen in their second term, Sophomore, Juniors and Seniors may earn up to nine credits (not more than three per semester) by pursuing guided independent research as Research Scholars or by working in subjects not in the regular college curriculum as Independent Students.

- 1. To qualify for either section of the College Scholars' Program, the candidate must have achieved a semester average of 85 during the semester immediately preceding.
- 2. A student may in this way fulfill his requirements for three credit hours of Pivotal or up to nine credit hours of Radial courses. Each semester of passing work in the programs will carry three semester credits.
- 3. A student may work for no more than one semester in the Department of his Academic Major.
- 4. The Divisions of the Program are Natural Sciences, Languages, Social Sciences, and Humanities.
  - 5. In the Research Scholars' Program, the candidate must prepare a brief

prospectus outlining his research project which meets the approval of his Academic Adviser and of the College Scholars' Committee of the faculty. He must then prepare his research paper under the supervision of a Tutor and must participate in two seminar meetings per semester, designed to bring him into contact with the other Scholars working in the same Division of the Program. His work will be graded by the College Scholars' Committee, which will assess the merits of his research paper and his performance at an oral examination, which will be attended by his Tutor and when feasible by an outside authority in the student's field. His Academic Adviser will also be invited to attend.

6. In the Independent Study Program, the candidate must prepare a prospectus stating what subject he wishes to study and what materials he hopes to use. This prospectus must be approved by his Academic Adviser and by the College Scholars' Committee of the faculty, which may consult the head of any Department logically concerned. The student must submit to the College Scholars' Committee a course outline approved by his Tutor before the end of the second full week of the semester. The student, his Tutor, and the Committee will then meet to determine an appropriate format for his final report and examination. Independent Students will also be required to participate in the seminar meetings of the Program. The Independent Student will be graded by the Committee on the basis of the course plan agreed upon at the outset, with the Tutor devising and administering the final examination, oral or written, as in any regular course.

### **DEPARTMENTAL HONORS**

Students may be graduated with special honors in their own or other departments of study in which they have shown exceptional proficiency, subject to the following regulations:

- 1. To be admitted to candidacy for Departmental Honors a student must have the endorsement of the Chairman of the Department in which he wishes to pursue the program, file the written approval in the Dean's Office, and register during the Spring pre-registration period of his junior year.
- 2. A candidate must have a minimum cumulative average of B— in all courses taken throughout the first three years of college, and a minimum average of B+ in all courses taken in the department in which he seeks honors.
- 3. Upon consent of the adviser a candidate may be exempt from a three-hour course in his own department.
- 4. The Project Adviser will assign a grade for the project and may recommend Departmental Honors. If the candidate receives a passing grade, he will earn three semester credits toward graduation, even though his work may not be recommended for Departmental Honors.
- 5. In order that the Faculty may consider the awarding of Honors, the candidate shall deposit his completed thesis, together with a written recom-

mendation from his adviser, in the Office of the Dean by April 20 preceding the Convocation at which the Departmental Honors are to be awarded.

### INTERDEPARTMENTAL COURSES OF STUDY

A student whose major interests span two or more recognized academic fields and who during his sophomore year maintains a cumulative B average may arrange a specialized major which combines these fields, such as Biophysics, Biopsychology, Chemical Biology, American History and Literature, Comparative Literature.

In order to set up such a specialized major, the student and the department heads of the involved departments must draw up a written statement of all courses and additional major requirements, which may include a comprehensive or an oral examination by members of both departments at the end of the program of studies. This proposed course of studies must then be submitted to the Dean of the College, with whose approval it may be signed and filed in his office.

Upon successful completion of the major requirements so specified, the student will graduate in the subject field specified on his program proposal.

### SENIOR SYMPOSIUM

The Senior Symposium is a cooperative teaching enterprise with an emphasis on discussion and dialogue among students, faculty, and visiting specialists from different disciplines.

The first semester's work consists entirely of independent reading and periodic conferences with a Tutor. Selected readings, conference discussions, and an oral examination comprise the first semester. The second semester's work concentrates on the major issues confronting Americans today. The Symposium meets twice a week for one and one-half hours. Approximately one-half of this time is devoted to lectures, panels, and question periods, followed by discussions to further the student's inquiry into the issues at hand.

### COMPLEMENTARY PROGRAM

### COMPLEMENTARY CULTURAL ACTIVITIES

Every full-time student is required to participate in cultural activities at Ursinus College. The activities are planned in a four-year cycle of emphasis. They include the FORUM series, the SUMMER READING program, academic CONVOCATIONS, and related activities such as FIELD TRIPS to museums, and other complementary activities.

### COMPLEMENTARY STUDENT ACTIVITIES

Every student is encouraged to participate in those student activities which provide opportunities for integrating perspectives and content of several

disciplines and courses within the four divisions. While students are not restricted to participation in activities related to their divisional or departmental fields, the following listing will assist students in seeing those relationships:

Language Division:

French Club German Club Spanish Club Debating Team

Humanities Division:

Manities Division:
YM-YWCA
Meistersingers
Messiah Chorus
Ursinus College Band
Protheatre
Ursinus Weekly Staff
Lantern Staff
Ruby Staff

Social Science Division

Economics Club
International Relations Club
Intercollegiate Conference on
Government

Psychology Club
G. Leslie Omwake Education Club
Ursinus Student Government
Association
College Union Program Board

Science and Mathematics Division: Beardwood Chemical Society

Brownback-Anders Pre-Medical Society Mathematics Club

### COMPLEMENTARY PHYSICAL ACTIVITIES

All students are required to take PHYSICAL EDUCATION 111, 112, unless they are a Physical Education Major or otherwise excused. In addition, every student is encouraged to participate in the activities of organizations such as the Outing Club, and to engage in intramural as well as varsity sports.

### COURSES OF INSTRUCTION

The system used in numbering courses reflects in general the year of the college in which many students schedule a course. Thus a course taken in the first year normally will begin with the numeral 1, in the second year with a 2, and so on. Numbers do *not* indicate the year in which a course *must* or *should* be taken. Any specific prerequisites or other considerations for enrolling are stated in the course description.

In designating courses of study, odd numerals are employed to indicate the courses offered during the Fall Term and even numerals the work of the Spring Term. Exceptions to this regulation are noted. Summer Term offerings are not announced in this catalog, but so far as possible, courses will be offered to meet the needs of students who register for the Summer Term.

The credit value of each course, expressed in semester hours, is printed in italics. The hours per week are given in the definition of the course

### 003—ANTHROPOLOGY

MR. GALLAGHER

003—201. INTRODUCTION TO SOCIOCULTURAL ANTHROPOLOGY AND LINGUISTICS

STAFF

A survey of alternate ways of dealing with human needs, while viewing people as social beings. An emphasis is placed on family patterns, kinship relationships, political organization, economic systems, religion, and language as a cultural system. Three hours per week. *Three semester hours*.

003—202. INTRODUCTION TO PHYSICAL ANTHROPOLOGY AND PREHISTORIC ARCHAEOLOGY

STAFF

A survey of anthropological analysis of human biological nature and human prehistory. Attention will be given to human evolution, issues of race, primate studies, and the reconstruction of life styles of extinct, non-literate populations. Three hours per week. *Three semester hours.* 

#### ART

see under Fine Arts

### 005—BIOLOGY

ASSOCIATE PROFESSOR ALLEN ASSOCIATE PROFESSOR KRUSE ASSISTANT PROFESSOR SMALL ASSISTANT PROFESSOR SHINEHOUSE

DR. FIELDS DR. PHILLIPS

The Department aims, through the study of the fundamental aspects of Biology as a science, to foster the scientific attitude in its students, and to provide for its majors a firm foundation for graduate work in Biology or for professional schools in the several fields of medicine and other health services. The Department also participates in a program leading to Teacher Certification in secondary schools as described below.

Students majoring in Biology must take a minimum of 32 semester hours of Biology in one of the three programs listed below. Chemistry 111, 112; Chemistry 207, 208; Physics 111, 112 or 111, 112 Int., and Mathematics 111, 112 or 111, 112 Int., are required for all majors. Students interested in graduate programs in the biological sciences are advised to elect additional courses in Mathematics, including Mathematics 215, 216.

### I. Biology Major Program

This program is designed for students who wish to terminate their formal education at the baccalaureate level and for those who wish to pursue further degree programs in the biological sciences. Electives are to be selected from other departmental course offerings at the 200, 300 and 400 levels and should be chosen in accordance with vocational objectives. The following are required for the completion of this course of study: Biology 111, 112; 315, 316; 321; sufficient electives to total 32 semester hours of Biology.

### II. Healing Arts Program

Students who wish to prepare for further study in any of the allied health fields should follow this program, which is designed to satisfy the requirements for admission to schools of medicine, dentistry, veterinary medicine, etc. Electives are to be selected from other departmental course offerings at the 300 and 400 levels and should be chosen in accordance with the professional objective. The following are required for the completion of this program: Biology 111, 112; 315, 316; 321; Biology 424 or Chemistry 203 or Chemistry 316; sufficient electives to total a minimum of 32 semester hours of Biology.

### III. Teaching Program

This program is designed for prospective secondary school teachers whose principle interest is Biology and who wish to be certified in Biological Science. In addition to the nondepartmental courses required for all major students, the following are prescribed by the Department of Biology: Biology 111, 112; 315, 316; 321; 326 or 328; 415; sufficient electives to total a minimum of 32 semester hours of Biology.

The curriculum of students beyond the first year must be arranged in consultation with the adviser from the Department of Education. For a suggested sequence of courses, see Concentration in Biology at the back of the catalog.

### 005-101. GENERAL BIOLOGY (ZOOLOGY)

DR. SMALL

Introduction to principles of structure, function, and development of living things as revealed in a study of selected animal types. Two hours of lecture; two hours of laboratory per week. *Three semester hours*.

### 005-102. GENERAL BIOLOGY (BOTANY)

DR. SMALL

Introduction to principles of structure, function, and development of living things as revealed in a study of selected plant material. Two hours of lecture; two hours of laboratory per week. *Three semester hours*.

Courses 005—101 and 102 of General Biology are not open to Biology majors but may be taken by other students to satisfy college graduation requirements.

### 005-111. GENERAL BIOLOGY

DR. PHILLIPS

A consideration of the general principles operative in the natural world through the study of representative types of organisms and the medium of experimentation. General topics include the metabolism, genetics, development and structure of living systems. Prerequisite or Corequisite, Chemistry 111, 112 or equivalent. Three hours of lecture; three hours of laboratory per week. Four semester hours.

### 005-112. GENERAL BIOLOGY

DR. PHILLIPS

A continuation of Biology 111. General topics include physiology, ecology and evolution of living organisms. Prerequisite, Biology 111; Prerequisite or Corequisite, Chemistry 112. Three hours of lecture; three hours of laboratory per week. Four semester hours.

Courses 005—111, 112 are the basic introductory courses prescribed for all Biology majors and for any others who are planning to meet the various pre-professional requirements in the health sciences.

### 005-213. HUMAN HEREDITY

DR. FIELDS

A general survey of genetics with emphasis on classical inheritance, and the social implications and human aspects of heredity. Prerequisite, Biology 102. Three hours of lecture per week. *Three semester hours*.

NOTE: Course 005-213 is not open to majors in Biology or Chemistry.

### 005-222. EVOLUTION

DR. FIELDS

Lectures, assigned readings and papers explaining the history of living things in space and time. Prerequisite, Biology 102 or 112. Two hours per week. Two semester hours.

### 005-315. VERTEBRATE ANATOMY AND DEVELOPMENT

DR. ALLEN

An integrated comparative study of anatomy and development in all major vertebrate classes. Laboratory includes embryology of the amphibian, bird and mammal; dissection of the shark, bony fish, bird and mammal. Prerequisite, Biology 112. Two hours of lecture; six hours of laboratory per week. Five semester hours.

### 005—316. VERTEBRATE ANATOMY AND DEVELOPMENT

DR. ALLEN

A continuation of Biology 315. Prerequisite, Biology 315. Two hours of lecture; six hours of laboratory per week. Five semester hours.

### 005-317. HUMAN ANATOMY AND PHYSIOLOGY

MRS. SHINEHOUSE

A study of the characteristics of cells and tissues, and of the muscular, skeletal and nervous systems. Emphasis is placed on the integration of structure and function. Prerequisite, Biology 101 or 111; or permission of the instructor. Two hours of lecture; two hours of laboratory per week. *Three semester hours*.

### 005—318. HUMAN ANATOMY AND PHYSIOLOGY

MRS. SHINEHOUSE

A study of the structure and function of the sense organs, and of the circulatory, respiratory, urinary, digestive, endocrine and reproductive systems. Prerequisite, Biology 317; or permission of the instructor. Two hours of lecture; two hours of laboratory per week. *Three semester hours*.

### 005-321. GENETICS

DR. FIELDS

A survey of the basic principles of classical, biochemical and population genetics using a variety of organisms to illustrate the experimental rationale of the genetic problem. Prerequisite, Biology 112; or permission of the instructor. Two hours of lecture; two hours of laboratory per week. *Three semester hours*.

### 005-324. INVERTEBRATE ZOOLOGY

DR. PHILLIPS

An introduction to the study of invertebrate animals and their life processes. Prerequisite, Biology 112. Two hours of lecture; three hours of laboratory per week. Three semester hours.

### 005—326. PLANT MORPHOLOGY AND TAXONOMY

DR. SMALL

A phylogenetic survey of the morphology and evolution of the plant kingdom, including the principles, theory and methodology underlying modern taxonomic systems. Available field time centers upon the taxonomy of local angiosperms. Prerequisite, Biology 102 or 112. Two hours of lecture; three hours of laboratory per week. Three semester hours.

NOTE: Limitations in space or laboratory facilities preclude the enrollment of more than 20 students in Biology 326.

### 005-328. PLANT PHYSIOLOGY

DR. FIELDS

A study of the life processes of green plants and the environmental factors that regulate them. Experiments will illustrate physiological concepts. Prerequisites, Biology 112; Chemistry 208. Two hours of lecture; three hours of laboratory per week. *Three semester hours*.

### 005-341. RESEARCH

STAFF

Scientific literature research with the preparation of a final report concerning some biological phenomenon of interest to the student. Prerequisites, Biology 112 and written consent of a staff member who will serve as research adviser, presented at the time of preregistration. One semester hour.

#### 005-342. RESEARCH

STAFF

Content and prerequisites as in Biology 341, but offered in the spring term. One semester hour.

### 005-415. ECOLOGY

DR. SMALL

Studies of the interrelationships between organisms and their environment, with emphasis on field investigations. The following principles and concepts are stressed: energy relations, population dynamics, the community, succession and environmental effects. Prerequisite, Biology 102 or 112. Two hours of lecture; three hours of laboratory per week. *Three semester hours*.

NOTE: Limitations in space or laboratory facilities preclude the enrollment of more than 40 students in Biology 415.

### 005-422. HISTOLOGY

MRS. SHINEHOUSE

A study of the structure of vertebrate tissues and their integration into organs and organ systems. An introduction to histological technique. Prerequisite, Biology 112; or permission of the instructor. Two hours of lecture; five hours of laboratory per week. Four semester hours.

### 005-423. MICROBIOLOGY

DR. KRUSE

The structural, cultural, and physiological characteristics of microorganisms and their role in the economy of nature. The principles of immunology, serology and virology are also considered. Prerequisite, Biology 112; or permission of the instructor. Two hours of lecture; three hours of laboratory per week. *Three semester hours*.

### 005-424. BIOCHEMISTRY

DR. KRUSE

Chemistry and intermediate metabolism of proteins, lipids, carbohydrates and nucleic acids; energetics of biological compounds; chemistry of photosynthesis, digestion, absorption, assimilation and excretion. Prerequisite, Chemistry 208. Two hours of lecture; three hours of laboratory per week. *Three semester hours*.

### 005-425. CELLULAR PHYSIOLOGY

DR. KRUSE

A study of the phenomena involved in cell growth, maintenance, self-regulation and in the general behavior of protoplasm. Prerequisites, Biology 112; Chemistry 208. Two hours of lecture; four hours of laboratory per week. Four semester hours.

NOTE: Limitations in space or laboratory facilities preclude the enrollment of more than 16 students in Biology 425.

### 005-426. VERTEBRATE PHYSIOLOGY

DR. KRUSE

A study of the general principles of the functional mechanisms that underlie the life processes of vertebrates. Prerequisites, Biology 112; Chemistry 208. Two hours of lecture; four hours of laboratory per week. Four semester hours.

NOTE: Limitations in space or laboratory facilities preclude the enrollment of more than 20 students in Biology 426.

### 005-433. SEMINAR

STAFF

Papers, reports, discussions and/or independent research concerned with selected phases of biological knowledge. Topics to be chosen by the instructor in charge. Prerequisites, Senior standing; Biology 315, 316; 321; Chemistry 208; or permission of the instructor. One hour per week. One semester hour.

### 005-434. SEMINAR

STAFF

Comparable to Biology 433, but using different material. Prerequisites, Senior standing; Biology 315, 316; 321; Chemistry 208; or permission of the instructor. One hour per week. One semester hour.

### 005-451. RESEARCH

STAFF

Library and laboratory research with the preparation of a final thesis. An original laboratory analysis of some biological phenomenon and presentation of results in a student-staff seminar. Prerequisites, Biology 112 and written consent of a staff member who will serve as research adviser, presented at the time of preregistration. Three semester hours.

### 005-452. RESEARCH

STAFF

Content and prerequisites as in Biology 451, but offered in the spring term. Three semester hours.

NOTE: A normal maximum of three semester hours of credit will be applied to any combination of research courses. Students who wish to add additional hours of research credit must obtain special permission from the research adviser and from the Chairman of the Department.

### **BUSINESS ADMINISTRATION**

see under Economics and Business Administration

### 010—CHEMISTRY

PROFESSOR STAIGER
ASSOCIATE PROFESSOR SCHULTZ
ASSOCIATE PROFESSOR KRUSE
ASSOCIATE PROFESSOR KRUSE
MRS. SHAW

The courses of study offered by the Chemistry Department are (1) to provide a course in general chemistry which will satisfy the requirements of the College for a laboratory science; (2) to provide training in chemistry for students planning to teach; (3) to provide more than the minimum training for students planning to become technicians in medical laboratories, and for pre-dental and pre-medical students; (4) to offer sufficient specialized training in chemistry beyond the basic courses that will enable a graduate to enter a career as a professional chemist; and (5) to prepare students for graduate training.

Students whose principal interest is Chemistry will select a degree of concentration consistent with their vocational objective.

One of the following programs should be chosen that corresponds with the student's educational objectives:

### 1. American Chemical Society — Accredited Chemistry Major

All students planning to become professional chemists should enroll in the following program, which is approved by the American Chemical Society for undergraduate professional training in Chemistry. The following courses are prescribed:

1st year — Chemistry 111, 112; Physics 111, 112; Mathematics 111, 112; English Composition; Language (German is recommended).

2nd year — Chemistry 203, 207, 208; Mathematics 231; Physics 204; (Social Science) Pivotal, continuation of Language or Radial

and 3rd year — Chemistry 309, 310; 306, 311. The following are recommended and 4th year for selection as electives; Chemistry 304, 405, 312, 413, 330, 424; Physics 207, 208; German 311, 312; Mathematics 232.

### II. Concentration in Chemistry for Graduate School and Medical School

This program is designed for degree seeking students planning for graduate work or admission to professional schools in the healing arts (Medicine, Dentistry, etc.). In this and the following programs another language may be substituted for the German recommended in Program I.

### URSINUS COLLEGE BULLETIN

1st and 2nd year identical with Program I except Biology 111, 112 is substituted for Physics 204 in the second year.

3rd year — Chemistry 309, 310. The following are recommended for selection as electives, Chemistry 405, 306, 321, 424.

### III. Concentration in Chemistry for Allied Fields of Science

This program is suggested for students wishing a sound preparation in Chemistry to be combined with further study in areas such as Pharmacology, Clinical Chemistry, Physical Therapy, and Environmental Science, or students wishing to combine a Chemistry background with a concentration in Economics, Business Administration, Biology or Psychology.

1st and 2nd year identical with Program I except Biology 111, 112 is substituted for Chemistry 203 and Physics 204 and Mathematics 215 (Statistics) is substituted for Mathematics 231 (Intermediate Calculus).

3rd year — Chemistry 203, 316; Biology, 6 credits, (Humanities) Radial; Electives consistent with objectives.

4th year — Chemistry 321, 424; Radial; Electives consistent with objectives.

### IV. Teaching

This program (major in Science, concentration in Chemistry) is designed for prospective secondary school teachers whose principal interest is Chemistry. The following courses are prescribed by the Department of Chemistry: Chemistry 111, 112, 203, 207, 208; Chemistry electives 6 credits; Biology 101, 102; Physics 111, 112, 211. 212, 204; Mathematics 111, 112. A student presenting six credits in general chemistry may satisfy the prerequisite for an advanced course by passing a written examination set by the faculty of the Department.

### 010-101. GENERAL CHEMISTRY

MRS. SHAW

A development of the facts, theories, and methods of chemistry as applied to solids, liquids, gases and solutions. Related laboratory work is given. Chemistry 101 does not satisfy the prerequisite requirements for advanced chemistry courses. Limitations in space or laboratory facilities preclude the enrollment of more than 20 students. Two hours of lecture and three hours of laboratory per week. *Three semester hours*.

### 010-102. GENERAL CHEMISTRY

MRS. SHAW

A continuation of Chemistry 101. Prerequisite, Chemistry 101. A study of the properties and reactions of the elements. A study of descriptive inorganic and organic chemistry based on the principles of equilibrium and structure. Chemistry 102 does not satisfy the prerequisite for advanced chemistry courses. Limitations in space or laboratory facilities preclude the enrollment of more than 20 students. Two hours of lecture and three hours of laboratory per week *Three semester hours*. Courses 010-101 and 010-102 of General Chemistry are not open to Chemistry majors but may be taken by other students who satisfy college graduation requirements.

### 010-111. GENERAL COLLEGE CHEMISTRY

DR. STAIGER, MRS. SHAW

A study of the basic theories and laws of chemistry, concerning the common elements of the periodic system, their structures, interactions and energy relationships. This course is accompanied by work in the mathematical solution of chemical

problems and is the prerequisite to advanced chemistry courses. Three hours of lecture and three hours of laboratory per week. Four semester hours. Chemistry 111, 112 are coordinated with Mathematics 111, 112 and Physics 111, 112 in such a way as to demonstrate their relationships and interdependence.

010—112. GENERAL COLLEGE CHEMISTRY

A continuation of Course 010-111. Prerequisite course 010-111. A study of the oxidation states of the common elements, chemical equilibrium, solubility product and pH. The laboratory experimentation deals with the qualitative separation and characterization of the common cations and anions. Three hours of lecture and three hours of laboratory per week. Four semester hours.

# 010—203. QUANTITATIVE ANALYSIS A study of commonly used methods of gravimetric and volumetric analysis. Emphasis is placed on the theory of equilibrium. Prerequisites, Chemistry, 111, 112; Mathematics 111, 112 and Physics, 111, 112, previously or concurrently. Three hours lecture and three hours of laboratory per week. Four semester hours.

# 010—207. ORGANIC CHEMISTRY The study of the properties, synthesis, and the structure of the most important classes of the carbon compounds. Prerequisites, Chemistry 111, 112; Mathematics 111, 112 and Physics, 111, 112, previously or concurrently. Three hours of lecture and three hours of laboratory per week. Four semester hours.

## 010—208. ORGANIC CHEMISTRY A continuation of Chemistry 207. Prerequisite, Chemistry 207. Three hours of lecture and three hours of laboratory per week. Four semester hours.

# 010—304. INORGANIC CHEMISTRY Selected topics in the descriptive chemistry of the elements in terms of modern bonding theory. The laboratory work involves the application of special techniques to the synthesis of representative inorganic compounds. Three hours of lecture and three hours of laboratory per week. Prerequisite, Chemistry 309. Four semester hours.

# 010—306. INSTRUMENTAL ANALYSIS A study of the principles and applications of modern instrumental analysis with particular emphasis on the chemical principles on which the methods of measurement are based. Prerequisites, Chemistry 203 and 309. Two hours of lecture and three hours of laboratory per week. Three semester hours.

# 010—309. PHYSICAL CHEMISTRY The principles of thermodynamics and quantum chemistry are used in studying the states and structure of matter. Kinetics and mechanism, equilibrium, electrochemistry, surface chemistry, solutions, and phase rule are also studied. Related laboratory work is provided. Prerequisites, Chemistry 203 and Mathematics 231. Mathematics 232 is recommended. Three hours of lecture and three hours of laboratory work per week. Four semester hours.

## 010—310. PHYSICAL CHEMISTRY A continuation of Chemistry 309. Prerequisite, Chemistry 309. Three hours of lecture and three hours of laboratory work per week. Four semester hours.

### URSINUS COLLEGE BULLETIN

### 010-311. THE IDENTIFICATION OF ORGANIC COMPOUNDS

DR. STAIGER, DR. HESS

The classification and identification of organic compounds based on physical and chemical properties; the chemical analysis of organic functional groups and the preparation of characteristic derivatives. Two hours of lecture and six hours of laboratory per week. Prerequisite, Chemistry 208. Four semester hours.

### 010-312. ADVANCED ORGANIC CHEMISTRY

DR. HESS

A study of the structures of organic molecules and their relation to the mechanism of organic reactions. Prerequisite, Chemistry 208 and permission of the instructor. Three hours of lecture per week. *Three semester hours*.

### 010—316. PHYSICAL CHEMISTRY FOR THE LIFE SCIENCES

DR. SCHULTZ

A study of the fundamental laws of thermodynamics as applied to biological systems. The areas emphasized are macromolecular solutions, electro-chemistry, surface chemistry and enzyme kinetics. Prerequisite, Chemistry 208, Biology 112. Three hours of lecture and three hours of laboratory per week. Four semester hours.

### 010-321. THE LITERATURE OF CHEMISTRY

MISS BARTI

The use of books, journals, and reports in the field of Chemistry and the presentation of a seminar paper. This course is prerequisite to the Chemical Research courses. Two hours per week. *Two semester hours*.

### 010-330. RESEARCH

STAFF

Library and laboratory research with oral progress reports and a final thesis. Prerequisite 321 and written consent of a staff member who will serve as research advisor, presented at the time of preregistration. A student will normally register for two semesters sequentially of RESEARCH with a maximum of four semester hours credit being granted. Students who have been admitted to the course and who have fulfilled its requirements may be awarded Departmental Honors, but no additional semester hours of credit, if they have qualified in other ways for admission to the Honor program. Two semester hours.

### 010-424. BIOCHEMISTRY

DR. KRUSE

Chemistry and intermediate metabolism of proteins, lipids, carbohydrates, and nucleic acids; energetics of biological compounds; chemistry of photosynthesis, digestion, absorption, assimilation, and excretion. Prerequisites, Chemistry 207, 208. Two hours of lecture; three hours of laboratory per week. *Three semester hours*.

### 010-405. ANALYTICAL CHEMISTRY

MISS BARTH

An advanced course in quantitative analysis. Topics covered are non-aqueous and complexometric titrimetry, analytical separations, and quantitative organic analysis. Prerequisites, Chemistry 203 and 310. Two hours of lecture and three hours of laboratory per week. *Three semester hours*.

### 010-413. POLYMER CHEMISTRY

DR. SCHULTZ

A study of the synthesis, structure and properties of polymers. Topics include molecular weight determination and distribution, crystallinity, solution properties, and mechanical behavior. Prerequisite, Chemistry 208. Two hours of lecture and three hours of laboratory per week. *Three semester hours*.

010-431. RESEARCH

STAFF

Prerequisite, Chemistry 330. Two semester hours.

010-432. RESEARCH

STAFF

Prerequisite, Chemistry 431. Two semester hours.

### **CLASSICAL STUDIES**

### ASSISTANT PROFESSOR WICKERSHAM

Courses in the Department of Classical Studies are intended to develop reading ability in ancient Greek and Latin, and to introduce the student to the major forms of ancient literary expression; they enhance general linguistic facility and give the student direct access to the original documents of Western civilization.

Majors must take at least 12 semester hours of Greek, and 12 semester hours of Latin above Latin 102. Latin 301 is required. Majors must also include among their electives History 101, 102 and elect at least 9 semester hours from the following major-related courses: English 321 (Classics in Translation), 214 (Linguistics); Anthropology 101, 102 (Introduction to Social and Physical Anthropology); History 319 (Ancient Near East & Greece), 320 (Rome), 321 (Byzantium), 327, 238 (History of Art); Philosophy 101, 102 (History of Philosophy), 103 (General Problems of Philosophy), 105, 106 (Logic), 108 (Aesthetics); World Literature 101, 102 (Western Literature). Other courses not mentioned may be counted as major-related with the approval of the Department.

Those intending to teach Greek or Latin in the public schools are urged to acquire State certification through the Department of Education.

### 016-GREEK

016-101. ELEMENTARY GREEK

DR. WICKERSHAM

Thorough study of ancient Greek grammar and syntax. Practice in reading and composition. Emphasis on development of reading ability. Forms a unit with Greek 102. Three hours per week. Three semester hours.

016-102. ELEMENTARY GREEK

DR. WICKERSHAM

Continuation of Greek 101. Study of grammar completed and replaced by reading of a whole work, such as a play of Euripides, Xenophon's *Anabasis I*, or a book of the New Testament. Three hours per week. *Three semester hours*.

016-203. ATTIC PROSE

DR. WICKERSHAM

Plato's Apology and other texts concerning Socrates. Prerequisites: Greek 102 or equivalent. Three hours per week. Three semester hours.

016-204. THE EPIC

DR. WICKERSHAM

Large excerpts from the *Iliad* or *Odyssey*. Study of Homer's poetry and thought. Introduction to history of the Greek language, with special attention to phonology. Foundations of Western literature. Prerequisites: Greek 203 or equivalent. Three hours per week. *Three semester hours*.

The following advanced courses will be given according to students' needs and interests; consult with the instructor concerning available offerings.

### URSINUS COLLEGE BULLETIN

016-208. NEW TESTAMENT

DR. WICKERSHAM

At least one book of this important record. Three hours per week. Three semester hours.

016-301. DRAMA

DR. WICKERSHAM

Reading and study of Sophocles' Oedipus the King, plus one other tragedy by Sophocles, Aeschylus, or Euripides, or a comedy by Aristophanes or Menander. Three hours per week. Three semester hours.

016-302. HISTORICAL WRITERS

DR. WICKERSHAM

Large excerpts from Herodotus' Persian Wars, Thucydides' Peloponnesian War, or Xenophon's Greek History. Three hours per week. Three semester hours.

016-401. SEMINAR

DR. WICKERSHAM

Seminars of varying content, concentrating on a topic, author, or genre. Three hours per week. Three semester hours.

016-402. SEMINAR

DR. WICKERSHAM

Seminars of varying content, concentration on a topic, author, or genre. Three hours per week. Three semester hours

### 017—LATIN

017-101. ELEMENTARY LATIN

DR. WICKERSHAM

Instant production of reading ability, with ever-growing development of vocabulary and style. Forms unit with Latin 102. Three hours per week. Three semester hours.

017-102. ELEMENTARY LATIN

DR. WICKERSHAM

Continuation of Latin 101. All aspects of classical Latin are covered; readings depict wide variety of Roman life. Three hours per week, *Three semester hours*.

017-203. INTERMEDIATE LATIN

DR. WICKERSHAM

Review of elementary Latin. Carefully programmed readings cover topography of Rome, and early Roman legends and history down through the first Punic War. Three hours per week. Three semester hours.

017-204. INTERMEDIATE LATIN

DR. WICKERSHAM

Continues Latin 203. Practice and review, and transition to readings from original sources taking Roman history through the growth of the empire. Three hours per week. Three semester hours.

The sequence Latin 101—204 is recommended for fulfilling the foreign language requirement

The following advanced courses will be offered as suits the needs and interests of students; consult with the instructor concerning available offerings.

017-301. THE LATIN LANGUAGE

DR. WICKERSHAM

Detailed study of Latin vocabulary, morphology and syntax. Introduction to comparative linguistics. Survey of documents and literature from the origins to the present. Required for Classical Studies majors. Prerequisite, Latin 204, equivalent, or permission. Three hours per week. Three semester hours.

### 017-302. INTRODUCTION TO LATIN POETRY

DR. WICKERSHAM

Poems of Catullus, Ovid, Tibullus, Propertius. Stress on developing sensitivity and canons of appreciation. Three hours per week. Three semester hours.

### 017-303. HISTORICAL WRITERS

DR. WICKERSHAM

Caesar, Suetonius, or Tacitus. Three hours per week. Three semester hours.

### 017—304. THE ROMAN REVOLUTION

DR. WICKERSHAM

Speeches and letters of Cicero, and other contemporary documents. Three hours per week. Three semester hours.

017-305. VERGIL'S AENEID

DR. WICKERSHAM

Paganism transcended. Three hours per week, Three semester hours.

017-401. SEMINAR

DR. WICKERSHAM

Seminars of changing content, for study of special topics, authors, genres. Three hours per week. Three semester hours.

017-402. SEMINAR

DR. WICKERSHAM

Seminars of changing content, for study of special topics, authors, genres. Three hours per week. Three semester hours.

### 018—COMPUTER SCIENCE

ASSOCIATE PROFESSOR JESSUP

DR. CORWIN

018—102. INTRODUCTION TO COMPUTER SCIENCE

DR. JESSUP

The aim of this course is to teach the student how to use the computer as a problemsolving tool. The emphasis will be on problems which occur in the social sciences and humanities. Instruction in BASIC will be given with heavy emphasis on data and string manipulation. (This course replaces 018—101.) Three hours per week. *Three* semester hours.

### 018—111. COMPUTER PROGRAMMING I

DR. JESSUP

The aim of this course is to teach computer programming as a problem-solving tool. The language of instruction will be BASIC. Numerical and non-numerical problems from the sciences and social sciences will be considered. Although the emphasis will be on numerical techniques, other topics such as strings, arrays, subroutines and data manipulation will be covered in detail. Students may not receive credit for both 018—102 and 018—111. Prerequisite, Mathematics 102 or equivalent. Three hours per week. Three semester hours.

### 018—112. COMPUTER PROGRAMMING II

DR. CORWIN

Computer programming on an intermediate level and a study of a second higher level language such as FORTRAN. The emphasis will be on the computer as a problem-solving tool. Topics such as linked linear lists, data bases, structured programming, recursions, compilers and system design may be introduced. Prerequisite 018—101 or 018—111 or equivalent experience. Three hours per week. Three semester hours.

### 018—211. SEMINAR IN COMPUTING

OR CORWI

A detailed look at some advanced topics in Computer Science such as data base management, operating systems or compiler design. Prerequisite 018—101 or 108—111 or permission of the instructor. Three hours per week. Three semester hours.

### 020—ECONOMICS AND BUSINESS ADMINISTRATION

ASSOCIATE PROFESSOR PILGRIM
ASSOCIATE PROFESSOR SYMONS
ASSISTANT PROFESSOR MEYER

ASSISTANT PROFESSOR MEYER

ASSISTANT PROFESSOR MEYER

ASSISTANT PROFESSOR DOYLE

MR. McCARTHY

MRS. HUBER

The work in the Economics and Business Administration Department is designed to give (1) a knowledge of the structure and functioning of our economy for effective citizenship; (2) a knowledge of the philosophy and methods of economics as a policy science; (3) a suitable background in economics for those who wish to enter accounting, business, law, government, or graduate school.

All students majoring in the department must take a minimum of thirty semester hours of work in the department including Economics and Business Administration 101, 102, 325, 326, and 435. In addition, they must take Mathematics 101, 102, 215, and one pivotal series other than Economics and Business Administration 101, 102 from the Social Science Division. Mathematics 111 may be substituted for Mathematics 101, 102 upon the basis of adequate previous preparation.

Selection of electives will depend on the student's vocational objective. Recommended electives for different objectives are as follows:

### I. Economics Emphasis

This program is recommended for students planning to pursue graduate study in economics or who are interested in economics as a social science. Electives should be chosen from Economics and Business Administration 311, 321, 328, 408, 434, 435, and 436. An introductory course in computer science is also recommended. Students planning on graduate study should also take at least one year of calculus.

### II. Business Administration Emphasis

This emphasis is recommended for students preparing for a career in business. It is also recommended for students planning to attend graduate school in management. Electives should be chosen from Economics and Business Administration 111, 112, 215, 306, 307, 313, 315, 316, 318, and 436. It is also recommended that students take an introductory course in computer science and the year-long course in intermediate accounting offered in the Ursinus Evening School. Students planning on graduate school in management should complete Economics and Business Administration 315 and at least one semester of calculus.

### III. Accounting Emphasis

This program is designed for students interested in entering the field of Accounting and seeking the CPA designation. In addition to the thirty semester hours of economics (including Accounting Principles), students should elect a minimum of eighteen additional semester hours of Accounting courses offered in the Ursinus Evening School. Although these courses do not count toward the Economics and Business Administration major, they do receive credit toward graduation.

### IV. Secondary School Teaching Certification

This program satisfies the Pennsylvania state requirements for secondary school certification in social science — economics emphasis. The required courses in Economics and Business Administration are 101, 102, 325, 326, and 435. Electives should be selected from Economics and Business Administration 215, 306, 307, 313, 316, 318, 328, 408, and 434.

### 020—101. ECONOMIC PRINCIPLES—MACROECONOMICS

STAFF

Basic economic concepts, national income and its fluctuations, the money and banking system, and the role of government. Three hours per week. *Three semester hours*.

### 020—102. ECONOMIC PRINCIPLES-MICROECONOMICS

STAFF

Price theory, income distribution, international trade, and current economic problems. Three hours per week. *Three semester hours*.

### 020-111. ACCOUNTING PRINCIPLES

DR. DOYLE

MRS. HUBER

Introduction to principles and procedures underlying the periodic determination of income and financial positions; emphasis is directed toward the interrelationship between statements and their use in decision making. Three hours per week. Three semester hours.

### 020-112. ACCOUNTING PRINCIPLES

DR. DOYLE

MRS. HUBER

Partnership, corporate, manufacturing cost, and departmental accounting. Analysis of financial statements and the impact of accounting methods and policies on financial reports. Prerequisite, Economics and Business Administration 111. Three hours per week. *Three semester hours*.

### 020-215. BUSINESS LAW

MR. McCARTHY

Fundamental procedures governing contracts, sales, agency, bailments and negotiable instruments with emphasis on the analysis of cases. Three hours per week. *Three semester hours*.

### 020-306. CORPORATION FINANCE

MR. SYMONS

Basic principles underlying the financing of the corporate structure. Short and long-term financing instruments. Expansion, failure, and reorganization of the corporation. Prerequisite, Economics and Business Administration 101. Three hours per week. Three semester hours.

### 020-307. MARKETING

MR. SYMONS

Basic principles and practices involved in the physical distribution of goods and services between producers and consumers. Methods used to create place, time, and possession utility. Three hours per week. Three semester hours.

### 020-311. URBAN ECONOMICS

DR. DOYLE

Application of the analytical techniques of economic theory to cities and to particular urban problems (housing, crime, pollution, migration, transportation, urban finance, and land use). Prerequisites: Economics and Business Administration 101, 102; Mathematics 215 or equivalent. Three hours per week. *Three semester hours*.

### URSINUS COLLEGE BULLETIN

### 020-313. PUBLIC FINANCE AND TAXATION

MR. SYMONS

Principles of public expenditures, public revenues, public indebtedness, and financial administration. Principles and workings of the Federal Income Tax Law. Class assignments in solving income tax problems. Prerequisite, Economics and Business Administration 101, 102. Three hours per week. *Three semester hours*.

### 020-315. QUANTITATIVE METHODS FOR BUSINESS

DR. PILGRIM

An introductory course in operations research. Topics include linear programming, decision theory, PERT/CPM analysis, and simulation methods. Emphasis on problem-solving and case studies. Prerequisite Mathematics 215 or equivalent. Three hours per week. *Three semester hours*.

### 020-316. MONEY AND BANKING

MR. SYMONS

Monetary theory and practice with reference to commercial banking in the United States. Governmental monetary and fiscal policies. International balance of payments. Prerequisites, Economics and Business Administration 101, 102. Three hours per week. Three semester hours.

### 020—318. ECONOMICS OF MANAGEMENT AND LABOR

MR. MEYER

Theory and practice in the organization and management of the firm for effective use of capital and labor. Three hours per week, *Three semester hours*.

### 020-321. HISTORY OF ECONOMIC THOUGHT

MR. MEYER

An examination of the development of systematic economic thought from ancient to modern times. Ideas are considered in the light of their initial and continuing relevance. Three hours per week, *Three semester hours*.

#### 020-325. MICRO-ECONOMICS

DR. PILGRIM

Advanced study of price theory and income distribution. Prerequisite, Economics and Business Administration 101, 102. Three hours per week. Three semester hours.

### 020—326. MACRO-ECONOMICS

DR. PILGRIM

Development of alternative theoretical models of output, employment, and price level determination and the impact of governmental stabilization policies. Prerequisite, Economics and Business Administration 101, 102. Three hours per week. *Three semester hours*.

### 020-328. COMPARATIVE ECONOMIC SYSTEMS

MR. MEYER

Analysis of National economic systems in theory and practice. The development of economic policy and problems is discussed and compared. Two year cycle of topics; each topic may be elected for credit. Prerequisite, Economics and Business Administration 101, 102.

020—328a. ECONOMIC SYSTEMS IN DEVELOPED COUNTRIES Three hours per week. Three semester hours.

\*020—328b. ECONOMIC SYSTEMS IN UNDERDEVELOPED COUNTRIES Three hours per week. Three semester hours.

### 020-434. ECONOMIC DEVELOPMENT

MR. MEYER

Examination of the theories of economic growth, and of the social, economic and political factors that seem to affect the rate of growth. Two year cycle of topics; each topic may be elected for credit. Prerequisite, Economics and Business Administration 101, 102.

020—434a. PROCESS AND PROBLEMS OF DEVELOPMENT IN THE MODERN WORLD

Three hours per week. Three semester hours.

\*020—434b. PROCESS AND PROBLEMS OF ECONOMIC DEVELOPMENT IN EUROPE AND THE U.S.

Three hours per week. Three semester hours.

020—435. SEMINAR IN CURRENT ECONOMICS PROBLEMS

MR. MEYER, DR. PILGRIM

Review of contemporary economic problems in a setting of policy actions and theoretical analysis. Preparation and discussion of research papers. Open to senior economics majors or to others with permission of instructor. Three hours per week. Three semester hours.

### 020-436. ECONOMETRICS

DR. DOYLE

Topics include simple and multiple regression analysis, forecasting, time series analysis, and the construction of economic models. Development and presentation of research papers. Prerequisites, Mathematics 101, 102, 215 or their equivalent. Three hours per week. *Three semester hours*.

### 025—EDUCATION

PROFESSOR COGGER
PROFESSOR FLETCHER
ASSOCIATE PROFESSOR JOHNS
ASSISTANT PROFESSOR SULLIVAN

VISITING PROFESSOR KRUG ASSOCIATE PROFESSOR FAGO ASSISTANT PROFESSOR LODGE

The Department of Education aims (1) to increase the students' awareness of the function of the school in modern society; (2) to understand forces which cause change in society and to develop a philosophy of education which will be suitable to these changes; (3) to increase the students' understanding of the nature of growth and the development of individuals; (4) to acquaint the students with modern theories of learning; (5) to provide opportunities for future teachers to become acquainted with acceptable practices in the schools; (6) to develop the skills necessary for beginning teachers. The preparation of teachers is a function of the college as a whole.

The Department of Education provides the professional courses required for certification of secondary school teachers in Pennsylvania, New Jersey, Delaware and Maryland. In Pennsylvania approval for certification has been granted in nearly all

<sup>\*</sup> This course is not offered in 1978-1979.

the subject areas of the curriculum. Copies of these approved programs are in the hands of the department advisers and should be referred to when planning your yearly registration. Students preparing for requirements of other states should consult the Chairman of the Department for information concerning specific requirements of those states. Students preparing for teaching must complete Psychology 101 prior to taking courses in Education. As a prerequisite to student teaching, second-year students are required to observe classes in secondary schools for ten hours, and third-year students in areas other than Physical Education are required to observe classes in secondary schools for twenty hours. For Physical Education majors, at least eight hours of the third-year observation should be in elementary schools. The remainder of the twenty hours for Physical Education majors will be in secondary schools. Information regarding this observation can be obtained in the office of the Department of Education.

Those students who elect student teaching in the fall semester of the senior year have a full semester of professional courses. The following courses will be given in that semester: Education 441, 443, 405, 444.

The following program of studies is required by all students seeking certification in secondary school teaching:

Second year, 2nd semester, Education 202; Third year, Education 223, 224; Fourth year, 1st semester, Education 441; Education 443; Education 405; Education 444. Education 443 will be satisfied for students who major in Health and Physical Education upon the successful completion of Physical Education 355 and 356.

### 025-202. INTRODUCTION TO SECONDARY SCHOOL TEACHING

DR. COGGER, DR. JOHNS, MR. KRUG

An introductory course for those who plan to enter teaching. It deals with the organization, personnel, agencies and characteristics of the American school system, and sketches briefly the characteristics of teaching as a profession and the details of the teacher's responsibility in the classroom and in the school. Open only to sophomores and juniors, not to seniors. Three hours per week. *Three semester hours*.

025—223. EDUCATIONAL PSYCHOLOGY — LEARNING DR. FAGO, DR. LODGE Contemporary learning theory for teachers. Topics include schedules of reinforcement, operant theory and methodology for the classroom, token economics, and programmed learning techniques and their application. (The same course as 223 under Psychology.) Prerequisite, Psychology 101 or 102. Three hours per week. Three semester hours.

### 025—224. EDUCATIONAL PSYCHOLOGY — GROWTH AND DEVELOPMENT

DR. FLETCHER, DR. FAGO, DR. SULLIVAN

The nature and development of the psychological processes from the prenatal period through adolescence. (The same course as 224 under Psychology.) Prerequisite, Psychology 101 or 102. Three hours per week. *Three semester hours*.

### 025-405. STUDENT TEACHING AND PRACTICUM

DR. COGGER, DR. JOHNS, MR. KRUG

A laboratory course consisting of observation and student teaching. Supervision is provided by the Department of Education in cooperation with cooperating teachers from the selected schools. Where possible, supervision will also be provided by

members of the college faculty whose interests are those of the subjects which the students teach. Conferences and critiques are held between the college supervisors and student teachers. A practicum is held bi-weekly while the student teaching program is in progress, dealing with the analysis of classroom instructional practice and the responsibilities of a beginning teacher. This course is open only to fourth-year students who meet personality and academic requirements. A student who has not acquired an accumulative average of at least 70 by the end of the first term of his junior year will not normally be approved for student teaching. Fall semester. Prerequisites, Education 202, 223, 224, 441, 443. Ten semester hours for Health and Physical Education majors. Nine semester hours for all others.

### 025—409. EDUCATIONAL AND PSYCHOLOGICAL TESTS AND MEASUREMENTS DR. FLETCHER

An introductory survey of the field of measurement in psychology and education; main features of the technique of testing and test construction; types of tests and scales; evaluation; interpretation; use. (The same course as 409 under Psychology.) Prerequisites, Psychology 101, 210. Two hours of lecture. Two hours of laboratory per week. Three semester hours.

### 025—434. SEMINAR IN SECONDARY EDUCATION

DR. JOHNS

A study of selected topics, drawn from curriculum, which are relevant to secondary education. Two hours per week. Two semester hours.

### 025—441. ORIENTATION TO EDUCATIONAL PRACTICE AND METHODOLOGY DR. COGGER, DR. JOHNS

Principles of secondary school teaching; general methods of instruction; problems of the beginning teacher; inter-group sensitivity; the teaching of reading in the content areas; instruction and practice in the utilization of audiovisual methods and materials. Two hours per week. Two semester hours.

### 025—443. SPECIAL METHODS OF TEACHING IN THE SECONDARY SCHOOL

STAFF

Instruction in the techniques appropriate to the teaching of secondary school subjects; units on reading where appropriate. Sections will be formed in the following areas and noted with the designated suffixes on the college records.

(C)—Classical Studies

(R)-Romance Languages

(E)—English

(S)—Science

(G)—Germanic Languages

(X)—Social Science

(M)—Mathematics

Prerequisite, Education 441. One hour per week. One semester hour.

### 025-444. FOUNDATIONS OF EDUCATION

DR. COGGER, DR. JOHNS

A study of the philosophical and historical foundations of education and the problems of contemporary education, emphasizing the potential implications not only for the secondary school teacher, but for society in general. A requirement for those preparing to teach, it attempts to synthesize all their preliminary study and practice in their teacher education. It can be a valuable liberalizing course for those who do not prepare for teaching. Three hours per week. *Three semester hours*.

025—446. ISSUES AND TRENDS IN CONTEMPORARY EDUCATION DR. COGGER A study of major educational problems and trends, including school desegregation, humanism in education, open education, equalizing educational opportunity, accountability, and relevance in education. Societal factors and values related to these problems will be stressed. Three hours per week. Three semester hours. Alternates with 444 in spring term.

### **ENGLISH**

PROFESSOR STOREY
PROFESSOR BOZORTH
ASSOCIATE PROFESSOR DOLMAN
ASSOCIATE PROFESSOR JONES
ASSOCIATE PROFESSOR BYERLY
ASSISTANT PROFESSOR DE CATUR

ASSISTANT PROFESSOR HENRY
ASSISTANT PROFESSOR PERRETEN
ASSISTANT PROFESSOR RICHTER
ASSISTANT PROFESSOR WICKERSHAM
MRS. CLOUSER

Majors must take at least thirty semester hours in English beyond Composition 101, 102. To complete departmental requirements, in their senior year majors must pass a comprehensive examination in English and American Literature. Most students majoring in English will be strongly urged to take the following courses: History 101, 102; History 309, 310 or 311, 312; Literature 203, 204; and Literature 219, 220. Students preparing for graduate study in English should elect French and German as their modern languages. Study in classical languages is also recommended for such students as is Literature 213. Required of students who want to be certified to teach English are Literature 214 and Speech 201.

Students will be guided in selecting courses that will help prepare them for the comprehensive examination as well as for their careers

### 031—Composition

031—101. FIRST-YEAR COMPOSITION

STAFF

Practice in the writing of exposition; readings in narrative and expository prose. Three hours per week. Three semester hours.

031—102. FIRST-YEAR COMPOSITION

STAFF

Continuation of Composition 101; readings in poetry and drama. Prerequisite, Composition 101. Three hours per week. *Three semester hours*.

031—205. ADVANCED COMPOSITION

MR. DOLMAN

Discussion of and practice in current types of *fictional* writing, with emphasis on the short story. Prerequisite, Composition 101, 102. Two hours per week. *Two semester hours*.

031-206. ADVANCED COMPOSITION

MR. DOLMAN

Discussion of and practice in *non-fictional* writing with an introduction to basic forms of journalism. Prerequisite, Composition, 101, 102. Two hours per week. *Two semester hours*.

031—308. ADVANCED COMPOSITION

MR. DOLMAN

A conference course in creative writing offering the student opportunity to practice his favorite type of composition. Enrollment is limited to twelve qualified students by arrangement with the instructor. Prerequisite, Composition 101, 102. Individually scheduled. Two semester hours.

### 032-Literature

### 032-203. SURVEY OF ENGLISH LITERATURE

STAFF

The history of English Literature from its beginnings to the end of the neoclassical era. Special attention is given to the social background. Three hours per week. Three semester hours.

### 032-204. SURVEY OF ENGLISH LITERATURE

STAFF

A continuation of course 203 to the present. Three hours per week. Three semester hours.

### 032-209. SHAKESPEARE

DR. DeCATUR, DR. HENRY

The reading of Shakespeare's principal plays and the study of their background. Three hours per week. *Three semester hours*.

### 032-210. SHAKESPEARE

DR. DeCATUR, DR. HENRY

Continuation of Literature 209. Literature 209 is not a prerequisite for Literature 210. Three hours per week. *Three semester hours*.

Literature 209 and 210 are elective for second-year, third-year and fourth-year students.

### 032-213. HISTORY OF THE ENGLISH LANGUAGE

DR. BYERLY

A survey of the development of the English language from Old English to modern American and British English. Close analysis of samples of English in at least three stages of its history. Three hours per week. *Three semester hours*.

### 032-214. LINGUISTICS AND MODERN GRAMMAR

DR. BYERLY

This course prepares future teachers to utilize a variety of current approaches to English grammar. Although transformational-generative theory is emphasized, traditional and structural grammars are also discussed. Three hours per week. *Three semester hours*.

### 032—219. AMERICAN LITERATURE

DR. BYERLY, MRS. CLOUSER

A survey of American literature from its beginning to the Civil War. Three hours per week, *Three semester hours*.

032—220. AMERICAN LITERATURE

DR. BYERLY, MRS. CLOUSER

American literature from the Civil War to the present. Prerequisite, Literature 219. Three hours per week. *Three semester hours*.

Literature 219 and 220 are elective for second-year, third-year and fourth-year students.

### 032—305. ENGLISH LITERATURE FROM 1660 TO 1740

DR. PERRETEN

The literature of the Restoration and the early decades of the eighteenth century. Three hours per week. Three semester hours.

Literature 305 is elective for third-year and fourth-year students.

032—306. ENGLISH LITERATURE FROM 1740 TO 1795

DR. PERRETEN

The literature of the neo-classical age and of pre-romanticism. Three hours per week.

Three semester hours.

Literature 306 is elective for third-year and fourth-year students.

### URSINUS COLLEGE BULLETIN

\*032—307. ENGLISH POETRY, 1790-1824

DR. PERRETEN

A study of the English Romantic poets from 1790 to the death of Byron. Three hours per week. Three semester hours.

Literature 307 is elective for third-year and fourth-year students.

032-308. ENGLISH POETRY, 1824-1890

MR. JONES

A study of the poetry of Tennyson and his contemporaries. Three hours per week. Three semester hours.

Literature 308 is elective for third-year and fourth-year students.

032—315. TWENTIETH CENTURY POETRY

DR. BOZORTH

A study of modern poetry written in Britain and America. Three hours per week. Three semester hours.

\*032—320. CLASSICS IN TRANSLATION: COMEDY

DR. WICKERSHAM

A thorough study of one area of ancient Greek or Roman thought, experience and literature. Three hours per week. Three semester hours.

\*032—322. CLASSICS IN TRANSLATION: EPIC Three hours per week. Three semester hours.

DR. WICKERSHAM

032-324. CLASSICS IN TRANSLATION: TRAGEDY

DR. WICKERSHAM

Three hours per week. Three semester hours.

DR. WICKERSHAM

\*032—326. CLASSICS IN TRANSLATION: MYTHOLOGY Three hours per week. Three semester hours.

DR. BYERLY

032—327. CRITICAL THEORY AND PRACTICE A survey of critical approaches to literature from Sir Philip Sidney's The Defense of Poesy to the present, emphasizing the practical application of critical principles in the student's own writing. Alternates with Literature 329. Three hours per week. Three semester hours.

\*032-329. CHAUCER

A study of Chaucer's poetry in its historical context, including Troilus and Criseyde, The Canterbury Tales, and some of the short poems. Alternates with Literature 327. Three hours per week. Three semester hours.

032—330. ENGLISH NON-DRAMATIC LITERATURE, 1485-1660 DR. DeCATUR A study of the non-dramatic poetry and prose of the English Renaissance, with concentration upon the works of Malory, More, Sidney, Spenser, Browne, and the metaphysical poets. Prerequisite, Literature 203 or History 204. Three hours per week. Three semester hours.

Literature 330 alternates with Literature 331.

\*032—331. ENGLISH DRAMA, BEGINNINGS TO 1642

DR. DeCATUR

A study of the development of English drama (excluding Shakespeare) through the Medieval and Renaissance periods up to the closing of the theaters. Prerequisites, Literature 203 and Literature 209 or 210. Three hours per week. Three semester hours. Literature 331 alternates with Literature 330.

<sup>\*</sup> This course is not offered in 1978-1979.

032-332. MILTON

DR. STOREY

The reading of Milton's poetry and most important prose works and the study of their background. Prerequisite, Literature 203 or History 204. Three hours per week. Three semester hours.

032—333. THE NOVEL IN ENGLAND AND AMERICA BEFORE

THE TWENTIETH CENTURY

MR. JONES

A study of the origins and development of the novel in England and America from the seventeenth through the nineteenth centuries. Prerequisite, English Composition 101. Three hours per week. *Three semester hours*.

032—334. THE NOVEL IN ENGLAND SINCE THE BEGINNING

OF THE TWENTIETH CENTURY

DR. BOZORTH

A study of British fiction of the twentieth century. Three hours per week. Three semester hours.

Literature 334 alternates with Literature 434.

032-335. MODERN DRAMA

DR. HENRY

A reading and discussion course in significant European and American dramatists, from Ibsen to O'Neill, with emphasis on influences of earlier playwrights on modern writers. Prerequisite, English Composition 101. Three hours per week. *Three semester hours*.

032-336. CONTEMPORARY DRAMA

DR. HENRY

A reading and discussion course in significant contemporary European and American dramatists, since World War II. Prerequisite, English Composition 101. Three hours per week. *Three semester hours*.

\*032—434 THE NOVEL IN AMERICA SINCE THE BEGINNING

OF THE TWENTIETH CENTURY

OR BOZORTH

A study of American fiction of the twentieth century. Three hours per week. Three semester hours.

Literature 434 alternates with Literature 334.

032-440. SENIOR SEMINAR

DR. BYERLY

A study of key works and major trends in English and American literature. Open only to senior English majors. Three hours per week. Three semester hours.

\*032—441. SEMINAR IN ADVANCED STUDIES IN LITERATURE

STAFF

A study of genre. Prerequisite, junior or senior standing. Three hours per week. Three semester hours.

032—442. SEMINAR IN ADVANCED STUDIES IN LITERATURE

STAFF

A study of a major author. Prerequisite, junior or senior standing. Three hours per week. Three semester hours.

080-FINE ARTS

MR. XARAS

080—201. APPRECIATION OF THE FINE ARTS

MR. XARAS

An integrated study of the visual, audio and performing arts. Three hours per week. Three semester hours. Enrollment limited to 60.

<sup>\*</sup> This course is not offered in 1978-1979.

#### URSINUS COLLEGE BULLETIN

080-202. APPRECIATION OF THE FINE ARTS

MR. XARAS

A continuation of Fine Arts 201. Prerequisite, Fine Arts 201. Three hours per week. Three semester hours. Enrollment limited to 60.

080-303. PAINTING AND THE PLASTIC ARTS

MR. XARAS

Theory of painting and the plastic arts. Three hours per week. *Three semester hours*. Enrollment limited to 18 per section.

080-304. PAINTING AND THE PLASTIC ARTS

MR. XARAS

A continuation of Fine Arts 303. Prerequisite, Fine Arts 303. Three hours per week. Three semester hours. Enrollment limited to 18 per section. See also History 327, 328.

# 034—GEOGRAPHY

034-102. GEOGRAPHY

MR. DAVIS

Extensive study of the major regions of the world. The purpose is to analyze each from the standpoint of climate, natural resources, and economic problems, and to give the student a fairly detailed knowledge of the physical geography of the regions. Three hours per week. *Three semester hours*.

#### 033—GEOLOGY

VISITING PROFESSOR BOGERT

The science of geology presents to the student the fundamental concepts of the earth and its relationship to the economic and cultural worlds of man.

033-101. PHYSICAL GEOLOGY

MR. BOGERT

The analysis of earth materials, structures, and processes that form the earth's surface. Two hours of lecture and two hours of laboratory work per week. *Three semester hours*.

033—102. HISTORICAL GEOLOGY

MR. BOGERT

A systematic study of the earth's historic events as recorded by geologic processes and organic evolution. Two hours of lecture and two hours of laboratory work per week *Three semester hours*.

#### 035—GERMAN

ASSISTANT PROFESSOR CLOUSER
ASSISTANT PROFESSOR LLOYD

VISITING PROFESSOR SPRINGER

DR. WARD

The goals of the *Department of German* are the development of linguistic skills in German and instruction in aesthetic and critical appreciation of German Literature. Majors are required to take at least thirty semester hours in German beyond German 203-204, and twelve hours of study in another language. German 305, 306, 309, and 310 are required courses. At least eighteen semester hours must be taken on the 300-level (not including 311 and 312). In the senior year, majors must pass a comprehensive departmental examination. It is recommended that students preparing for graduate study in German elect French and/or Latin as supplemental languages, and the following complementary courses from other departments: History 101, 102, 203, 204, 327, 328; English 209, 210, 213, 319, 321, 323, 325; Philosophy 101, 102.

#### 035-101. ELEMENTARY GERMAN

STAFF

Introduction to grammar and practice in using the language. Three hours in class per week. One hour per week in the language laboratory. Three semester hours.

# 035-102. ELEMENTARY GERMAN

STAFF

Continuation of 101. Should not be taken separately. Three hours in class per week. One hour per week in the language laboratory. Three semester hours.

#### 035-203. INTERMEDIATE GERMAN

STAFF

Grammar review, composition and conversation, and an introduction to the Germanic literary and cultural heritage. Prerequisite German 102 or equivalent. Three hours per week in class. One hour per week in the language laboratory. Three semester hours.

#### 035-204. INTERMEDIATE GERMAN

STAFF

Continuation of 203. Prerequisite, German 203. Three hours in class per week. One hour per week in the language laboratory. Three semester hours.

035—305. SURVEY OF GERMAN LITERATURE: BEGINNINGS TO 1750 STAFF Representative literature from the Old High German Period to the Age of Enlightenment. Prerequisite, 204 or equivalent. Three hours per week. Three semester hours.

035—306. SURVEY OF GERMAN LITERATURE: 1750 TO PRESENT

STAFF
Representative literature from the Age of Enlightenment to the Modern Period.

Prerequisite, 204 or equivalent, Three hours per week. Three semester hours.

035—307. STUDIES IN GERMAN LITERATURE

DR. SPRINGER

Readings in Middle High German Literature with special attention to Hartman von Ouwe's epic, *Der arme Heinrich*. Prerequisite, 306 or equivalent. Three hours per week. *Three semester hours*.

035—308. STUDIES IN THE GERMANIC LANGUAGES

DR. SPRINGER

A study of the development of the German language from Indo-European to modern German, Prerequisite, 306 or equivalent. Three hours per week. Three semester hours.

#### 035—309. CONVERSATION AND COMPOSITION

STAFF

Practice in oral elements of the language, written composition, and advanced grammar. Prerequisite, 204 or equivalent. Three hours per week. Three semester hours.

#### 035-310. CONVERSATION AND COMPOSITION

STAF

Continuation of 309. Prerequisite, German 309. Three hours per week. Three semester hours.

#### 035-311. SCIENTIFIC GERMAN

STAFF

Grammar review with attention to techniques of translation. General, scientific, and cultural readings. (Open only to majors in physical and natural sciences who have not already completed 204. 311-312 satisfies the language requirement for graduation.) Prerequisite, 102. Three hours per week. Three semester hours.

#### 035-312. SCIENTIFIC GERMAN

STAFF

Reading of scientific texts. Prerequisite, 204 or 311. Three hours per week. Three semester hours

# \*035-413. SEMINAR IN THE LITERATURE OF

THE EIGHTEENTH CENTURY: GOETHE

DR. CLOUSER

A study of the poetic, dramatic and prose masterpieces of Goethe. Prerequisites, 305 and 306. Three hours per week. *Three semester hours*.

# \*035-414. SEMINAR IN THE LITERATURE OF

THE EIGHTEENTH CENTURY: SCHILLER

DR. LLOYD

A study of the poetic, dramatic, and prose masterpieces of Schiller. Prerequisites, 305 and 306. Three hours per week. *Three semester hours*.

# \*035-415. SEMINAR IN THE LITERATURE OF THE

NINETEENTH CENTURY: FICTION

DR. CLOUSER

Authors studied include the Romantics, Kleist, Stifter, Heine, Keller, Meyer, and others. Prerequisites, 305 and 306. Three hours per week. *Three semester hours*.

# \*035—416. SEMINAR IN THE LITERATURE OF THE

NINETEENTH CENTURY: DRAMA

DR. LLOYD

Authors studied include Kleist, Grabbe, Ludwig, Büchner, Hebbel, and Grillparzer Prerequisites, 305 and 306. Three hours per week. *Three semester hours*.

035—419. SEMINAR IN GERMAN LITERATURE: (MAJOR WRITERS)

A comprehensive study of a genre, the works of a major writer, or of a literary movement or motif. Prerequisites, 305 and 306. Three hours per week. Three semester

hours.
035—420. SEMINAR IN THE LITERATURE OF THE

TWENTIETH CENTURY

DR. LLOYD

This course will focus on the major dramatists of Naturalism, Impressionism, Neo-Romanticism, and Expressionism. Prerequisites, 305 and 306. Three hours per week. Three semester hours

#### **GREEK**

See under Classical Languages

#### 040—HEALTH AND PHYSICAL EDUCATION

ASSISTANT PROFESSOR DAVIDSON MRS. BUTLER
PROFESSOR GURZYNSKI MR. CASH
ASSOCIATE PROFESSOR WHATLEY MISS CHLAD
ASSISTANT PROFESSOR BOYD MRS. POLEY

ASSISTANT PROFESSOR KARAS

The Health and Physical Education Department serves dual functions: (1) to provide for all students a diversified Service Program of activities, and (2) to offer to those students interested in majoring in the field, a comprehensive Professional Program in Health and Physical Education leading to teaching certification in these areas.

Included in the Service Program are the required two-hour freshman classes in basic activities, the optional organized intramural programs for men and women, and the provision of recreational facilities for use of all students in their leisure time.

The Professional Program is a four-year course, offering, within the framework of a broad Liberal Arts education, the opportunity to receive specific training in the field of Health and Physical Education. Implicit in its objectives are the development of the

<sup>\*</sup> This course is not offered in 1978-1979.

total individual in knowledge, skills, habits and attitudes, the development of social and professional competencies, the growth of insight, independent thought, initiative and leadership, and the evolution of a dynamic ethical philosophy.

Students majoring in Health and Physical Education must take the following courses: Physical Education 131, 132 (m) or 132 (w), 243, 244, 351, 352, 354, 355, 356, 357, 358, 361, 462, 464; 101, 102, 203, 204, 305, 306, 408; Biology 101, 102, 317, 318; Psychology 101, 108. Students preparing for teaching also must take prescribed education courses.

# **Required Activities Courses**

MR. WHATLEY, MISS BOYD, MRS. BUTLER, MR. KARAS, MRS. POLEY, MISS CHLAD

040—111, 112. These basic courses offering a variety of seasonal games and skills, aim to develop basic skills, improve physical fitness, provide enjoyment and relaxation and to develop recreational and social competence through participation in stimulating activities. These courses are required for graduation for all students except those majoring in physical education and must be completed in the first year. Two hours per week. Not for credit.

# Professional Courses Health and Physical Education

**040—131.** PRINCIPLES AND HISTORY OF PHYSICAL EDUCATION MR. DAVIDSON An orientation course designed to give the student an understanding of the meaning, basic philosophies, principles, and problems of physical education; an analysis of its historical background from the era of primitive man to modern times. Three hours per week. Three semester hours.

# 040—132m. PERSONAL AND COMMUNITY HEALTH

(Men students only)

MR. KARAS

A study of factors affecting the physical, mental, and social well-being of the individual and of the community. Major emphasis is placed upon problems of personal health including disease prevention and the understanding of the functioning of the human body. Three hours per week. *Three semester hours*.

#### 040—132w PERSONAL AND COMMUNITY HEALTH

(Women students only)

MISS BOYD

Subject matter and presentation as for Physical Education 132m Three hours per week. Three semester hours.

**040—242.** LEADERSHIP IN CAMP AND CLUB ACTIVITIES MR. WHATLEY Discussion of the principles, characteristics, and processes of leadership in light of their significance to directors of camp and club activities. Three hours per week. Three semester hours.

#### 040—243. COMMUNITY RECREATION PROGRAMS

MR. CASH

A comprehensive analysis of the leisure-time problem. An examination of the nature, scope, need, and function of community recreation programs, and of the social and economic forces affecting them. Three hours per week. *Three semester hours*.

# 040—244. PROBLEMS AND MATERIALS OF HEALTH AND SAFETY EDUCATION IN SCHOOL PROGRAMS

MISS BOYD

The scope, responsibilty, and function of the health education program in the school with particular stress upon the phases of healthful school living, health service, and safety education. Resource materials are studied and compiled. Two hours per week. Two semester hours.

#### 040-351. KINESIOLOGY

MR. GURZYNSKI

An anatomical analysis of the mechanics of body movement and position. A study of the fundamental anatomical concepts in relation to the development of physical education skills. Prerequisite, Biology 317, 318. Two hours per week. Two semester hours.

#### 040-352. PHYSIOLOGY OF ACTIVITY

MR. GURZYNSKI

The physiological phenomena underlying physical activity. The anticipatory, immediate, and after effects of exercise on the different organs and the organism as a whole. Class discussion and laboratory demonstration. Prerequisite, Biology 317, 318. Two hours per week. Two semester hours.

## 040—354. FIRST AID CARE AND PREVENTION OF ATHLETIC INJURIES

MISS CHLAD

This course deals with the causes, preventive procedures and emergency treatment for all types of common injuries and with those injuries specifically incident to athletic competition. Conditioning exercises, diet and various therapeutic aids are studied. Laboratory practice includes bandaging, taping, massage, and the clinical use of physical therapy equipment. This work meets the requirements for the Red Cross Standard First Aid certificate. Two hours per week. Two semester hours.

#### 040—355. METHODS OF HEALTH INSTRUCTION.

MR. KARAS

Analysis of the principles, materials, and methods involved in the teaching of health at different age levels. Lesson plans and units construction. Open only to physical education majors or students who have completed six hours in Education. Two hours per week. Two semester hours.

# 040—356. PRINCIPLES AND METHODS OF TEACHING PHYSICAL EDUCATION MRS. BUTLER

Principles, methods, and problems of teaching physical educational activities at the elementary and secondary school levels, lesson planning, unit and curriculum construction. Open only to physical education majors or students who have completed six hours in Education. Two hours per week *Two semester hours*.

# 040—357. PRINCIPLES AND METHODS OF COACHING AND OFFICIATING MISS BOYD, MR. GURZYNSKI, MR. KARAS, AND STAFF

This course is designed with particular reference to the needs of prospective coaches and officials. Opportunities are given for practice in officiating. Two hours per week. Two semester hours.

# 040—358. PRINCIPLES AND METHODS OF COACHING AND OFFICIATING MISS BOYD, MR. KARAS, AND STAFF

Continuation of Physical Education 357. Two hours per week. Two semester hours.

040—361. TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION MRS. BUTLER This course aims to familiarize the student with the nature, function and history of measurement in the field of physical education and to give him working knowledge and practical experience in the use of testing procedures. Three hours per week. Three semester hours.

040-462. ADMINISTRATION OF HEALTH, PHYSICAL EDUCATION, AND RECREATION

MR. DAVIDSON

A study of the administrative problems in health education and physical education. Two hours per week. Two semester hours.

040-464. CORRECTIVE AND ADAPTIVE PHYSICAL EDUCATION MR. GURZYNSKI An analysis of conditions affecting the development of atypical children; methods for selecting and classifying such individuals, with particular attention to the adaption of activities to meet their needs. Three hours per week. Three semester hours.

040-466. HEALTH AND PHYSICAL EDUCATION SEMINAR

Consideration of current trends and emphasis in the fields of health, physical education and recreation. Lecture, discussion, papers, reports, and guest speakers. Limited to second semester seniors in physical education curriculum. Two hours per week. Two semester hours.

## **Activities Courses**

040-101, 102. FIRST YEAR ACTIVITIES

STAFF

Physical Education activities of a seasonal nature comprise the major content of this course with greatest stress laid on team sports. All activities are analyzed from the teaching standpoint. Students are given opportunities for self evaluation and for creative and teaching experiences. Six hours per week. Four semester hours.

MEN: Football, soccer, speedball, basketball, wrestling, gymnastics (apparatus and tumbling), lacrosse, baseball, square, folk and social dancing.

WOMEN: Field hockey, soccer, speedball, basketball, lacrosse, tennis, softball, gymnastics (apparatus and tumbling), square, folk and social dancing.

040-203, 204. SECOND YEAR ACTIVITIES

STAFF

A continuation of H & PE 101, 102 with some additional activities. More stress is placed on teaching and on the development of advanced skills and team strategies. Opportunity is given in modern dance for original composition. Six hours per week. Four semester hours.

MEN: Football, soccer, speedball, basketball, wrestling, swimming, weight training and conditioning, handball, paddleball, baseball, lacrosse, and track and field.

WOMEN: Field hockey, soccer, speedball, basketball, swimming, modern dance, badminton, squash and lacrosse.

040-305, 306. THIRD YEAR ACTIVITIES

More time is devoted to individual sports with continuing emphasis upon the teaching and analysis of skills and strategies, and upon the role of these activities in the physical education program. Six hours per week. Four semester hours.

MEN: Archery, golf, tennis, badminton, squash, bowling, swimming, volleyball, team handball, and elementary activities.

WOMEN: Archery, golf, tennis, bowling, swimming, team handball, volleyball, weight training and conditioning, and elementary activities.

#### 040-408. FOURTH YEAR ACTIVITIES

STAFF

A continuation of courses 305 and 306 at a more advanced level. In addition, track and field for women and synchronized swimming, diving, judo and self defense for men and women. Six hours per week. Two semester hours.

Professional courses offered by the Department of Health and Physical Education are designed for students majoring in Health and Physical Education. Students in other majors may elect such courses but, except for H & PE 131, 132m or 132w, academic credit will be withheld until the student has completed the general college requirements, his departmental requirements, and has earned a total of one hundred twenty semester hours credit. An exception will be made in the case of a student who wishes to have Health or Physical Education written upon his teaching certificate in addition to another subject matter certification. In such a case, academic credit will be given within the one hundred twenty hour limit. Students should consult the Education Department to learn the exact certification requirements of a particular state.

## 045—HISTORY

PROFESSOR DAVIS
PROFESSOR E. H. MILLER
PROFESSOR PARSONS
PROFESSOR VISSER

ASSISTANT PROFESSOR REED MR. XARAS DR. DOUGHTY

The objectives of the History Department are to provide an opportunity for students to understand the backgrounds of Western culture and their relationships to other cultures through a knowledge of pertinent historical material, and to become acquainted with the methods of historical research and analysis.

In addition to History 101, 102 students majoring in history must take Course 213, 214; six additional semester hours of European history; eleven semester hours in elective history courses, including one seminar; Economics 101, 102; Political Science 101, 102; Sociology 201; English Literature 203, 204 or 219, 220; and Psychology 101. To complete departmental requirements, majors must pass in their senior year a comprehensive examination in History.

For students who plan to prepare for secondary school teaching in the social studies field it is suggested that consideration be given to course 433—434 and to those other courses which include study of contributions of minority groups, specifically History 213—214; 207—208; 300—400; and the seminars devoted to African or American topics.

#### 045-101. EUROPEAN CIVILIZATION

STAFF

An introductory history of ideas and institutions in European Civilization for the purpose of providing a general historical background for other courses and for an understanding of contemporary world affairs. Two lectures and one section meeting per week. Three semester hours.

#### 045—102. EUROPEAN CIVILIZATION

STAFF

Prerequisite, History 101. Continuation of Course 101. Two lectures and one section meeting per week. *Three semester hours*.

\*045-203. MEDIEVAL INSTITUTIONS

DR. VISSER

A study of selected economic, social, cultural, religious, and political institutions essential to the understanding of the period from the fall of Rome to the Renaissance. Not open to first-year students. Three hours per week. *Three semester hours*.

\*045—204. THE RENAISSANCE AND THE REFORMATION DR. VISSER A study of humanism and religion in the 15th and 16th centuries. This course not open to first-year students. Three hours per week. Three semester hours.

045—205. THE AGE OF ENLIGHTENMENT

The development of the European state system 1648-1815, the Enlightenment, the French Revolution and the Napoleonic Era. Not open to first-year students. Three hours per week. Three semester hours.

045—206. THE AGE OF ROMANTICISM

DR. DOUGHTY
European romanticism and nationalism 1815-1870. Not open to first-year students.
Three hours per week. Three semester hours.

045-207. THE TWENTIETH CENTURY

DR. VISSER

A study of the impact of industrialization, neo-imperialism, and nationalism upon the European peoples and their overseas empires in the years leading up to and directly following the first World War. Not open to first-year students. Three hours per week. Three semester hours.

045-208. THE TWENTIETH CENTURY

DR. VISSER

A continuation of History 207 covering the events leading up to and following the second World War and the problems of contemporary world history. Not open to first-year students. Three hours per week. Three semester hours.

045—213. THE UNITED STATES OF AMERICA

DR. PARSONS, DR. REED Political and cultural history from colonial status to World Power with special emphasis on Pennsylvania. This course is prescribed for all students majoring in history and for any others who are preparing to teach social studies. Three hours per week. Three semester hours.

045—214. THE UNITED STATES OF AMERICA DR. PARSONS, DR. REED A continuation of Course 213. Prescribed for all students majoring in history and for any others preparing to teach social studies. Three hours per week. Three semester hours.

\*045—309. ENGLAND AND THE BRITISH EMPIRE DR. DOUGHTY A history of the British people with special attention to political and constitutional developments to 1600. Three hours per week. Three semester hours. (Alternates with 311.)

\*045—310. ENGLAND AND THE EMPIRE — COMMONWEALTH DR. DOUGHTY A continuation of History 309 with special attention to political and imperial developments since 1600. Three hours per week. Three semester hours. (Alternates with 312.)

045—311. BRITISH SOCIAL HISTORY
A study of the daily life of the British people. Three hours per week. Three semester hours. (Alternates with 309.)

<sup>\*</sup> This course is not offered in 1978-1979.

#### 045—312. BRITISH SOCIAL HISTORY

DR. DOUGHTY

A continuation of Course 311. Three hours per week. Three semester hours. (Alternates with 310.)

#### 045-315. AMERICAN DIPLOMATIC HISTORY

DR. REED

A study of American diplomacy from the treaty of 1783 to the present, including an analysis of the various factors which determine that policy; public opinion, population, world markets and international organization. Three hours per week, Three semester hours.

## 045—317. LATIN AMERICA

DR. MILLER

Political and cultural backgrounds of South and Central American nations and their relation to the interests and policy of the United States. Three hours per week. Three semester hours. (Alternates with 323.)

# 045-318. LATIN AMERICA

DR. MILLER

A continuation of History 317. Three hours per week. Three semester hours. (Alternates with 324.)

#### 045-319. ANCIENT HISTORY

DR. VISSER

Studies in the social, political, and economic life in the ancient world of the Eastern Mediterranean and the Hellenistic area. Three hours per week. Three semester hours.

#### 045-320. ANCIENT HISTORY

DR. VISSER

A continuation of History 319 with emphasis upon the history of the Roman republic, the transition to empire, and the causes for the decline of the Roman world. Three hours per week. Three semester hours.

# \*045-321. MIDDLE EAST

A study of the Byzantine, Persian, and Moslem empires in the middle ages. Three hours per week. Three semester hours.

#### \*045-322. MIDDLE EAST

The Moslem World and the Middle East under the Ottoman Empire and in modern times. Three hours per week. Three semester hours.

#### EAST, SOUTHEAST AND SOUTH ASIA

History of the Asiatic Mainland and the Pacific Islands. Three hours per week. Three semester hours. (Alternates with 317.)

# 045-324. EAST, SOUTHEAST AND SOUTH ASIA

A continuation of History 323. Three hours per week. Three semester hours. (Alternates with 318.)

#### 045—325. POLITICAL AND SOCIAL HISTORY OF RUSSIA

An examination of the political, social, economic, and cultural conditions of the medieval and modern periods of Russian development through the imperial era to the end of the nineteenth century. Three hours per week, Three semester hours.

045—326. POLITICAL AND SOCIAL HISTORY OF RUSSIA

An examination of the history of the Soviet Union, the sources of its institutions, and its role in the contemporary world. Three hours per week. Three semester hours.

<sup>\*</sup> This course is not offered in 1978-1979.

045-327. HISTORY OF ART

MR. XARAS

An introduction to the history of architecture, sculpture and painting, both Occidental and Oriental, presented by means of illustrated lectures and museum trips. Prerequisite, History 101, 102 or Philosophy 101, 102 Three hours per week. *Three semester hours*.

045-328. HISTORY OF ART

hours.

MR. XARAS

A continuation of History 327. Prerequisite, History 327. Three hours per week. Three semester hours.

045—335. ECONOMIC AND SOCIAL HISTORY OF THE UNITED STATES AND PENNSYLVANIA — COLONIAL AMERICA

DR. PARSONS

Economic foundations and social change in the United States with intensive study of Pennsylvania. A two-year cycle of topics is offered: courses 335 and 336 alternate with courses 435 and 436. This course is not open to first-year students. Three hours per week. Three semester hours.

045—336. ECONOMIC AND SOCIAL HISTORY OF THE

UNITED STATES AND PENNSYLVANIA — CIVIL WAR DR. PARSONS This course is not open to first-year students. Three hours per week. Three semester

045—429. SEMINAR IN THE HISTORY OF EUROPE, OR ASIA, OR AFRICA

STAFF

Preparation and discussion of research papers. Open to third-year and fourth-year students with the permission of the instructor. Three hours per week. *Three semester hours* 

The requirement of History 429 may be met by students who complete a special summer course of European travel and research conducted by a member of the Department of History of Ursinus College.

045—430. SEMINAR IN THE HISTORY OF ASIA, OR AFRICA,

OR EUROPE

STAF

Preparation and discussion of research papers. Open to third-year and fourth-year students with the permission of the instructor. Three hours per week. Three semester hours

045-431. SEMINAR IN THE HISTORY OF AMERICA

STAFF

Preparation and discussion of research papers. Open to third-year and fourth-year students with the permission of the instructor. Three hours per week. *Three semester hours*.

045-432. SEMINAR IN THE HISTORY OF AMERICA

STAFF

Preparation and discussion of research papers. Open to third-year students with the permission of the instructor. Three hours per week. Three semester hours.

045-433. MINORITIES IN AMERICA

DR. PARSONS

A study of European and Asian minority groups in American history and society with particular attention to their problems of identity and adjustment, and their special contributions to American life. Three hours per week. Three semester hours.

<sup>\*</sup> This course is not offered in 1978-1979.

#### 045-434. MINORITIES IN AMERICA

DR. REED

A study of the Afro-American minority with particular attention to their problems of identity and adjustment, and their special contributions to American life. Three hours per week. *Three semester hours*.

# \*045—435. ECONOMIC AND SOCIAL HISTORY OF THE UNITED STATES AND PENNSYLVANIA — WESTWARD MOVEMENT

DR. PARSONS

Economic foundations and social change in the United States with intensive study of Pennsylvania, A two-year cycle of topics is offered: courses 435 and 436 alternate with courses 335 and 336. This course is not open to first-year students. Three hours per week. *Three semester hours*.

# \*045—436. ECONOMIC AND SOCIAL HISTORY OF THE UNITED STATES AND PENNSYLVANIA — TWENTIETH CENTURY AMERICA

DR. PARSONS

This course is not open to first-year students. Three hours per week. Three semester hours.

#### 050—MATHEMATICS

ASSOCIATE PROFESSOR JESSUP ASSISTANT PROFESSOR SHUCK PROFESSOR SCHULTZ DR. ARKLES ASSOCIATE PROFESSOR BREMILLER DR. CORWIN

The general aims of the Department of Mathematics are (1) to give the students a grasp of the ideas and methods of mathematics; (2) to develop an understanding and appreciation of mathematics as an abstract deductive system; (3) to give the students an appreciation of the historical importance of mathematics in the progress of civilization, both past and present; and (4) to provide the students with sufficient skills to enable them to apply their knowledge to related fields of study.

For mathematics majors, the Department aims to provide stimulation and preparation for (1) continued study at the graduate level; or (2) effective teaching in the secondary schools; or (3) employment in industrial research, statistics, computing, or actuarial positions. For other majors, it seeks to provide the mathematical competence required by the increasing quantitative emphasis in many of these disciplines.

A student majoring in Mathematics is required to take Physics 111, 112 and Mathematics 111, 112, 231, 233, 234 and fifteen additional hours of Mathematics selected from the courses whose numbers are above 231.

Certain particular courses are recommended but not specifically required. For those preparing to be teachers: Mathematics 335, 336, 337, 338, 341, 342. For those preparing to take post-graduate work: Mathematics 232, 335, 336, 337, 338, 339, 340, 341, 342, 443, 444, 445.

For those preparing for engineering jobs in industry and for work in the computing field: Mathematics 232, 335, 336, 339, 340, 341, 342.

<sup>\*</sup> This course is not offered in 1978-1979.

050—101. FUNDAMENTALS OF MODERN MATHEMATICS

A treatment of the ideas that are especially pervasive in modern mathematics: sets, functions, operations, and relations; with emphasis on topics from algebra that are needed to pursue successfully courses in calculus with analytic geometry and statistics. Courses 050—101 and 102 are not open to mathematics majors. Three hours per

week. Three semester hours.

050—102. FUNDAMENTALS OF MODERN MATHEMATICS

A further development of modern mathematics with a greater emphasis on analysis and the study of integral and differential calculus. Courses 050—101 and 102 are not open to mathematics majors. Prerequisite, Mathematics 101. Three hours per week. Three semester hours.

050—111. ANALYTIC GEOMETRY AND CALCULUS

STAFF
An integrated study of analytic geometry and calculus with respect to functions of
one variable with applications to the study of physics. This course is integrated with
and therefore must be taken concurrently with Physics 111 or with permission of
the instructor. Three hours per week. Three semester hours.

050—112. ANALYTIC GEOMETRY AND CALCULUS

STAFF
A continuation of Mathematics 111. This course must be taken concurrently with
Physics 112 or with permission of the instructor. Three hours per week. Three
semester hours.

050—129. ANALYTIC GEOMETRY AND CALCULUS

STAFF
An integrated study of analytic geometry and calculus with respect to functions of one variable. Three hours per week. Three semester hours.

050—130. ANALYTIC GEOMETRY AND CALCULUS

STAFF
A continuation of Mathematics 129, with applications to the fields of chemistry and physics. Prerequisite, Mathematics 129. Three hours per week. Three semester hours.

050—215. STATISTICS I DR. ARKLES Statistical methods of studying data, measures of central tendency and dispersion, probability, distributions including: binomial, normal, student -t, and chi-square; hypothesis testing. Three hours per week. Three semester hours.

050—216. STATISTICS II

A continued study of basic statistical techniques including basic concepts of experimental design, techniques of analysis of variance, methods of regression analysis, linear models and non-parametric statistics. Prerequisite, Mathematics 215. Three hours per week. Three semester hours.

050—231. INTERMEDIATE CALCULUS

A continuation of Mathematics 130, with emphasis on functions of more than one variable including three-dimensional geometry, partial differentiation and multiple integration; study of infinite series; and applications to problems in engineering. Prerequisite, Mathematics 112 or 130. Three hours per week. Three semester hours.

050—232. DIFFERENTIAL EQUATIONS

STAFF
Solution of ordinary differential equations of first and second order, with applications to problems in the physical sciences. Laplace transforms; Fourier Series; power series solutions. Prerequisite, Mathematics 231. Three hours per week. Three semester hours.

#### 050-233. LINEAR ALGEBRA

DR. JESSUP

An introduction to the important mathematical concepts of systems of linear equations, matrix theory, linear transformations on vector spaces, bilinear and quadratic forms. Three hours per week. *Three semester hours*.

# 050-234. LINEAR ALGEBRA

DR. JESSUP

A continuation of Mathematics 233, with emphasis on applications to Euclidean vector spaces of two and three dimensions. Prerequisite, Mathematics 233. Three hours per week. Three semester hours.

# 050—335. MODERN ALGEBRA

DR. JESSUF

An introduction to the modern mathematical systems of groups, integral domains, rings, and ideals, fields, and vector spaces. Prerequisite, Mathematics 234. Three hours per week. *Three semester hours*.

### 050-336. MODERN ALGEBRA

DR. JESSUP

A continuation of Mathematics 335, with extensions to linear groups, algebraic number fields, algebra of classes, Galois theory of equations. Prerequisite, Mathematics 335. Three hours per week. *Three semester hours*.

#### \*050—337. INTRODUCTION TO TOPOLOGY

MR. BREMILLER

Elementary point set topology; metric spaces; topological spaces, separation axioms, compactness, connectedness. Three hours per week. *Three semester hours*. Prerequisite, consent of the Instructor.

# \*050—338. FUNDAMENTALS OF GEOMETRY

MR. BREMILLER

Axiomatic development, introduction to non-Euclidean geometry, projective geometry and modern geometry. Three hours per week. *Three semester hours*. Prerequisite, consent of the Instructor.

# 050—339. ADVANCED CALCULUS

MR. BREMILLER

A theoretical treatment of the concepts of limits, continuity, partial differentiation, indeterminate forms, and infinite series; definitions and properties of the Stieltjes integral, multiple integrals, line and surface integrals. Prerequisite, Mathematics 231. Three hours per week. *Three semester hours*.

# 050-340. ADVANCED CALCULUS

MR. BREMILLER

A continuation of Mathematics 339, with an introduction to Gamma and Bessel functions. Fourier series, Laplace transforms, and applications to the solutions of differential equations. Prerequisite, Mathematics 339. Three hours per week. *Three semester hours*.

# 050-341. PROBABILITY

DR. ARKLES

An introduction to probability theory; a study of discrete and continuous probability functions. Prerequisite, Mathematics 231. Three hours per week. *Three semester hours*.

# \*050—342. MATHEMATICAL STATISTICS

DR. ARKLES

This course emphasizes the essential mathematical background of modern statistics. It includes the mathematical development of sampling distributions; the theory and application of tests of hypotheses, regression and correlation, and analysis of variance. Prerequisite, Mathematics 341. Three hours per week. *Three semester hours*.

<sup>\*</sup> This course is not offered in 1978-1979.

#### \*050-431. MATHEMATICAL MODELS

DR. JESSUP

Mathematical methods are used to develop models for use in fields outside of Mathematics with emphasis on the social and biological sciences. Topics such as Digraphs, Graphs, Markov Chains and Game Theory will be studied. Prerequisite, Mathematics 234. Three hours per week. *Three semester hours*.

## \*050-432. NUMERICAL ANALYSIS

DR. JESSUP

Selected topics from Numerical Analysis are presented. These may include solving systems of linear equations, linear and nonlinear differential equations, numerical integration and differentiation, eigenvalue problems, error analysis, interpolation and approximation. The computer will be used. Prerequisites, Mathematics 232 and an ability to program. Three hours per week. *Three semester hours*.

## 050-444. THEORY OF NUMBERS

STAFF

Theory of primes and divisibility conditions; simple continued fractions, congruence theory, quadratic residues, diophantine equations. Three hours per week. Three semester hours.

## 050-445. FUNCTIONS OF A COMPLEX VARIABLE

STAFF

An introduction to the theory of analytic functions, integrals of complex functions, conformal mapping, harmonic functions. Taylor's and Laurent's series, residue theory, geometry of elementary functions. Prerequisite, Mathematics 339, or simultaneously with Mathematics 339. Three hours per week. *Three semester hours*.

# 050-451. SEMINAR IN ADVANCED MATHEMATICS

STAFF

A course designed to acquaint the student with modern trends in advanced topics in mathematics and its applications. The course will be adapted to the students' preferences and needs. Three hours per week. Three semester hours. Prerequisite, consent of the Instructor.

# 050—452. SEMINAR IN ADVANCED MATHEMATICS

STAFF

A course designed to acquaint the student with modern trends in advanced topics in mathematics and its applications. The course will be adapted to the students' preferences and needs. Three hours per week. Three semester hours. Prerequisite, consent of the Instructor.

## 055-MUSIC

MR. GATENS

MR. JAMES W. SOETE, Director of Bands

The art of music holds a prominent place in the cultural heritage of Western civilization. It is of great value to the general student of the liberal arts and sciences to gain an acquaintance with and an understanding of this art, and it is the object of the academic offerings listed below to illuminate and reveal the role of music in the broad cultural and intellectual context of our civilization. The intimate relationships of music to general culture are most directly discovered through the study of musical history, while the study of musical theory, in addition to training the student in the techniques of composition, is conducive to an intellectual rigor analogous to that imparted in the study of mathematics and logic. It is the purpose of the introductory courses to initiate this process of discovery in both dimensions and by stimulating a thoughtful perception of musical events, open to the students a significant resource for cultural self-enrichment.

<sup>\*</sup>This course is not offered in 1978-1979.

#### A. INTRODUCTORY COURSES

# 055-203. INTRODUCTION TO MUSIC

STAFF

A course in perceptive listening intended to heighten the student's awareness, understanding, and hence, enjoyment of music through an examination of its basic elements—tone color, texture, rhythm, etc.—and how these function in the artistic context of musical composition. Two hours per week. *Two semester hours*.

# 055—204. INTRODUCTION TO THE HISTORY AND STRUCTURES OF MUSIC

STAFF

A continuation of Music 203 involving a closer examination of structural principles in music and of specific compositions illustrating these principles as well as a consideration of stylistic developments in the context of musical and cultural history. Prerequisite: Music 203 or equivalent. Two hours per week. Two semester hours.

#### B. INTERMEDIATE AND ADVANCED COURSES

# 055—215. MUSIC HISTORY I: MIDDLE AGES TO BAROOUE

STAFF

A survey of early Western musical history with emphasis on the relation of musical developments to the broader cultural and artistic context. Individual topics may be selected for closer examination. Prerequisite: Music 203 and/or 204 or equivalent, or by permission. Three hours per week. *Three semester hours*.

# 055—216. MUSIC HISTORY II: PRE-CLASSICS TO THE TWENTIETH CENTURY

STAFF

A continuation of Music 215. In this more familiar part of music history, investigation of selected topics will play a larger part in the course structure than in Music 215. Prerequisite: Music 203 and/or 204 or equivalent, or by permission. Three hours per week. Three semester hours.

#### 055-301. HARMONY I

STAFF

A practical course in the theory and techniques of tonal harmony with consideration of the related disciplines of counterpoint, analysis, arranging, and composition. The objective is the acquisition, at an elementary level, of fluency with musical notation through written exercises. Prerequisite: one year of keyboard study or by permission. Three hours per week. *Three semester hours*.

#### 055-302. HARMONY II

STAFF

A continuation of Music 301. Prerequisite: Music 301 or equivalent. Three hours per week. Three semester hours.

# \*055—307, 308 TOPICS IN THE HISTORY AND LITERATURE OF MUSIC

Fall and Spring Semesters respectively. Examination of a selected topic in music, such as a period of music history, a single composer and his works, a group of related composers, the history of a genre such as opera, the symphony, keyboard music, etc. Specific topics will be determined according to interest and announced in advance. Prerequisite: Music 203 and/or 204 or equivalent, or by permission. Three hours per week. *Three semester hours*.

<sup>\*</sup>This course is not offered in 1978-1979.

055-401, 402, 403, 404. TUTORIAL

STAFF

Individual projects in theoretical or historical studies including composition, arranging, orchestration, and research carried out at an intermediate to advanced level. Prerequisite for theoretical studies: Music 302 or equivalent. Prerequisite for historical studies: an intermediate course in music history (Music 215, 216, 307, or 308) or equivalent. Students should consult with the instructor before registering for a tutorial, and they should be prepared to discuss in some detail the project they propose to undertake. In exceptional circumstances, prerequisites may be waived at the discretion of the Instructor. One hour per week. One semester hour.

### C. PERFORMANCE ORGANIZATIONS

Participation in performing groups can be a source of great personal and intellectual value if done in a sustained and thoughtful manner over a period of years. To insure this degree of thoughtfulness and academic integrity, each student applying for performance organization credit will be required, at the end of each semester for which credit is requested, to submit a written self-evaluation of accomplishment during the semester and to give evidence of independent investigation into the specific repertory performed. Arrangements for retroactive credit may be made on an individual basis with the instructor.

055-121, 122; 221, 222; 321, 322; 421, 422 URSINUS COLLEGE BAND

First, second, third, and fourth years respectively. Fall Semester, marching band; Spring Semester, concert band. Two hours per week. Credit of one semester hour to be given upon completion of four full semesters. Credit of one additional semester hour to be given upon completion of two full additional semesters.

055-125, 126; 225, 226; 325, 326; 425, 426. URSINUS COLLEGE CHOIR

First, second, third, and fourth years respectively. A large choral ensemble which performs Handel's *Messiah* in the Fall Semester and another major choral work or group of works in the Spring Semester. Two to three hours per week. Credit of *one semester hour* to be given upon completion of three full years.

055—127, 128; 227, 228; 327, 328; 427, 428. MEISTERSINGERS

First, second, third, and fourth years respectively. A smaller choral ensemble (approximately forty voices) with a repertory appropriate to that number of voices. Most of the ensemble's performances, including a tour, take place in the Spring Semester. One to three hours per week. Credit of one semester hour to be given upon completion of two full years. Credit of one additional semester hour to be given upon completion of one additional year.

#### OTHER ENSEMBLES

In addition to the organizations listed above, other musical ensembles flourish on a less formal basis. Currently active are 1 Madrigalisti and 1 Concertisti (both under the direction of Dr. F. Donald Zucker, Associate Professor of Political Science) which specialize respectively in the vocal and instrumental chamber music of the Renaissance and Baroque, the Ursinus College Jazz Band (under the direction of Mr. Soete), and some smaller ensembles: string quartet, woodwind quintet, recorder consort, etc. The Ursinus College Chamber Orchestra is not currently active, but can be revived with the appearance of adequate personnel. The formation of additional ensembles will meet with the encouragement and support of the Music Department.

<sup>\*</sup>This course is not offered in 1978-1979

#### 058—PENNSYLVANIA DUTCH STUDIES

#### PROFESSOR PARSONS

#### PROFESSOR SNYDER

The purpose of Pennsylvania Dutch Studies is to examine the origins and values of the Pennsylvania Dutch (or Pennsylvania Germans) as an American Ethnic group, their history, customs, arts and folklore. The aim is to increase awareness of cultural facets of the Pennsylvania Dutch and to preserve dialect and folk cultural remains. Facilities of Myrin Library, Pennsylvania Folklife Society and Kutztown Folk Festival offer special opportunities for study and research.

Courses in this program follow Ethnic Studies, state and federal guidelines. They are offered during the Summer Session under the condition that minimum enrollment is attained. Details may be found in the Summer School catalogue.

#### \*058—401. PENNSYLVANIA DUTCH CULTURE

DR. PARSONS

A survey of the history, language, culture and folklore of the Pennsylvania Dutch, their influence on American life and their contributions to the American scene during the 17th and 18th centuries. Field trips among the Dutch, to Folk Festivals and museums; visiting speakers and artists. Pennsylfawnisch Deitsch poetry, prose and music. Summer Session only. A research paper or creative composition is required. Three hours of class per day and field trips. Three semester hours.

#### \*058-402. PENNSYLVANIA DUTCH CULTURE

DR. PARSONS

Continuation of Course 401, emphasizing events of the 19th and 20th centuries, the diaspora, and status of women among the Pennsylvania Dutch. Summer Session only. A research paper or creative composition is required. Three hours per day and field trips. *Three semester hours*.

#### \*058-405. PENNSYLVANIA DUTCH MUSIC

DR. PARSONS

Folk songs of German origin and from Pennsylvania. Formal music by composers of Pennsylvania Dutch origin. Three hours per day. Three semester hours.

#### 058-406. PENNSYLVANIA DUTCH ART

STAFF

Pattern, symbolism and content in Folk Art. Formal painters of Pennsylvania Dutch origin. Three hours per day. Three semester hours.

#### 058-407. PENNSYLVANIA DUTCH FOLKLIFE

DR. PARSONS

Classroom study and field techniques related to the folklore, folklife, folk sayings and general folk culture of the Dutch country. Three hours per day and field trips. Three semester hours.

# \*058—411. PENNSYLFAWNISCH DEITSCH: THE DIALECT

DR. SNYDER

A study of the dialect language of the Pennsylvania Dutch. Basics of the oral language and its written variations. Three hours per day. *Three semester hours*.

\*058—412. PENNSYLFAWNISCH DEITSCH: THE DIALECT

DR. SNYDER

Continuation of Course 411. Three hours per day. Three semester hours.

<sup>\*</sup>This course is not offered in summer 1978.

058—413. PENNSYLVANIA DUTCH PROSE AND POETRY
Works of 19th and 20th century dialect authors, poets and playwrights. Iwwersetzing ins Deitsch. Prerequisite: Course 411, 412, or German 203, 204, or evidence of competence in the dialect. Three hours per day. Three semester hours.

Study of *Pennsylfawnisch Deitsch* will not fulfill the College general requirement of language for graduation.

\*058—421, 422, 423, 424, 425, 426, 427, 428. SEMINARS AND WORKSHOPS
DR. PARSONS AND VISITING LECTURERS

Topics on the life, culture, customs and values of the Pennsylvania Dutch. Individual topics supervised and directed by professors and specialists. Research and folk cultural laboratory or workshop. Topics for each summer to be announced by January 31 preceding. Monday through Thursday, 1:00 to 4:15 p.m. One semester hour each.

058—431, 432, 433, 434, 435, 436, 437, 438. SEMINARS AND WORKSHOPS AT KUTZTOWN FOLK FESTIVAL STAFF

Topics as described in Course 421, but in areas related to Folk Festival program. Introductions and practicum in specialized areas of the Folk Festival. Festival Week only. Monday through Thursday, 1:30 to 4:45 p.m. One semester hour each.

#### 060—PHILOSOPHY AND RELIGION

PROFESSOR WILLIAMSON ASSISTANT PROFESSOR HARDMAN DR. ZAKYDALSKY

The Department of Philosophy and Religion seeks to encourage the student's practical appreciation and facile use of the tools of philosophy, to cultivate his informed awareness and critical appraisal of philosophical perspectives, and to give him opportunity for a scholarly and appreciative study of historic as well as contemporary religious insights. In this manner the department strives to translate into the terms of today's academic interests the traditional roles both disciplines have played in liberal education.

The offerings of the Department are open to all students, but will be of special interest to pre-theological students, prospective teachers in the fields of philosophy, religion and ethics, and all of those interested in the general humanities.

Majors must take thirty-six semester hours of work within the Department including Philosophy 101, 102; Religion 201, 202; and Philosophy 403, 404 which are required. Each major also must elect fifteen hours of course work in one of four Areas of Concentration, each of which is viewed as giving explicit expression to certain traditional types of philosophical inquiry and religious reflection. The four areas are:

A-Classics, for the student interested in Ancient History, Greek, Latin, etc.

B-Poetics, for the student interested in Literature, Fine Arts, Music, etc.

C—Analytics, for the student interested in Logic, the Philosophy of Science, the Philosophy of Mathematics, etc.

D-Social Sciences, for the student interested in the Social Sciences.

With the approval of the adviser a major may make certain substitutions in the area he chooses.

<sup>\*</sup>This course is not offered in summer 1978.

## URSINUS COLLEGE BULLETIN

# 060-101. HISTORY OF ANCIENT AND MEDIEVAL

PHILOSOPHY

DR. WILLIAMSON AND STAFF

A survey of the evolution of reflective thought in the Western World from Thales to Descartes. Course 101 is open to all students. Three hours per week. *Three semester hours*.

060—102. HISTORY OF MODERN PHILOSOPHY DR. WILLIAMSON AND STAFF A survey of developing reflective thought in the Western World, beginning with Descartes and including several representative modern philosophers. Course 102 is open to all students. Three hours per week. Three semester hours

#### 060—103. GENERAL PROBLEMS OF PHILOSOPHY

DR. WILLIAMSON

A study designed to orient the student with reference to perennial problems of philosophical inquiry. Intensive use is made of primary sources. Three hours per week. Three semester hours

#### 060—104. CONTEMPORARY PHILOSOPHY

DR. ZAKYDALSKY

A study of late nineteenth century and twentieth century philosophers and trends in philosophic thought beginning with Nietzsche and Moore. Intensive use is made of primary sources. Three hours per week. *Three semester hours*.

# 060-105. INTRODUCTORY LOGIC

DR. ZAKYDALSKY

A study of the guiding principles involved in correct thinking: the use of terms; classification; the nature of deductive inference with special reference to fallacious forms of reasoning as they receive expression in daily life; the canons of inductive inference; the basic concepts in scientific method. Three hours per week. *Three semester hours*.

#### 060—106. ADVANCED LOGIC

DR. ZAKYDALSKY

The study of symbolic logic and its relation to contemporary philosophy and scientific thought with a consideration of two-valued sentential and quantificational logic and an introduction to many-valued logics, modal logic and natural deduction. Prerequisite, Philosophy 105. Three hours per week. *Three semester hours*.

## 060—108. AESTHETICS

DR. WILLIAMSON

An examination of the canons of beauty and art to supply a background for evaluation of specific works of literature, painting, sculpture, music and architecture. Three hours per week. *Three semester hours*.

## 060—109. ETHICS

DR. ZAKYDALSKY

A study of the principles of moral judgment, with exposition and criticism of the more important theories concerning the basic distinction between right and wrong conduct; the various problems of theoretical and practical ethics. Three hours per week. Three semester hours.

# 060—110. PHILOSOPHY OF RELIGION

DR. WILLIAMSON

A philosophical analysis of religious beliefs with particular attention devoted to the validity of religious language and knowledge and the questions of the natures of God and man, of miracles, evil, morality and immortality. Three hours per week. Three semester hours.

# 060—201. HISTORY AND ANTHROPOLOGY OF RELIGION:

THE WESTERN SETTING

DR. HARDMAN

A systematic examination of the phenomenology of religion, its personal, social, psychological and cultural manifestations in history with special attention to Judaism, Islam and Christianity. Three hours per week. *Three semester hours*.

# 060—202. HISTORY AND ANTHROPOLOGY OF RELIGION:

THE EASTERN SETTING

DR. HARDMAN

A systematic examination of the phenomenology of religion, its personal, social, psychological and cultural manifestations in history with special attention to the Oriental religions. Three hours per week. *Three semester hours*.

# 060-203. INTRODUCTION TO THE LITERATURE OF THE BIBLE:

OLD TESTAMENT

DR. HARDMAN

Foundations of the Judaeo-Christian tradition in the literature and thought of the Old Testament. Emphasis is placed both on the biblical materials themselves and on the varying methodologies of Old Testament interpretation. Three hours per week. Three semester hours.

# 060-204. INTRODUCTION TO THE LITERATURE OF THE BIBLE:

NEW TESTAMENT

DR. HARDMAN

A study of the Judaistic background of the New Testament, the life and times of Jesus, the emerging Church, and relevant literature. Three hours per week. *Three semester hours*.

# \*060-207. HISTORY OF THE CHRISTIAN CHURCH

DR. HARDMAN

A study of the development of the Christian church from the apostolic period to modern times, with a view to understanding the nature and extent of its contribution to society. (Alternates with course 209.) Three hours per week. Three semester hours.

## 060-209. LITERATURE AND RELIGIOUS IDEAS

DR. HARDMAN

An analysis of the significant themes common to works of imaginative literature exploring the interrelation of religion and artistic creativity. Attention will be given to Camus, Eliot, Faulkner, Kazantzakis, Waugh, etc. (Alternates with course 207.) Three hours per week. Three semester hours.

#### \*060—301. EPISTEMOLOGY

DR. ZAKYDALSKY

A critical study of the theories of truth, belief, perception, understanding, and the important concepts involved in the characterization, analysis, and appraisals of classic and contemporary discussions of human knowledge. Three hours per week. Three semester hours.

# \*060-302. PHILOSOPHY OF SCIENCE

DR. ZAKYDALSKY

An examination of the nature of scientific method and scientific theory, with reference to presuppositions, inference, explanation, prediction, application and verification. Three hours per week. Three semester hours.

<sup>\*</sup>This course is not offered in 1978-1979.

060—311. SEMINAR IN RELIGION

DR. WILLIAMSON

The directed study of a given topic in religion as it relates to the vital issues of our time. Prerequisite, Departmental permission. Three hours per week. *Three semester hours*.

060—311A Religion and Ethics \*060—311B (Topic for 1977-78)

060-312. SEMINAR IN RELIGION

DR. HARDMAN

The directed study of a given topic in religion as it relates to the vital issues of our time. Prerequisite, Departmental permission. Three hours per week. *Three semester hours*.

060—312A Modern Theologians \*060—312B (Topic for 1977-1978)

060—403. SENIOR SEMINAR: CURRENT ISSUES AND MOVEMENTS IN PHILOSOPHY

DR. WILLIAMSON AND STAFF

A study of contemporary thinkers and schools of thought in Philosophy, making use of lectures, discussions, research papers, etc. Open only to Philosophy and Religion majors except with Departmental permission. Three hours per week. *Three semester hours*.

060—404. SENIOR SEMINAR: CURRENT ISSUES AND MOVEMENTS IN RELIGION

DR. WILLIAMSON AND STAFF

A study of contemporary theological and institutional trends in Religion, making use of lectures, discussions, research papers, etc. Open only to Philosophy and Religion majors except with Departmental permission. Three hours per week. *Three semester hours*.

#### 065—PHYSICS

PROFESSOR SNYDER

ASSISTANT PROFESSOR TAKATS

ASSISTANT PROFESSOR PEIFFER

DR. PLETICHA

The courses in Physics are designed to give the student an understanding of the logic and structure of Physics. Stress is laid upon methods of analysis and presentation of ideas. It is hoped in this way to make the student conversant with the methods of Physics, to develop in him the ability to study independently and to transmit his ideas to others.

Students majoring in Physics must take the following courses: Chemistry 111, 112; Mathematics 111, 112, 231, 232; Physics 111, 112, 203, 204, 207, 208, 207a, 208a, 315, 316, and at least six additional hours of credit in Physics.

Students anticipating graduate study in Physics should also take Mathematics 233, 234, 339, 340 and Physics 310, 401, 404.

Students majoring in Physics who are preparing to teach in secondary schools must take Chemistry 111, 112; Mathematics 111, 112, 231, 232; Physics 111, 112, 203, 204, 207, 208, 211, 212.

065-101. INTRODUCTION TO PHYSICS

STAFF

A survey of classical physics with emphasis on the structure and intellectual development of physics as well as its application to everyday life. Concepts of motion, force, and energy. Prerequisite: knowledge of trigonometry. Two hours lecture and two hours laboratory per week. *Three semester hours*.

<sup>\*</sup>This course is not offered in 1978-1979.

065-102. INTRODUCTION TO PHYSICS

STAFF

Continuation of Physics 101, following the development of physics to the twentieth century. Concepts of waves, light, electromagnetism, atomic and nuclear physics. Prerequisite: 065-101. Two hours lecture and two hours laboratory per week. *Three semester hours*.

065—111. GENERAL PHYSICS

STAFF

A study of elementary mechanics and thermodynamics utilizing the principles of calculus in the presentation and in exercises. Prerequisite: Mathematics 111, 112. Three hours of lecture and three hours of laboratory per week. Four semester hours.

065—112. GENERAL PHYSICS

STAFF

A continuation of 065—111. A study of waves, sound, electricity, magnetism, and light. Prerequisite: 065—111. Three hours of lecture and three hours of laboratory per week. Four semester hours.

065—111. INT. GENERAL PHYSICS

CTACE

This course covers the same topics as 065—111 with the presentation coordinated with Mathematics 111 Int. which must be taken simultaneously. Three hours of lecture and three hours of laboratory per week. Four semester hours.

065-112. INT. GENERAL PHYSICS

STAFF

A continuation of 065—111 Int. This course covers the same topics as 065—112 with the presentation coordinated with Math 112 Int. which must be taken simultaneously. Prerequisite: 065—111 Int. Three hours of lecture and three hours of laboratory per week. Four semester hours.

065-203. MECHANICS I

DR. SNYDER

Vectors, statics, vector calculus, kinematics of a particle, dynamics of a particle, energy, harmonic motion, moving reference systems, central forces, special relativity. Prerequisites: Physics 111, 112, Mathematics 111, 112. Three hours lecture and three hours laboratory per week. Four semester hours.

065-204. ELECTRICITY AND MAGNETISM

DR. TAKATS

Electrical forces, electric fields and potentials, capacitance, conductors, D-C circuits, magnetic fields, inductance, A-C circuits, electric and magnetic fields in matter. Prerequisites, Physics 111, 112, Mathematics 111, 112. Three hours lecture and three hours laboratory per week. Four semester hours.

065-205. WAVES

MR. PEIFFER

Introduction to the general phenomena of wave motion. Oscillations, traveling waves, modulation, polarization, interference, diffraction, geometric optics. Prerequisite: 065—111, 112. Three hours lecture and three hours laboratory per week. Four semester hours.

065-207. MODERN PHYSICS

DR. TAKATS

Classical waves and particles, wave-particle duality, elementary theory of the hydrogen atom, atomic spectra, and electron distribution. Prerequisites, Physics 111, 112, Mathematics 111, 112. Three hours per week. *Three semester hours*.

065-207a. LABORATORY IN MODERN PHYSICS

DR. SNYDER

Laboratory work (optional) for Course 207. Three hours per week. One semester hour.

065-208. MODERN PHYSICS

DR. TAKATS

A continuation of Course 207. Special relativity, elementary particle physics, nuclear physics. Prerequisite, Physics 207. Three hours per week. *Three semester hours*.

065—208a. LABORATORY IN MODERN PHYSICS

DR. SNYDER

Laboratory work (optional) for Course 208. Three hours per week. One semester hour.

# 065-211. GENERAL ASTRONOMY

MR. PEIFFER

The Copernican Revolution and the development of modern science; gravitation and celestial mechanics; principles of astronomical instrumentation; the Solar System. Includes simple observations. Prerequisites: Mathematics 101 and 102 or their equivalent and some knowledge of physics. Three hours per week. *Three semester hours*.

#### 065-212. GENERAL ASTRONOMY

MR. PEIFFER

Continuation of Physics 211. Elements of astrophysics: stars, stellar evolution, galaxies, galactic evolution, intergalactic matter; cosmology. Includes simple observations. Prerequisite: Physics 211. Three hours per week. *Three semester hours*.

## \*065-310. MECHANICS II

DR. SNYDER

Dynamics of a system of particles, mechanics of rigid bodies, general motion of a rigid body, Lagrange's equations, Hamilton's equations, theory of vibrations. Prerequisites: Physics 203, Mathematics 231, 232. Three hours per week. *Three semester hours*.

## \*065—312. INTRODUCTORY ASTROPHYSICS

MR. PEIFFER

Discussion of fundamental problems of Astrophysics, e.g., stellar vital statistics and their determination, stellar constitution, evolution, and the stellar model, energy generation and transfer in the stars, stellar aggregations and their dynamics, intrinsic stellar variability. The course is open to third and fourth year Physics majors and to other students who have completed Physics 065—212. Three hours per week. *Three semester hours*.

#### \*065—314. ALTERNATING CURRENTS

DR. SNYDER

Capacitative and self-inductive circuits; mutual induction; the alternating-current circuit; alternating-current power and power factor; divided circuits; application of complex numbers; electromagnetic waves. Prerequisites, Physics 204 and Mathematics 231. Three hours per week. *Three semester hours*.

#### 065-315. ELEMENTS OF MATHEMATICAL PHYSICS

DR. SNYDER

Introduction to selected concepts and techniques of theoretical physics. Complex numbers, matrices, eigenvalues, vector algebra, vector calculus, Fourier series, calculus of variations, gamma, beta and error functions. Prerequisites: Mathematics 231, 232; Physics 111, 112. Three hours per week. *Three semester hours*.

# 065—316. ELEMENTS OF MATHEMATICAL PHYSICS

DR. SNYDER

Continuation of Physics 315. Coordinate transformations tensors, series solutions of differential equations, Legendre polynomials, Bessel functions, orthogonal functions, integral transforms, partial differential equations. Prerequisite: Physics 315. Three hours per week. *Three semester hours*.

#### 065—317. SEMINAR

STAFF

Study and discussion of advanced topics or recent developments in physics. Among topics offered are Electromagnetic Theory and Relativity. Students must consult the Chairman of the Department before registering for this course. Three hours per week. Three semester hours.

<sup>\*</sup>This course is not offered in 1978-1979.

065-318. SEMINAR

STAFF

Same description as Physics 317. Three hours per week. Three semester hours.

065-401. INTRODUCTORY QUANTUM MECHANICS

DR. TAKATS

Eigenvalues and eigenfunctions; probability density, expectation values, and operators; the Schrodinger equation in one and three dimensions; the hydrogen atom; perturbation theory: identical particles, spin. The course is open to fourth-year chemistry, mathematics, and physics majors and to qualified third-year students having the consent of the instructor. Three hours per week. *Three semester hours*.

065-404. THERMODYNAMICS

DR. SNYDER

Primarily classical thermodynamics with a brief introduction to statistical aspects. Temperature, laws of thermodynamics, work, heat, energy, entropy, thermodynamic potentials, kinetic theory of dilute gases, equations of state. Prerequisites: Physics 111, 112, Mathematics 231, 232. Three hours per week. *Three semester hours*.

065-411. RESEARCH

STAFF

Investigations, of experimental or theoretical nature, pursued independently by the student. The preparation of a summarizing report is required. To register for this course a student must have the consent of a member of the physics staff to serve as his adviser. One semester hour.

065-412. RESEARCH

STAFF

Continuation of Course 065-421. Two semester hours.

065-421. RESEARCH

STAFF

Same as Course 065-411, but more extensive in scope. Two semester hours.

065-422. RESEARCH

STAFF

Continuation of Course 065-421. Two semester hours.

#### 070—POLITICAL SCIENCE

PROFESSOR E. H. MILLER PROFESSOR PANCOAST PROFESSOR CRAFT ASSOCIATE PROFESSOR ZUCKER DR. KANE MISS KRAUS

The objectives of the Department of Political Science with relation to the general student are:

- (1) To help the student attain an appreciation of both the theory and the functioning of politics.
- (2) To aid the student in developing the faculty of critical thinking.
- (3) To familiarize the student with those values that sustain freedom.

The professional objectives are:

(1) To prepare students for graduate work in political science and the law.

(2) To prepare students for the examinations of the domestic civil service and the foreign service.

In addition to Political Science 101, 102, students majoring in Political Science must take courses 205, 206, and 215, 216; seven semester hours in elective Political Science courses; History 101, 102; History 213, 214; Economics 101, 102; Psychology 101 and Sociology 101, 102.

#### URSINUS COLLEGE BULLETIN

Students whose mathematical aptitude in College Board scores is below 550 are required to take a mathematics refresher course in their freshman year; Mathematics 101, 102 may be taken to satisfy this requirement.

070—101. AMERICAN GOVERNMENT DR. KANE, DR. ZUCKER An analysis of the structure and functions of American national and state governments. Three hours per week. Three semester hours.

070—102. AMERICAN GOVERNMENT DR. KANE, DR. ZUCKER Continuation of Course 101. Three hours per week, Three semester hours.

070—203. MUNICIPAL GOVERNMENT AND ADMINISTRATION DR. PANCOAST The legal power and position of the city and other local governmental institutions in our political system. Thorough consideration of forms and activities of local government. Three hours per week. Three semester hours.

070—204. POLITICAL PARTIES

DR. PANCOAST
Both structural description and functional analysis of American political parties.
The organization, work, leaders, and place of political parties in our democracy are considered at length. Three hours per week. Three semester hours.

070—205. COMPARATIVE GOVERNMENT DR. MILLER
A detailed comparison of the Cabinet and Presidential systems, as exemplified
by England and the United States. Three hours per week. Three semester hours.

070—206. COMPARATIVE GOVERNMENT DR. MILLER The study is extended to other representative governments, including France, Germany, and the Soviet Union. Three hours per week. Three semester hours.

070—207. POLITICAL THEORY

Significant political ideals, forces and concepts from Plato to the present. Three hours per week. Three semester hours.

070—209. PUBLIC ADMINISTRATION

A survey of the field of public administration, emphasizing administrative organization, fiscal management and personnel management. The administrative process is considered as a unit encompassing federal, state and local administration. Three hours per week. Three semester hours.

070—210. AMERICAN POLITICAL THEORY

Main currents in American political thought from the seventeenth century to the present. Three hours per week. Three semester hours.

070—211. CONSTITUTIONAL LAW

DR. PANCOAST
The role of the federal courts in the interpretation and enforcement of the Constitution through case study. The jurisdiction of the Supreme Court and its exercise of the power of judicial review of legislative and executive action. Powers of the Congress and the President; the division of power between nation and state; and the limitations on the exercise of state power resulting from the existence or exercise of congressional power. Three hours per week. Three semester hours.

# 070-212. CONSTITUTIONAL LAW

DR. PANCOAST

The study of the limitations on the power of government to restrict individual freedom. The effect of the Bill of Rights and the nationalization of the Fourteenth Amendment on freedom of speech and press, freedom of and from religion, procedure in criminal cases, and due process of law and equal protection of the law vs. the police power. Three hours per week. *Three semester hours*.

# 070—215. METHODS OF POLITICAL ANALYSIS

DR. CRAFT

An examination of the analytic processes in the development of concepts, hypotheses, and theories. Formulation of research problems related to basic methodologies. Three hours per week. Three semester hours.

## 070—216. METHODS OF POLITICAL ANALYSIS

DR. CRAFT

A continuation of Course 215. Prerequisite, Political Science 215. Three hours per week. Three semester hours.

#### 070-222. LAW AND SOCIETY

DR. KANE

A study of the origins, objectives, and manifestations of law in the United States political system. The case method of analysis is used to identify the salient features of the major classes of law and to evaluate the judicial procedures and institutions by which law is applied in the United States. Three hours per week. *Three semester hours*.

#### 070—311. INTERNATIONAL RELATIONS

MISS KRAUS

Basic theory, principles and functioning of the states in the world community. Three hours per week. Three semester hours.

#### 070—312. INTERNATIONAL RELATIONS

MISS KRAUS

Continuation of course 311. Three hours per week. Prerequisite, 311. Three semester hours.

#### 070—313. SEMINAR IN INTERNATIONAL LAW

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A course in the Law of Nations. Case studies are stressed. Two hours per week. Two semester hours.

# 070—314. SEMINAR IN INTERNATIONAL ORGANIZATIONS

DR. MILLE

The structure and functions of international organizations. Two hours per week. Two semester hours.

# 070—317. SEMINAR IN AMERICAN GOVERNMENT

DR ZUCKER

Selected topics in American Government. Preparation and discussion of research papers. Open to third and fourth year students with permission of the instructor. Two hours per week. Two semester hours.

# 070—318. SEMINAR IN AMERICAN GOVERNMENT

DR. ZUCKER

Selected topics in American Government. Preparation and discussion of research papers. Open to third and fourth year students with permission of the instructor. Two hours per week. Two semester hours.

\*070—319. SEMINAR IN POLITICS OF THE DEVELOPING WORLD DR. MILLER Selected topics concerning the politics of Asia, the Middle East, Africa and Latin America. Preparation and discussion of research papers. Open to third- and fourth-year students with permission of the instructor. Two hours per week. Two semester hours.

<sup>\*</sup>This course is not offered in 1978-1979.

\*070—320. SEMINAR IN POLITICS OF THE DEVELOPING WORLD DR. MILLER Selected topics concerning the politics of Asia, the Middle East, Africa and Latin America. Preparation and discussion of research papers. Open to third- and fourth-year students with permission of the instructor. Two hours per week. Two semester hours.

## 075—PSYCHOLOGY

PROFESSOR FLETCHER
ASSOCIATE PROFESSOR FAGO

ASSISTANT PROFESSOR MULVANNY
ASSISTANT PROFESSOR SULLIVAN

Students majoring in Psychology *must take* the following courses: Biology 101, 102, 213; Mathematics 215; Anthropology 201, 202 or Sociology 201, 202; Computer Science 101; Psychology 101, 102, 111, 112, 210, 334, 335, 336, 351 or 352, 409, 440, 442 or 444, and an additional elective course in Psychology.

For those preparing to teach Psychology by earning a Social Science Certification with an emphasis in Psychology, the above courses in Biology, Mathematics, Anthropology or Sociology and the following Psychology courses are required: Psychology 101, 102, 210, 334, 335 or 336, 351 or 352, 444, and two of the following: Psychology 311, 312, 336 and 440. Psychology 311 is strongly recommended. For General Education and Professional Education requirements consult the Psychology Department and the Education Department.

Students who plan to continue the study of Psychology at the graduate level are strongly urged to include in their schedules Mathematics 101, 102, 216; Biology 317, 318, 415; Philosophy 302; Physics 101, 102, and Psychology 311

For those seeking admission to medical school, the following additional subjects are usually required: a year of General Chemistry, a year of Organic Chemistry, a year of General Physics, and at least two courses in Biology beyond the year of General Biology required of all Psychology majors.

## 075—101. INTRODUCTORY PSYCHOLOGY

STAFF

A survey of the basic biological and environmental influences on the psychological processes. Emphasis will be on areas such as physiological correlates of behavior, the senses, and learning. Three hours per week. Three semester hours. Psychology majors will take this course in conjunction with Psychology 111.

#### 075—102. INTRODUCTORY PSYCHOLOGY

STAFF

This course surveys the more complex psychological and environmental determinants of individual behavior. Specific topics include the normal personality, abnormality, social behavior, work, and problems of scientific measurement. Three hours per week. Three semester hours.

Psychology majors will take this course in conjunction with Psychology 112.

# 075—111. INTRODUCTORY PSYCHOLOGY LABORATORY

STAFF

Designed primarily for Psychology majors, the laboratory provides basic experience with the research methods and procedures utilized in the content areas covered in Psychology 101. Prerequisite, major in Psychology or permission of the instructor. Two hours per week. One semester hour.

#### 075—112. INTRODUCTORY PSYCHOLOGY LABORATORY

STAFF

Designed primarily for Psychology majors, the laboratory provides the basic experience with the research methods and procedures of the content areas covered in Psychology 102. Prerequisite, major in Psychology or permission of the instructor. Two hours per week. One semester hour.

# 075-108. MENTAL HEALTH AND ABNORMAL PSYCHOLOGY

DR. FLETCHER, DR. SULLIVAN

The problem of mental health is treated under the following topics: The dynamics of human behavior, normal and abnormal reactions to frustration and conflict. Psychological, organic and social causes of poor mental health. The roles played by the home, the school and society in mental health. Additional topics include psycho-neuroses and functional psychoses, epilepsy, drug addiction and alcoholism. Methods of prevention and treatment of mental illness are discussed. This course is given from the point of view of preventive mental hygiene. Prerequisite, Psychology 101 or 102. Three hours per week. Three semester hours.

#### 075—210. EXPERIMENTAL PSYCHOLOGY

DR. FAGO

DR. MULVANNY

This course is designed to acquaint the student with laboratory techniques used in psychology. Lectures, demonstrations, individual experiments, and the preparation of scientific reports. Prerequisites, Psychology 101 or 102, Biology 101 or 111, Mathematics 215. Three hours lecture, two hours laboratory per week. Four semester hours

#### 075—223. EDUCATIONAL PSYCHOLOGY — LEARNING

Contemporary learning theory for teachers. Topics include schedules of reinforcement, operant theory and methodology for the classroom, token economies, and programmed learning techniques and their application. (The same course as 223 under Education.) Prerequisite, Psychology 101 or 102. Three hours per week. Three semester hours.

# 075—224. EDUCATIONAL PSYCHOLOGY — GROWTH AND DEVELOPMENT

STAFF

The nature and development of the psychological processes from the prenatal period through adolescence. (The same course as 224 under Education.) Prerequisite, Psychology 101 or 102. Three hours per week. Three semester hours.

DR. SULLIVAN 075—246. PSYCHOLOGY IN THE COMMUNITY Applications of psychological theory, research methods, and empirical findings to community programs dealing with contemporary social problems, such as crime and delinquency, racial prejudice, mental illness, drug addiction, poverty and other forms of deprivation. Prerequisites, Psychology 101 or 102. Three hours per week. Three semester hours.

075—311. HISTORY AND THEORIES OF PSYCHOLOGY DR. SULLIVAN A study of the more important findings and theories contributing to the development of modern scientific psychology. Prerequisite, Psychology 101 or 102. Three hours per week. Three semester hours.

## 075-312. PSYCHOLOGY IN INDUSTRY

DR. FLETCHER

Applications of psychology to industry: employee and job ratings, aptitudes and skills, work methods, training programs, fatigue, safety, attitudes, morale, interviewing and counseling. Human relations problems are emphasized using the case method and role playing. Prerequisites, Psychology 101 or 102, Mathematics 215. Three hours per week. *Three semester hours*.

## 075—334. DEVELOPMENTAL PSYCHOLOGY

STAFF

The concepts, theories and experimental approaches used to account for the ontogeny of behavior will be reviewed. The primary emphasis will be on human development. Prerequisites, Psychology 101 or 102, and 210. Three hours per week. *Three semester hours*.

#### 075-335. BEHAVIORAL NEUROSCIENCES

DR. MULVANNY

A study of the structure and function of the vertebrate nervous system, particularly of the neural substrates of behavior. Topics include evolutionary, anatomical, physiological and functional approaches to the nervous system and behavior. Special emphasis is placed on neural mechanisms in the psychology of sensation and motivation. May be taken in conjunction with Psychology 337. Prerequisites, Psychology 101 or 102, 210; Biology 101 or 111; or by permission of the instructor. Three hours per week. *Three semester hours*.

## 075—336. SENSATION AND PERCEPTION

DR. MULVANNY

The nature of the fundamental sensory processes will be explored with emphasis on vision and audition. Theory and experiments bearing on significant perceptual phenomena will be surveyed from both physiological and behavioral viewpoints. Prerequisites, Psychology 101 or 102, Psychology 210. Three hours of lecture, two hours of laboratory per week. Four semester hours.

# 075—337. NEUROSCIENCES LABORATORY

DR. MULVANNY

A study of nervous system structure and function using the basic anatomical, physiological, and behavioral methods of the neurosciences. Topics include gross and microscopic neuroanatomy, techniques of stereotaxic surgery, and behavioral analysis of experimental interventions in the central nervous system. Corequisites, Psychology 335 and permission of the instructor. Two hours per week. *One semester hour*.

## 075-341. READINGS IN PSYCHOLOGY

STAFF

Individual study of one or more selected topics in the psychological literature, and preparation of an annotated bibliography or a detailed proposal for subsequent research. To register for this course, the student must have the consent of a member of the psychology staff to serve as his adviser. Prerequisite, Psychology 210. One semester hour.

#### 075—342. READINGS IN PSYCHOLOGY

STAFF

Content and prerequisites as in Psychology 341, but offered in the spring term. One semester hour.

# 075—351. LEARNING AND MOTIVATION

DR. FAGO

A review of learning theory, past and contemporary. Emphasis will be on the basic processes of classical conditioning and instrumental learning, the phenomena associated with these processes, and the development of learning theory in response to experimentation. Lectures, individual experimentation and the preparation of scientific reports. Prerequisites, Psychology 101 or 102, and 210. Three hours lecture, two hours laboratory per week. Four semester hours.

#### 075—352. HUMAN LEARNING

DR. FAGO

Traditional research on verbal learning will be reviewed, as well as contemporary research on topics including attention, memory, cognition, and psycholinguistics. Prerequisites, Psychology 101 or 102, and 210. Three hours per week, two hours laboratory per week. Four semester hours.

# 075—409. EDUCATIONAL AND PSYCHOLOGICAL TESTS AND MEASUREMENTS

DR. FLETCHER

An introductory survey of the field of measurement in psychology and education; main features of the techniques of testing and test construction; types of tests and scales; evaluation; interpretation; use. Prerequisites, Psychology 101 or 102, 210. Two hours of lecture, two hours of laboratory per week. *Three semester hours*. (The same course as 409 under Education.)

#### 075-417. DEVELOPMENTAL DEVIATIONS

DR. FLETCHER

The effects on personality, social, and intellectual development of minimal brain dysfunction, learning disabilities, retardation, sensorimotor handicaps, and giftedness. Etiology, assessment, and remedial methods. Demonstrations and field trips. Prerequisites, Psychology 101 or 102, Psychology 334 or permission of the instructor. Three hours per week. *Three semester hours*. (Alternates with Psychology 312.)

#### 075—437 PERSONALITY

DR. SULLIVAN

A comprehensive survey of psychological theory and research dealing with the "normal" aspects of human nature. In addition to traditional "personality" perspectives, consideration is given to more recent alternatives, such as the behavioristic, factor-analytic, and "functional style" perspectives. Prerequisites, Psychology 102, 108, 210, and 334. Three hours per week. *Three semester hours*.

#### 075—438. PSYCHOPATHOLOGY AND PSYCHOTHERAPY

DR. SULLIVAN

Clinical and experimental approaches to the understanding and treatment of psychosis, neurosis, and related conditions. Selected findings are studied intensively to illustrate the wide variety of contemporary viewpoints and techniques. Prerequisites, Psychology 102, 108, 210, and 334. Three hours per week. *Three semester hours*.

# 075-440. SOCIAL PSYCHOLOGY

DR. FLETCHER

A study of group action and of the group influences by which the individual is surrounded; tradition, custom, public opinion and other psychological and social forces which affect individual judgment and action. Prerequisite, Psychology 101 or 102, 223, 351 or 352. Three hours per week. *Three semester hours*.

## 075-441. RESEARCH

STAFF

Investigations of an experimental, clinical or theoretical nature pursued independently by the student. The preparation of a scientific report is required. To register for the course a student must have the consent of a member of the psychology staff to serve as his adviser. Three semester hours.

#### 075-442. RESEARCH

STAFF

Content and prerequisites as in Psychology 441, but offered in the spring term. Students who have been admitted to the course and who have fulfilled its requirements may be awarded Departmental Honors, but no additional semester hours of credit, if they have qualified in other ways for admission to the honor program. Three semester hours.

## 075-444. SEMINAR IN PSYCHOLOGY

STAFF

A seminar intended to familiarize the student with current trends and special topics in theoretical and applied psychology. Emphasis will be given to the preparation and presentation of papers on selected topics which will vary from year to year. Open to third and fourth year students majoring in psychology. Two hours per week. Two semester hours.

# **ROMANCE LANGUAGES**

PROFESSOR REINER ASSISTANT PROFESSOR PAUL MRS. LUCAS

MR. RAPPOCCIO MR. ESPADAS DR. NOVACK

The development of linguistic ability and an understanding of the foreign culture and literature comprise the scope of the first two years' work.

Students who advance beyond courses numbered 204 receive further instruction in conversation, composition and the literatures of the respective languages.

The goal of this teaching is to develop faculties of critical and esthetic judgment, as well as to perfect the use of the languages.

#### 086—French

French majors must meet the following requirements:

French 205, 206, 315, 316; English Literature 203, 204; History 203, 204 or 205, 206 It is recommended that Latin 101, 102, 203, 204 (or equivalent, i.e., four years of Latin in secondary school) be taken.

Two of the following courses: French 311, 312, 313, 314.

Two of the following courses: French 421, 422, 423, 424.

To complete departmental requirements in their senior year, majors must pass a comprehensive examination in French.

086-101. ELEMENTARY FRENCH

STAFF

Three hours per week plus one hour of language laboratory per week. Three semester hours.

086-102. ELEMENTARY FRENCH

Prerequisite: French 101. Three hours per week plus one hour of language laboratory per week. Three semester hours.

086—203. INTERMEDIATE FRENCH

Prerequisite: French 102 or equivalent (i.e., satisfactory completion of two years of French in secondary school). Three hours per week plus one hour of language laboratory per week. Three semester hours.

086-204. INTERMEDIATE FRENCH

STAFF

Prerequisite: French 203. Three hours per week plus one hour of language laboratory per week. Three semester hours.

086—205. FRENCH LITERATURE IN WORLD CIVILIZATION Major French writers and their contribution to world culture and civilization from the Middle Ages to the Revolution. Three hours per week. Three semester hours.

086—206. FRENCH LITERATURE IN WORLD CIVILIZATION MRS. LUCAS A continuation of French 205; from 1789 to the present. Three hours per week. Three semester hours.

\*086—311. NINETEENTH CENTURY FRENCH NOVEL MRS. LUCAS The development of the French novel of the nineteenth century, with special emphasis on Benjamin Constant, Stendhal, Balzac, Flaubert, and Zola. Prerequisite: French 205, 206 or equivalent. Three hours per week. *Three semester hours*.

\*086—312. FRENCH POETRY OF THE NINETEENTH AND MRS. LUCAS TWENTIETH CENTURIES

Analysis and interpretation of poems of the Romantics, Baudelaire, Mallarmé, Rimbaud, Verlaine, Valéry, Péguy, and the moderns. Prerequisite: French 205, 206 or equivalent. Three hours per week. *Three semester hours*.

086—313. REPRESENTATIVE TWENTIETH CENTURY WRITERS MRS. LUCAS Studies in major novelists and dramatists from Proust and Gide to Camus and Sartre. Prerequisite: French 205, 206 or equivalent. Three hours per week. Three semester hours.

086—314. FRANCE TODAY

MRS. LUCAS
Contemporary France as seen in its current literature, art, philosophy, and politics.
Prerequisite: French 205, 206 or equivalent. Three hours per week. Three semester hours.

French 311 and 312 alternate with French 313 and 314.

086—315. ADVANCED CONVERSATION AND COMPOSITION
Three hours per week. Three semester hours.

MRS. LUCAS

086—316. ADVANCED CONVERSATION AND COMPOSITION
Three hours per week. Three semester hours.

Three hours per week. Three semester hours. MRS. LUCAS
\*086—421. MEDIEVAL FRENCH LITERATURE DR. REINER

Three hours per week. Three semester hours.

\*086—422. RABELAIS, THE PLEIADE, MONTAIGNE DR. REINER Three hours per week. Three semester hours.

086—423. THE AGE OF LOUIS XIV STAFF Studies in depth of the major writers of the Grand Siécle. Three hours per week. Three semester hours.

086—424. THE ENLIGHTENMENT

A seminar on the decline of the monarchy and the rise of the republican ideal as seen in the works of Bayle, Montesquieu, Voltaire, Diderot and Rousseau. Three hours per week. Three semester hours.

French 421 and 422 alternate with French 423 and 424.

086—428. ADVANCED GRAMMAR DR. REINER Intended primarily for French majors who plan to teach. Prerequisite: French 315 or 316. Three hours per week. Three semester hours.

<sup>\*</sup>This course is not offered in 1978-1979.

#### 086-452. ADVANCED SEMINAR IN FRENCH LITERATURE

Students will select a major author, literary movement, or genre and investigate the subject in depth over an entire term. Under the close supervision of the instructor, regular conferences and reports will culminate in an original paper based on the student's research. Prerequisite: one course in advanced French literature. Three hours per week. Three semester hours.

# 088—Spanish

Spanish majors must meet the following requirements.

Six hours of advanced Spanish composition and conversation and fifteen hours of Spanish literature (Students planning to teach shall take three hours of advanced grammar in second semester of the senior year and may then take twelve hours of literature); English Literature 203, 204; History 203, 204 or 205, 206 or 317, 318 or 327, 328. Latin 101, 102 and 203, 204 are recommended. To complete departmental requirements in their senior year, majors must pass a comprehensive examination in Spanish.

088-101. ELEMENTARY SPANISH

MR. PAUL, MR. RAPPOCCIO

Three hours plus one hour of language laboratory per week. Three semester hours.

088-102. ELEMENTARY SPANISH

MR. PAUL, MR. RAPPOCCIO

Prerequisite, Spanish 101. Three hours plus one hour of language laboratory per week. Three semester hours.

088-203. INTERMEDIATE SPANISH

STAFF

Prerequisite, Spanish 102 or equivalent (i.e., satisfactory completion of two years of Spanish in secondary school). Three hours plus one hour of language laboratory per week. Three semester hours.

088—204. INTERMEDIATE SPANISH

Prerequisite, Spanish 203. Three hours plus one hour of language laboratory per week. Three semester hours

088-205. SPANISH LITERATURE IN WORLD CIVILIZATION

Spanish master works and their contribution to world culture and civilization. Three hours per week. Three semester hours.

088-206. SPANISH LITERATURE IN WORLD CIVILIZATION A continuation of Spanish 205 from Romanticism to major writers in contemporary Spain and Latin America. Three hours per week. Three semester hours.

088-310. SPANISH-AMERICAN LITERATURE

Prerequisite, Spanish 205, 206 or 314 or permission of the instructor. Three hours per week. Three semester hours.

Spanish 310 alternates with Spanish 422.

088-313. ADVANCED COMPOSITION AND CONVERSATION

MR. PAUL, MR ESPADAS

Three hours per week. Three semester hours.

088-314. ADVANCED COMPOSITION AND CONVERSATION

MR. PAUL, MR. ESPADAS

Three hours per week. Three semester hours.

088—332 LATIN AMERICAN STUDIES See under World Literature.

MR. PAUL

\*088—421. SPANISH THEATRE SINCE 1800

MR. RAPPOCCIO

Prerequisite, Spanish 205, 206 or 314 or permission of the instructor. Three hours per week. Three semester hours.

\*088—422. SPANISH PROSE SINCE 1800

MR. RAPPOCCIO

Prerequisite, Spanish 205, 206 or 314 or permission of the instructor. Three hours per week. Three semester hours.

088-423. THEATRE OF THE SIGLO DE ORO

AR ESPADAS

Prerequisite, Spanish 205, 206 or 314 or permission of the instructor. Three hours per week. Three semester hours.

\*088-426. MEDIEVAL SPANISH LITERATURE

MR. ESPADAS

The epic, the romance, drama, and early prose, with special emphasis on *El Cantar de Mio Cid, El Libro de Buen Amor, El Conde Lucanor*, and *La Celestina*. Prerequisite: Spanish 421, 422, 423, 424, 427 or permission of the instructor. Three hours per week. *Three semester hours*.

\*088-427. CERVANTES AND OTHER NOVELISTS OF THE SIGLO DE ORO

MR PAUL

Don Quijote, the Novelas Ejemplares, and works of fiction by contemporaries of Cervantes. Prerequisite, Spanish 205, 206 or 314 or permission of the instructor. Three hours per week. Three semester hours.

Spanish 427 alternates with Spanish 423.

088-428. ADVANCED GRAMMAR

DR. REINER

Intended primarily for Spanish majors who plan to teach. Prerequisites: Spanish 314 and at least one year of a Spanish literature course. Three hours per week. Three semester hours.

#### 090—SOCIOLOGY

#### MR. GALLAGHER

090—201. INTRODUCTION TO SOCIOLOGY

STAFF

A course designed to give the student a more scientific understanding of man's social nature and of the social world in which he lives. In addition to fundamental concepts and theories particular attention is focused on problems arising from race relations and personality disorganization. Not open to freshmen. Three hours per week. Three semester hours.

090-202. INTRODUCTION TO SOCIOLOGY

STAFF

A continuation of Sociology 101. Problems to which particular attention is given include urbanization, public opinion and propaganda, marriage and the family and crime and delinquency. Prerequisite, Sociology 101. Three hours per week. *Three semester hours*.

<sup>\*</sup>This course is not offered in 1978-1979.

## **SPANISH**

See under Romance Languages

# 077—SPEECH

DR. HENRY

## 077-201. PUBLIC SPEAKING

DR. HENRY

The composition and presentation of speeches that inform, teach and persuade, with group analysis and criticism. Three hours per week. Three semester hours. Enrollment limited to twenty students per section.

# 077-202. TELEVISION PRODUCTION

DR. HENRY

An introduction to television techniques and organization, with student participation in the production of newscast, panel discussions, and interview programs. Three hours per week. Prerequisite, Speech 201. Three semester hours. Enrollment limited to twenty students per section.

# 077-301. DRAMATIC ARTS WORKSHOP

DR. HENRY

An introduction to the elements of theatrical production, with an emphasis upon acting techniques. Students will participate in acting exercises, improvisation and scene study, and will gain practical experience in campus productions. One hour of lecture and two hours of workshop per week. Prerequisite: Speech 201 or 202 or consent of instructor. Two semester hours.

# 077-302. DRAMATIC ARTS WORKSHOP

DR. HENRY

A continuation of Course 301 with a greater emphasis upon directing techniques and the problems of artistic management. Prerequisite, Speech 301. One hour of lecture and two hours of workshop per week. Prerequisite: Speech 301. Two semester hours.

# SPECIAL OFFERINGS

208

# College Scholar's Program

Guided independent study for qualified freshmen in their second term, sophomores and juniors. Each course is credited as three semester hours. (See "The Ursinus Plan" for details.)

201.	LANGUAGES	DR. RICE	AND	DIVISIONAL 7	TUTORS
202.	LANGUAGES	DR. RICE	AND	DIVISIONAL 7	TUTORS
203.	HUMANITIES	DR. BYERLY	AND	DIVISIONAL T	TUTORS
204.	HUMANITIES	DR. BYERLY	AND	DIVISIONAL	TUTORS
205.	SOCIAL SCIENCES	DR. VISSER	AND	DIVISIONAL 7	TUTORS
206.	SOCIAL SCIENCES	DR. VISSER	AND	DIVISIONAL T	TUTORS
207.	NATURAL AND PHYSICAL SCIENCES				
		DR. TAKATS	AND	DIVISIONAL 7	TUTORS

NATURAL AND PHYSICAL SCIENCES

DR. TAKATS AND DIVISIONAL TUTORS

# **Departmental Honors**

Guided independent study and research for qualified seniors. Written thesis required. There is a Project Adviser for each course listed below. (See the Ursinus Plan for details.) Three semester hours.

005—450.	BIOLOGY	045—450.	HISTORY	
010—450.	CHEMISTRY	050—450.	MATHEMATICS	
016—450.	GREEK	060—450.	PHILOSOPHY-RELIGION	
017—450.	LATIN	065—450.	PHYSICS	
020—450.	ECONOMICS	070—450.	POLITICAL SCIENCE	
032—450.	ENGLISH LITERATURE	075—450.	PSYCHOLOGY	
035—450.	GERMAN	086—450.	FRENCH	
040—450.	HEALTH AND PHYSICAL	088—450.	SPANISH	

# 027-Intercollege Seminar

# \*027—202. SEMINAR ON CONTEMPORARY PROBLEMS

An elective course dealing with contemporary issues. The problems are analyzed from philosophical, sociological, psychological, and scientific viewpoints.

Seven class meetings of 90 minutes each. One class is held at each of the participating colleges. Coordinator is in charge.

Open to sophomores and juniors.

Students make own travel arrangements to and from participating colleges. One semester hour.

## 028-Senior Symposium

The Senior Symposium is an elective course designed to encourage seniors from all departments to apply their accumulated knowledge to some of the major problems of the age. It is hoped that open discussion of current movements, ideas and values will help the students to move with a greater degree of confidence and usefulness in the world after graduation and will result in individual participation and involvement in the issues of their time. The Symposium, therefore, will deal with meanings and values as well as facts.

#### 028-401. SENIOR SYMPOSIUM

MR. DAVIS AND STAFF

Independent readings and periodic conferences with a Tutor, with emphasis on the Contemporary World. Open only to seniors. Three hours per week. *Three semester hours*.

#### 028-402. SENIOR SYMPOSIUM

MR. DAVIS AND STAFF

Discussion in depth of some of the major issues confronting Americans today with particular emphasis on the social foundations of education. Prerequisite, Senior Symposium 401. Three hours per week. *Three semester hours*.

<sup>\*</sup>This course is not offered in 1978-1979.

### 029-Interdivisional Course

\*029—401. COMMUNITY AND CIVILIZATION — THEN AND NOW:

AN INTERDIVISIONAL STUDY PROGRAM DR. VISSER AND STAFF

An experimental two-semester interdivisional study program for seniors. During the first semester two historical models — the Late Roman Empire and Europe, 1450-1850 — will be examined in a comparative study of values and institutions. The second semester will concentrate on the condition of man in the present world. In this sequence the Late Roman Empire will stand in relation to the Early Modern Period as the Early Modern Period stands to the Present. Students will be encouraged to discover the relationship between the community (civitas), the values of its institutions (civilitas) and the forces that affect changes in both. In addition to a weekly lecture, there will be tutorials, independent research and case studies in the form of disputation. Three hours per week. Three semester hours.

\*029—402. COMMUNITY AND CIVILIZATION — THEN AND NOW:

AN INTERDIVISIONAL STUDY PROGRAM DR. VISSER AND STAFF

Continuation of Course 401. Prerequisite, Community and Civilization 401. Three hours per week. Three semester hours.

#### 030-World Literature

030-201. WESTERN LITERATURE

STAFF

Critical reading of selected representative works from Western literature. Three hours per week. Three semester hours.

030-202. WESTERN LITERATURE

STAFF

A continuation of World Literature 201. Prerequisite, Course 201. Three hours per week. Three semester hours.

\*030-203. NON-WESTERN LITERATURE

STAFF

Critical reading of selected representative works from non-Western literature. Three hours per week. *Three semester hours*.

\*030-204. NON-WESTERN LITERATURE

STAFF

A continuation of World Literature 203. Three hours per week. *Three semester hours*. Although World Literature 201, 202 is offered every year, the sequence 203, 204 is offered only in alternate years. Student may elect both year courses for credit.

088-332. LATIN AMERICAN STUDIES

MR. PAUL

The historical, political, and socio-economic background of this increasingly important region is brought out in studies based on the works of its major writers, especially those still active on the contemporary scene. Given in English, using texts in translation. Three hours per week. *Three semester hours*.

(Does not fulfill the Humanities pivotal requirement.)

<sup>\*</sup>This course is not offered in 1978-1979.

# SUGGESTED PROGRAMS

First Year (Plan CMB) Biology 111, 112	Fourth Year Biology Electives
First Year (Plan CMP)  Chemistry 111, 112	Chemistry 111, 112
34	34
Second Year (Plan CMB) Physics 111, 112 8 Chemistry 207, 208 8 Pivotal Humanities 6 Language 203, 204 or Pivotal Social Sciences 6	Second Year         Mathematics 231, 232       6         Chemistry 207, 208       8         Chemistry 203, Physics 204       8         Language 203, 204       6         Humanities or Social Science       6
28	34
Second Year (Plan CMP)           Biology 111, 112         8           Chemistry 207, 208         8           Pivotal Humanities         6           Language 203, 204 or         6           Pivotal Social Sciences         6           —         28	Third Year  Chemistry 309, 310
Third Year	Fourth Year
Biology 315, 316	Chemistry 405, 306 6 Chemistry 413, 312 6 Chemistry 321, 322, 323, 430 3 Physics 207, 208 4 German 311, 312 or 6 Radial 6
29/30	

CLASSICAL STUDIES (B.A.)	Second Year
Adviser—Professor Wickersham	Foreign Language 203, 204
	(if not completed)
First Year	Humanities Pivotal
English Composition 101, 102 6	Computer Science
History 101, 102 6	Economics and Business
Greek 101, 102 6	Administration Electives 6
Latin 101, 102 or 203, 204 or 304, 305 . 6	Social Science Pivotal 6
Elective	30
-	
30	Third Year
C	Economics and
Second Year	Business Administration 325, 326 6 Economics and Business
Social Science         6           Science         6	Administration Electives 6
Greek 203, 204 6	Electives
Latin 6	
Electives 6	30
30	Fourth Year
	Economics and Business
Third Year	Administration 435
Latin or Greek	Administration Electives 3
Electives24	Electives24
30	
	30
Fourth Year	ENGLISH (B.A.)
Greek or Latin	Adviser—Professor Storey
_	
30	First Year
	English Composition 101, 102 6 Humanities 6
	Science 6
The state of the s	Foreign Languages 6
ADMINISTRATION (B.A.)	Social Science
Adviser—Professor Pilgrim	- Thysical Education 111, 112
Adviser Holesser Highin	30
First Year	Second Year
English Composition 101, 102 6	English Literature
Science 6 (Candidates for teaching should	
Foreign Language 6 Mathematics 101, 102 6	214)
Economics and Business	Foreign Language (if not completed) 6
Administration 101, 102 6	Radial Courses 6
Physical Education 111, 112	Other Electives
30	30

## SUGGESTED PROGRAMS

Third Year	Fourth Year
English Literature         .12           Radial Courses         .6           Other Electives         .12	German 413, 414 or 415, 416 or 417, 418
Fourth Year	
English Literature         6           Electives         .24	
30	HEALTH AND PHYSICAL
	EDUCATION (B.S.)
GERMAN (B.A.)	Adviser—Professor Davidson
Adviser—Professor Clouser	Adviser—Professor Davidson
First Year English Composition 101, 102 6 History 101, 102 6 Science 6 German 101, 102 or 203, 204 or 305, 306 6 Other Language 101, 102 or 203, 204 6 Physical Education 30	First Year  English Composition 101, 102 6 History 101, 102 6 Foreign Language 6 Biology 101, 102 6 Physical Education 131, 132 6 Physical Education 111, 112 4
(Majors who have not already done so should complete German 203, 204 in summer school.)  Second Year  English Literature 203, 204	Second Year         Foreign Language (if not completed)       6         Biology 317, 318       6         Education 202       3         Physical Education 243       3         Physical Education 203, 204       4         Psychology 101       3         Physical Education 244       2         Electives       6         33
Third Year  German 307, 308 or 309, 310 6  German 413, 414 or 415, 416 or  417, 418 6  Radial Courses 6  Electives	Physical Education 351, 352 4 Physical Education 354 2 Physical Education 354 4 Physical Education 355, 356 4 Physical Education 357, 358 4 Physical Education 361 3 Physical Education 305, 306 4 Electives 6

Fourth Year	Fourth Year
Education 405       10         Education 441       2         Education 444       3         Physical Education 462       2         Physical Education 464       3         Physical Education 408       2         Psychology 102       3         Electives       5         Physical Education 466       2	History
_	MATHEMATICS (B.S.)
32	Adviser—Professor Jessup
	First Year  English Composition 101 102 6
HISTORY (B.A.)  Adviser—Professor Davis  First Year	English Composition 101, 102 6 Foreign Language 101, 102 or 203, 204 6 Mathematics 111, 112 6 Physics 111, 112 8 Humanities 6
English Composition 101, 102 6 History 101, 102 6 Science	Physical Education 111, 112
Physical Education 111, 112	Foreign Language 203, 204 (if not completed) 6 Humanities 6 Mathematics 231 3 Mathematics 233, 234 6 Social Science 6 Electives 3
Foreign Language 203, 204 (if not completed)	30
Administration 101, 102	Third Year  Radial Courses
Third Year	
Sociology       3         History 203, 204 or 205, 206 or 207, 208       6         History Seminar       3         Electives       18	Fourth Year  Mathematics
30	30

## SUGGESTED PROGRAMS

PHILOSOPHY AND RELIGION (B.A.)	Second Year
Adviser—Professor Williamson	Humanities 6
First Year	Mathematics 231, 232 6
English Composition 101, 102 6	Physics 203, 204
Foreign Language 6	Physics 207a, 208a 2
Science	Electives 3
Social Science 6	
Philosophy 101, 102 6	31
Physical Education 111, 112	Third Year
30	Mathematics 339, 340 6
Second Year	Physics 315, 316 6
Foreign Language 203, 204	Radial Courses 6
(if not completed) 6	Social Science
Religion 201, 202 6	
Radial Courses	36
Electives in Area of Concentration 3	Fourth Year
_	Physics Courses
30	Radial Courses 6
Third Year	Electives
Philosophy or Religion15 or 18	
Electives in Area of Concentration 6 or 9	30
Electives 6 or 9	
_	
30	POLITICAL SCIENCE (B.A.)
Fourth Year	Adviser—Professor E. H. Miller
Philosophy or Religion	
Senior Seminar 403, 404 6 Electives in Area of	First Year
Concentration 3 or 6	English Composition 101, 102 6
Electives	History 101, 102 6
	Science
30	Political Science 101, 102 6
	Physical Education 111, 112
PHYSICS (B.S.)	The state of the s
	30
Adviser—Professor Snyder	Second Year
First Year	Foreign Language 203, 204
English Composition 101, 102 6	(if not completed) 6 Psychology 101
Foreign Language	Economics and Business
Chemistry 111, 112 8	Administration 101, 102 6
Mathematics 111 Int., 112 Int 6	Political Science 205, 206 6
Physics 111 Int., 112 Int 8	Political Science 215, 216 6 Electives
Physical Education 111, 112	Liectives
34	30

Third Year	Fourth Year
Sociology 101, 102 6 History 213, 214 6 Political Science 8 Electives 4 Radial Courses 6	Psychology 409, 440
Fourth Year	
Political Science	
30	ROMANCE LANGUAGES FRENCH (B.A.)
	Adviser—Professor Reiner
PSYCHOLOGY (B.S.)	First Year
## Adviser—Professor Fago    First Year	First Year  English Composition 101, 102 6 History 101, 102 6 Science 6 French 203, 204 6 Foreign Language 6 Physical Education 111, 112 30  Second Year  English Literature 203, 204 6 Social Science (Pivotal) 6 French 205, 206 6 French 315, 316 6 Foreign Language 203, 204 (if not completed, or other radial course) 6  30
Radial Courses	Third Year
Third Year  Sociology 201, 202 or Anthropology 201, 202 6 Psychology 351 or 352 4 Psychology 334 7 Psychology 334 3 Radial Courses 6 Electives 4	History 203, 204 or 205, 206
30	30
30	50

## SUGGESTED PROGRAMS

SPANISH (B.A.)	English Composition 101, 102 6
Adviser—Professor Reiner	Language 101, 102 or 203, 204 6 Physical Education 111, 112
First Year	-
English Composition 101, 102 6	34
History 101, 102 6	First Year (Plan CMP)
Science 6	
Spanish 203, 204 6	Chemistry 111, 112 8 Physics 111, 112 (Int.) 8
Foreign Language 6	Mathematics 111, 112 (Int.) 6
Physical Education	English Composition 101, 102 6
	Language 101, 102 or 203, 204 6
30	Physical Education 111, 112
Second Year	—
English Literature 203, 204	34
Social Science (Pivotal)	Second Year (Plan CMB)
Spanish 205, 206 6 Spanish 313, 314 6	
Foreign Language 203, 204 (if not	Physics 111, 112 8 Chemistry 207, 208 8
completed or other radial course) 6	Psychology 101, 102 6
Completed of other radial course,	Language 203, 204 or
30	Pivotal Humanities
Third Year	Education 202 3
History 6	
Spanish 421, 422 or 423, 426 6	31
Spanish 310, 427 6	Second Year (Plan CMP)
Electives12	Biology 111, 112 8
30	Chemistry 207, 208 8
Fourth Year	Psychology 101, 102 6
Spanish 422 or 427 3	Language 203, 204 or
Spanish 428 3	Pivotal Humanities 6
Electives	Education 202 3
Education Semester14	
_	31
32	Third Year
Fourth Year	Biology 315, 31610
Spanish 423, 426 or 421, 422 6	Biology 321 3
Electives24	Biology 326 or 328 3
30	Biology 415 3
30	Education 223, 224 6
SCIENCES AND MATHEMATICS (B.S.)	Pivotal Humanities or
PREPARATION FOR SECONDARY	Radial Electives 6
SCHOOL TEACHING IN THE SCIENCES	31
AND MATHEMATICS	
I. CONCENTRATION IN BIOLOGY	Fourth Year
Advisers—Professor Allen and	Education 405 9
Professor Cogger	Education 441, 443
First Year (Plan CMB)	Biology Electives
Biology 111, 112 8	Radial and Free Electives
Chemistry 111, 112 8	
Mathematics 111, 112 6	31

## CONCENTRATION IN CHEMISTRY  Advisers—Professor Starger and Professor Cogger  ### First Year  Chemistry 111, 112	III. CONCENTRATION IN MATHEMATICS  Advisers—Professor Jessup and Professor Cogger  First Year  Mathematics 111, 112 6 Physics 111, 112 8 English Composition 101, 102 6 Foreign Language 101, 102 or 203, 204 6 Pivotal Courses 6 Physical Education 111, 112 —
Second Year         Chemistry 207, 208       8         Chemistry 203, Physics 204       8         Psychology 101       3         Education 202       3         Language 203, 204       0r         Humanities       6         Electives       3         Third Year	Second Year         Foreign Language 203, 204         or       6         Electives       6         Mathematics 231       3         Mathematics 233, 234       6         Psychology 101       3         Education 202       3         Radial Courses       6         Electives       3
Chemistry Electives 6 Biology 101, 102  Or Geology 101, 102 6 Humanities 6 Social Science 3 Education 223, 224 6 Electives 3  Fourth Year  Physics 211, 212 6 Education 441, 443 3 Education 444 3 Education 445 9 Electives 10	Third Year         Education 223, 224       6         Mathematics       12         Radial Courses       6         Electives       6         Fourth Year         Education 405       9         Education 441       2         Education 443 (M)       1         Education 444       3         Mathematics       3         Electives       13

## SUGGESTED PROGRAMS

IV. CONCENTRATION IN MATHEMATICS-PHYSICS	V. CONCENTRATION IN PHYSICS  Advisers—Professor Snyder and
Advisers—Professor Jessup and Professor Snyder and	Professor Cogger
Professor Cogger	First Year
First Year  Physics 111 Int., 112 Int 8 Mathematics 111 Int., 112 Int 6 English Composition 101, 102 6 Foreign Language 101, 102 or 203, 204	Physics 111 Int., 112 Int
6	Second Year
Second Year         Physics 203, 204       8         Mathematics 231, 232       6         Mathematics 233, 234       6         Psychology 101       3         Education 202       3         Foreign Language 203, 204	Physics 203, 204       8         Mathematics 231, 232       6         Education 202       3         Language 203, 204       6         or       6         Electives       6         Psychology 101       3
or Electives 6	32
32	
Third Year	Third Year
Chemistry 111, 112 8 Physics 207, 208 6 Mathematics 335, 336 6 Education 223, 224 6 Electives 6	Chemistry 111, 112
The second second	
Fourth Year  Education 405 9  Education 444 3  Education 441 2  Education 443 1  Mathematics 338 3  Mathematics 444 3  Electives 10	Fourth Year  Education 405 9 Education 444 3 Education 441 2 Education 443 1 Physics 211, 212 6 Electives 10  31

VI. PROGRAM LEADING TO GENERAL SCIENCE CERTIFICATION FOR JUNIOR HIGH SCHOOL AND NON-COLLEGE PREPARATORY SENIOR HIGH SCHOOL  Advisers—Professor Snyder and Professor Cogger	Note: Specific courses required for teaching certification in subject fields other than those listed on pages 114-117 can be secured from the departmental adviser. Also refer to "Teaching" on page 24 of the Bulletin.
First Year  English Composition 101, 102 6 Language 101, 102 or 203, 204 6 Mathematics 111, 112 6 Physics 111, 112 7 Or Chemistry 111, 112 8 Pivotal Courses 6 Physical Education 111, 112 7 32	FIVE-YEAR COMBINED LIBERAL ARTS — ENGINEERING PROGRAM URSINUS COLLEGE (B.A.), THE UNIVERSITY OF PENNSYLVANIA, THE UNIVERSITY OF SOUTHERN CALIFORNIA, AND THE GEORGIA INSTITUTE OF TECHNOLOGY (B.S. in Engr.)
Second Year  Biology 101, 102 6  or  Biology 111, 112 8 Education 202 3 Physics 111, 112 or  Chemistry 111, 112 8 Psychology 101 3 Elective 3 Pivotal Courses 6	PLAN I FOR ELECTRICAL, CIVIL OR MECHANICAL ENGINEERS  First Year English Composition 101, 102 6 Foreign Language 203, 204 6 Chemistry 111, 112 8 Mathematics 111 Int., 112 Int. 6 Physics 111 Int., 112 Int. 8 Physical Education 111, 112 34
Third Year         Physics 211, 212       6         Additional Science (from area of major interest)       12         Education 223, 224       6         Electives       6         —       30	Second Year         Radial Courses       6         Humanities       6         Physics 203, 204       8         Mathematics 231, 232       6         Computer Science 101       3         —       29
Fourth Year  Education 441	Third Year  Radial Courses 6 Social Science 6 Physics 207, 314 6 Mathematics 339, 340 6 Electives 6 30

Fourth and Fifth Years to be completed at the University of Pennsylvania, the University of Southern California, or the Georgia Institute of Technology.	Third Year         Radial Courses       6         Social Science       6         Chemistry 309, 310       8         Mathematics 231, 232       6         Electives       3
PLAN II FOR CHEMICAL OR METALLURGICAL ENGINEERS	29
First Year	Fourth Year and Fifth Year
English Composition 101, 102 6 Foreign Language 6 Chemistry 111, 112 8 Mathematics 111 Int., 112 Int. 6 Physics 111 Int., 112 Int. 8 Physical Education 111, 112	to be completed at the University of Pennsylvania, the University of Southern California, or the Georgia Institute of Technology.
Second Year           Radial Courses         6           Humanities         6           Chemistry 203         4           Physics 204         4           Chemistry 207, 208         8           Computer Science 101         3	STUDENTS WHO WISH TO PREPARE FOR TEACHING, THE MINISTRY, OR FOR ADMISSION TO PROFESSIONAL SCHOOLS OF MEDICINE, DENTISTRY, VETERINARY MEDICINE, LAW OR NURSING SHOULD REFER TO "THE ADMISSION SECTION (CAREER OPPORTUNITIES)" WHERE SUGGESTED MAJORS

31 ARE INDICATED.

# DIRECTORY

# **BOARD OF DIRECTORS**

	First Elected	Term Expires
***JAMES M. ANDERSON, Wynnewood	1967	1977
ROBERT B. ANDERSON, B.S., M.S., Dallas, Texas	1972	1982
LILLIAN ISENBERG BAHNEY, B.A., Myerstown	1951	1981
RUSSELL C. BALL, JR., B.S., LL.D., Paoli	1968	1978
JOSEPH T. BEARDWOOD, III, B.S., Glenside	1968	1978
THOMAS J. BEDDOW, B.A., J.D., LL.D., Washington, D.C.	1958*	1979
REV. C. EUGENE BLUM, B.A., B.D., D.D., York	1950	1980
RALPH CONNOR, B.S., Ph.D., LL.D., Sc.D., Wyncote	1971	1981
PHILIP L. CORSON, B.A., LL.D., Plymouth Meeting	1960	1980
WILLIAM ELLIOTT, LL.D., Collegeville	1964	1979
CHARLES W. GEORGE, B.S., M.S., New York	1977	1982
MILLARD E. GLADFELTER, A.B., A.M., Ph.D., Sc.D., LL.D.,		
D.H.L., D.C.L., L.H.D., Litt.D., Jenkintown	1967	1982
THOMAS P. GLASSMOYER, B.A., LL.B., LL.D., Willow Grove	1956**	1982
PAUL I. GUEST, B.A., J.D., LL.D., Gladwyne	1966	1981
NORMA YOUNG HARBERGER, B.A., Abington	1975	1980
WILLIAM F. HEEFNER, B.A., LL.B., LL.D., Perkasie	1969	1979
DONALD L. HELFFERICH, B.A., J.D., LL.D., Pottstown	1927	1982
REV. MERRITT J. JEFFERS, B.S., M.S., B.D., D.D., Lebanon	1953	1978
ALEXANDER LEWIS, JR., B.S., M.S., Ph.D., Sc.D., Pittsburgh	1972	1982

<sup>\*</sup>Did not serve 1968-1969

<sup>\*\*</sup>Did not serve 1966-1967

<sup>\*\*\*</sup> Deceased August 4, 1977

REV. SHELDON E. MACKEY, B.A., B.D., D.D., LL.D., Glenside	1960	1981
ELLWOOD S. PAISLEY, B.S., LL.D., Philadelphia	1959	1979
WILLIAM S. PETTIT, B.S. in Chem., M.S., Sc.D., Naples, Fla.	1970	1980
RICHARD P. RICHTER, B.A., M.A., LL.D., Collegeville	1976	1981
WILLIAM R. ROBBINS, B.S., West Hartford, Conn.	1971	1981
CHARLES V. ROBERTS, B.S., Drexel Hill	1956	1981
DAVID M. SCHMID, B.S., Norristown	1971	1981
THEODORE R. SCHWALM, LL.D., Columbia	1963	1978
E. EUGENE SHELLEY, B.S., LL.B., York	1971	1981
JOHN C. SHETLER, A.B., B.D., Th.M., D.D., Collegeville	1976	1981
MARILYN L. STEINBRIGHT, B.S., Norristown	1975	1980
*GEORGE L. THOMAS, JR., B.A., D.C.S., Frederick, Md.	1951	1981
L. G. LEE THOMAS, S.B., L.H.D., Bryn Mawr	1976	1981
JOHN H. WARE, III, B.S., LL.D., Oxford	1975	1980
ROY WENHOLD, B.S., M.D., Abington	1968	1978
JOSEPH C. WILKINSON, Philadelphia	1973	1978
HARLESTON R. WOOD, B.A., LL.D., Gladwyne	1956	1976
Directors Emeriti		
JOSEPH L. EASTWICK, B.A., LL.D., Philadelphia	1962	1977
CHARLES LACHMAN, LL.D., Wayne	1949	1969
D. STERLING LIGHT, B.A., Norristown	1947	1977
CLARENCE A. WARDEN, JR., LL.D., Haverford	1957	1977

<sup>\*</sup> Deceased May 24, 1977

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## THE FACULTY 1977-1978\*

- RICHARD PAUL RICHTER, M.A., LL.D., President, Assistant Professor of English B.A., Ursinus College; M.A., University of Pennsylvania; LL.D., Ursinus College.
- DONALD LAWRENCE HELFFERICH, J.D., LL.D., Chancellor B.A., Ursinus College; J.D., Yale University School of Law; LL.D., Ursinus College, Temple University, Dickinson School of Law.
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- ALLAN LAKE RICE, Ph.D., R.N.O., Professor of German, Emeritus B.A., M.A., Ph.D., University of Pennsylvania

<sup>\*</sup>Listed in order of appointment to present rank; appointments of the same year are listed alphabetically.

- EVERETT MARTIN BAILEY, M.A., Professor of Health and Physical Education, Emeritus
  - B.P.E., B.S., Springfield College; M.A., Columbia University.
- FOSTER LEROY DENNIS, Ph.D., Professor of Mathematics, Emeritus B.S., Ursinus College; M.A., Cornell University; Ph.D., University of Illinois.
- CALVIN DANIEL YOST, JR., Ph.D., Litt.D., Professor of English Emeritus B.A., Ursinus College; M.A., Ph.D., University of Pennsylvania; Litt.D., Ursinus College.
- EUGENE HERBERT MILLER, Ph.D., Professor of Political Science B.A., Ursinus College; M.A., Ph.D., Clark University
- GARFIELD SIEBER PANCOAST, Ph.D., Professor of Political Science B.S., Ursinus College; M.A., Ph.D., University of Pennsylvania.
- ROGER POWELL STAIGER, Ph.D., David Laucks Hain Professor of Chemistry B.S., Ursinus College; M.S., Ph.D., University of Pennsylvania.
- RICHARD MUMMA FLETCHER, Ph.D., Professor of Psychology B.A., Franklin and Marshall College; Ph.D., Pennsylvania State University.
- GEORGE GILBERT STOREY, Ph.D., N. E. McClure Professor of English B.A., Geneva College; M.A., Duke University; M.A., Ph.D., Harvard University.
- EVAN SAMUEL SNYDER, Ph.D., Professor of Physics B.S., Ursinus College; M.S., Ph.D., University of Pennsylvania.
- WILLIAM BEDFORD WILLIAMSON, Ed.D., D.D., Professor of Philosophy B.S., S.T.B., Ed.D., Temple University; S.T.M., Lutheran Theological Seminary; M.A., Lehigh University; D.D., National University.
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- BERNARD OBLENIS BOGERT, M.A., Visiting Professor of Geology B.S., Lafayette College; M.A., Columbia University.
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  A.B., A.M., Dartmouth College; Ph.D., University of Illinois.
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  B.S., Ursinus College; M.S., University of Michigan.
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  B.S., Ursinus College; M.Ed., Temple University.
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  B.A., State University of New York at Albany; M.A., Ph.D., Yale University.
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  B.S., U.S. Naval Academy; M.S., Massachusetts Institute of Technology; Ph.D., University of Pennsylvania.
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- RAY KARL SCHULTZ, Ph.D., Associate Professor of Chemistry B.S., Muhlenberg College; M.S., Ph.D., Lehigh University.
- HARRY CLAY SYMONS, M.A., Associate Professor of Economics B.A., M.A., Pennsylvania State University.
- ALBERT CURTIS ALLEN, JR., Ph.D., Associate Professor of Biology B.A., College of Wooster; M.A., Ph.D., University of Michigan.
- RONALD EUGENE HESS, Ph.D., Associate Professor of Chemistry B.S., Lock Haven State College; Ph.D., Cornell University.
- JOHN DAVID PILGRIM, Ph.D., Associate Professor of Economics B.A., Grinnell College; Ph.D., Vanderbilt University.
- GEORGE C. FAGO, Ph.D., Associate Professor of Psychology
  A.B., Franklin and Marshall College; M.S., Ph.D., University of Pittsburgh
- ROBERT EDWARD JOHNS, Ed.D., Associate Professor of Education B.A., Franklin and Marshall College; M.S. in Ed., Ed.D., University of Pennsylvania.
- GAYLE ARMISTEAD BYERLY, Ph.D., Associate Professor of English A. B., Goucher College; M.A., Ph.D., University of Pennsylvania.
- PETER GORDON JESSUP, Ph.D., Associate Professor of Mathematics A.B., Kenyon College; M.S., Ph.D., Lehigh University.

- RICHARD JACOB WHATLEY, M.S., Dean of Men; Associate Professor of Health and Physical Education; Assistant Director of Athletics B.S., University of Maine; M.S., Springfield College.
- JANE ANN BARTH, M.A., Associate Professor of Chemistry B.A., Mount Holyoke College; M.A., Smith College.
- RICHARD STUART BREMILLER, M.A., Associate Professor of Mathematics B.S., United States Merchant Marine Academy; M.S., Drexel Institute of Technology; M.A., University of Delaware.
- ADELE PACK BOYD, M.Ed., Assistant Professor of Health and Physical Education
  B.S., Ursinus College; M.Ed., Temple University.
- MARGARET BROWN STAIGER, B.A., Senior Assistant Librarian B.A., Ursinus College.
- HUGHAN CONRAD MEYER, JR., M.A., Assistant Professor of Economics B.A., Ursinus College; M.A., University of Pennsylvania.
- LOUIS AUBREY DE CATUR, Ph.D., Assistant Professor of English A.B., M.A., Ph.D., University of Maryland.
- KEITH JORDAN HARDMAN, Ph.D., Assistant Professor of Philosophy and Religion
  B.A., Haverford College; B.D., Princeton Theological Seminary; M.A.
  Columbia University; Ph.D., University of Pennsylvania.
- ROBERT RAND DAVIDSON, M.S., Director of Athletics; Assistant Professor of Health and Physical Education B.S., Northeastern University; M.S., Springfield College.
- JOYCE ELIZABETH HENRY, Ph.D., Assistant Professor of English B.A., University of Michigan; M.A., Ph.D., University of Wisconsin.
- EMIL SAMUEL PAUL, M.A., Assistant Professor of Romance Languages B.S., North Texas State University; M.A., Rutgers State University.
- MARVIN ELIJAH REED, Ph.D., Assistant Professor of History B.A., Stetson University; M.A., Ph.D., Tulane University.

- PETER FORREST SMALL, Ph.D., Assistant Professor of Biology
  B.S., Austin Peay State University; M.S., East Tennessee State University;
  Ph.D., Miami University.
- MARTHA CARROLL TAKATS, Ph.D., Assistant Professor of Physics B.A., Wellesley College; M.S., University of Wisconsin; Ph.D., University of Pennsylvania
- JOHN MOORE WICKERSHAM, Ph.D., Assistant Professor of Classics B.A., M.A., University of Pennsylvania; B.A., New College, Oxford; Ph.D., Princeton University.
- PETER FLINT PERRETEN, Ph.D., Assistant Professor of English
  B.A., Moorhead State College; M.A., Idaho State University; Ph.D., University of Delaware.
- CHARLES THOMAS SULLIVAN, Ph.D., Assistant Professor of Psychology B.A., Swarthmore College; M.A., Ph.D., New York University.
- ROBIN ADAM CLOUSER, Ph.D., Assistant Professor of German B.A., Ursinus College; A.M., University of Pennsylvania; Ph.D., University of Kansas.
- HARRY ELVIN BROADBENT, III, M.S.L.S., Library Director B.A., Ursinus College; M.A., Villanova University; M.S.L.S., Drexel University.
- LAWRENCE DENNIS KARAS, M.Ed., Assistant Professor of Health and Physical Education
  B.S., Ithaca College; M.Ed., West Chester State College.
- DANUTA SWIECICKA LLOYD, Ph.D., Assistant Professor of German B.A., Temple University; M.A., Ph.D., University of Pennsylvania.
- KATHERINE WOOD KNEAS, B.S. in L.S., Assistant Librarian B.S., Ursinus College; B.S. in L.S., Drexel Institute of Technology.
- JANE PERRETEN SHINEHOUSE, P.T., Assistant Professor of Biology B.S., Ursinus College; P.T., University of Pennsylvania.
- JAMES JOSEPH DOYLE, Ph.D., Assistant Professor of Economics B.A., LaSalle College; M.A., Ph.D., Penn State University.

- PATRICK JOSEPH MULVANNY, Ph.D., Assistant Professor of Psychology B.S., Georgetown University; Ph.D., Brown University.
- JOHN WINFIELD SHUCK, Ph.D., Assistant Professor of Mathematics B.S., Massachusetts Institute of Technology; M.S., Tufts University; Ph.D., Northeastern University.
- ANNETTE VOCK LUCAS, M.A., Instructor in French
  B.A., George Washington University; M.A., New York University.
- CONSTANCE WARREN POLEY, B.S., Instructor in Health and Physical Education
  B.S., Ursinus College.
- JUDITH EMMA FRYER, M.S. in L.S., *Periodicals Librarian* B.A., Ursinus College; M.S. in L.S., Drexel Institute of Technology.
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- JAMES HOUGHTON KANE, J.D., Instructor in Political Science B.A., Houghton College; M.A., University of Pennsylvania; J.D., Temple University
- PHILIP JOSEPH RAPPOCCIO, M.A., Instructor in Romance Languages B.A., M.A., Rutgers, The State University.
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PATRICIA WARD, Ph.D., Lecturer in German
B.A., University of Massachusetts; M.A., Ph.D., University of Pennsylvania.

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B.S. in Nursing, Widener College; R.N.; A.T.C.

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LINDA LAFFEY ARKLES, Ph.D., Lecturer in Mathematics B.A., M.A., Ph.D., Temple University

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GERALDINE ANNE EDWARDS, M.A., Lecturer in English B.A., Chatham College; M.A., New York University.

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B.S., St. Procopius College; M.S., Ph.D., Cornell University.

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Psychology Department, Professor Fago Romance Languages Department, Professor Reiner Undesignated,

Humanities, Professor Reiner Social Sciences, Dr. Kane Natural Sciences, Professor Hess Graduate Scholarships, Professor Storey Foreign Students, Professor Reiner Freshman Class, Professor Small Sophomore Class, Mrs. Butler Junior Class, Professor Barth Senior Class, Professor Perreten

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- Scholarships: The President, Chairman; Dr. Craft; Deans Bozorth, Schultz, Dolman, Jones; Mr. McQuillan, Mr. Schaefer.
- Discipline: Professor Barth, Chairman; Deans Bozorth, Harris, Whatley; Professors Kruse, Reed, Takats. Alternates: Professors Hardman, Hess, Snyder, Symons.
- Student Activities: Dean Harris, Chairman; Professors BreMiller, Hess, Perreten, Reed, Small; Dean Whatley; Mr. Nuscher, Mrs. Lucas.
- Student Publications: Professor Storey, Chairman; Professors Decatur, Fryer, Henry, Perreten, Rappoccio; Dean Jones; Mr. Broadbent.
- Athletics: Professor Davidson, Chairman; Professors R. Clouser, Doughty, Pancoast, R. Schultz; Mrs. Kneas.
- Forum and Cultural Activities: Dean Harris, Chairman; Professors Barth. Henry, Williamson, Zucker; Dean Jones; Mrs. Brown, Mr. Gatens, Mr. Xaras.
- Professional School Credentials: Professor Allen, Chairman; Deans Bozorth, Harris; Professors Hess, Pilgrim, Snyder, Staiger, Sullivan.

## PRIZES, HONORS, DEGREES **AWARDED IN 1976**

The Alumni Senior Award -

George Bertram Randolph, III, Judith Hunter Turner

The American Chemical Society Award — Robert Michael Simon

The Cyrus E. Beekey Prize — George Stephen Bause

Boeshore Prizes -

Allen Roy Alloway, Margaret Akiko Horioka, Sarah Tyler Miller

The George Ditter Prize - George Franklin Geist, III

The Duttera Prize - David Reed Rowe

The Ehret Prize — Alan Scott Callahan

The Edwin M. Fogel Prize — Lori Ann Muhlenberg

The Philip H. Fogel Memorial Prize — Henry Andrew Ziegler

The French Award — Catherine Joan Schoenwald

The Ronald C. Kichline Prize — Robert Joseph Sieracki

The William L. Lettinger Chemistry Award — Stephen Charles Ransom

The Elizabeth Rockefeller McCain Prize — Mark Stephen Arena

The George E. Nitzsche Prize - Cheryl Adele Miller

The Paisley Prize — Glenn Curtis Freas

The Pennsylvania Institute of Certified Public Accountants -

Charles Jahn Brant, Jr.

The Peters Prize - Jeffrey Wayne Stafford

The Robert Trucksess Prize — George Bertrum Randolph, III

The Ursinus Women's Club Prize - Judith Hunter Turner

The Wagman Prize - Margaret Akiko Horioka

The Professor Elizabeth B. White Prize -

James Edward Gates, Geoffrey Lawrence Rawling

The Whitian Prize - Susan Ellen Malin

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SUMMA CUM LAUDE: Caryn Kroeger Antoniacci George Bertrum

lames Edward Gates

Randolph, III

MAGNA CUM LAUDE: Mary McDermott

Aristarco

Charles Jahn Brant, Jr. Lee Morriss deLacy, III

Victor Robert Frankel Glenn Curtis Freas

Ionathan Clement Haves Samuel Simon Laucks, II

Cheryl Adele Miller

Daniel William Reid

Geoffrey Lawrence

Rawling Cynthia Elizabeth

Shelmire

Robert Michael Simon Debra Lee Weiler

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## **EVENING SCHOOL HONORS**

MAGNA CUM LAUDE: Gary Bernard Runyon

CUM LAUDE: Barry Wessell Fry

Edmund Francis O'Connor

### **DEPARTMENTAL HONORS**

BIOLOGY:

Wendy Beth Bernstein Robert William Carty

**ENGLISH:** 

Cathryn Lee McCarthy Cynthia Elizabeth Shelmire

HISTORY:

PHILOSOPHY and RELIGION:

Robert Lewis Brant, Jr. David Reed Rowe Victor Robert Frankel Samuel Simon Laucks, II

Donald Raymond Whittaker Lisa Diane Williamson

George Louis Hines Henry Andrew Ziegler

POLITICAL SCIENCE:

Richard Scott Crane
Anthony Mark DiMassa

Anthony Mark DiMas James Edward Gates

PSYCHOLOGY: Jani

Janice Lynn Diehl Michael Bernard Matthews

Jeffrey Damian Roberts

Timothy Warren Callahan, II George Gerasimowicz, Jr.

Maryann Quartuccio George Bertrum Randolph, III

Alan Michael Taren Debra Lee Weiler

## **CHAPTER SCHOLARS**

Mary McDermott Aristarco George Stephen Bause Samuel Simon Laucks, II Cheryl Adele Miller Sarah Tyler Miller Daniel William Reid Cynthia Elizabeth Shelmire Robert Michael Simon Linda Marie Springer Alan Keiser Stetler Debra Lee Weiler Donald Raymond Whittaker

## SIGMA XI CLUB

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Linda Catherine Krupp

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## ALUMNI ASSOCIATION

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Vice-President—E. Tama Williams, '59, 2228 Pine Street, Philadelphia, Pa. 19103

Secretary-Treasurer—Janet Koenig Ayres, '47, 805 Main Street, Phoenixville, Pa. 19460

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David L. Allebach, Jr., Esq. '68, 877 N. Franklin Street, Pottstown, Pa. 19464
Marion Bright Jellis, '44, 721 Wolcott Drive, Philadelphia, Pa. 19118
Joseph D. Shrager, M.D., '56, 1016 Dale Road, Meadowbrook, Pa. 19046
Nancy Heatherington St. Laurent, '66, 338 W. Dean Street, West Chester, Pa. 19380

A. Geraldine Yerger Voss, '39, Gwynedd Manor Road, North Wales, R.D. 1, Pa. 19454

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#### ALUMNI DIRECTORS

Joseph T. Beardwood, III, '51, 620 Laverock Road, Glenside, Pa. 19038

Charles W. George, '35, Vice President & General Manager, General Electric Company, (Mail Drop 110) French Road, Utica, N.Y. 13503

Norma Young Harberger, '50, 1830 Canterbury Road, Abington, Pa. 19001

William F. Heefner, Esq., '42, 250 N. Pennsylvania Avenue, Morrisville, Pa. 19067

E. Eugene Shelley, Esq., '37, 35 N. George St., York, Pa. 17401

## COLLEGE CALENDAR FOR 1978

January January January January January	3 10 12 19 30	Tuesday Tuesday Thursday Thursday Monday	Christmas Recess ends, 8:00 A.M. Last day of classes First Semester examinations begin First Semester examinations end Second Semester begins, 8:00 A.M.
March March March March March March	1 17 17 22 28 29	Wednesday Friday Friday Wednesday Tuesday Wednesday	Last day for filing financial aid applications Mid-Semester grades due, 4:00 P.M. Spring Recess begins, 5:30 P.M. Mid-Semester grades mailed Spring Recess ends, 8:00 A.M. Pre-Registration begins
May May May May May May	16 18 25 27 28 28 31	Tuesday Thursday Thursday Saturday Sunday Sunday Wednesday	Last day of classes Second Semester examinations begin Second Semester examinations end Alumni Day Baccalaureate Service, 10:00 A.M. Commencement, 2:00 P.M. Summer School begins, 8:00 A.M.
August	23	Wednesday	Summer School ends, 5:30 P.M.
September	2	Saturday	Freshman Program begins, Academic Convocation 4:00 P.M.
September	4	Monday	First Semester begins, 8:00 A.M.
October October October October October October	7 13 17 21 23 26 29	Saturday Friday Tuesday Saturday Monday Thursday Sunday	Parents' Day Fall Recess begins, 5:30 P.M. Fall Recess ends, 8:00 A.M. Homecoming Day Mid-Semester grades due, 9:00 A.M. Mid-Semester grades mailed Founders' Day Convocation
November November		Wednesday Monday	Thanksgiving Recess begins, 5:30 P.M. Thanksgiving Recess ends, 8:00 A.M.
December December December	15	Wednesday Friday Friday	Last day of classes First Semester examinations begin First Semester examinations end

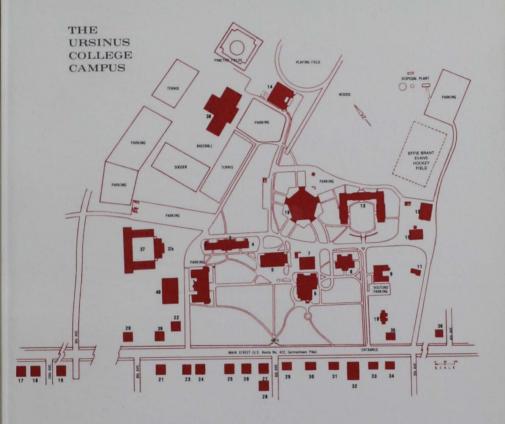
## COLLEGE CALENDAR FOR 1979

January	15	Monday	Second Semester begins, 8:00 A.M.
February	28	Wednesday	Last day for filing financial aid applications
March March March March March	2 7 12 14	Friday Friday Wednesday Monday Wednesday	Mid-Semester grades due, 4:00 P.M. Spring Recess begins, 5:30 P.M. Mid-Semester grades mailed Spring Recess ends, 8:00 A.M. Pre-Registration begins
April April	12 17	Thursday Tuesday	Easter Recess begins, 5:30 P.M. Easter Recess ends, 8:00 A.M.
May May May May May May	1 3 10 12 13 13 23	Thursday Saturday	Last day of classes Second Semester examinations begin Second Semester examinations end Alumni Day Baccalaureate Service, 10:00 A.M. Commencement, 2:00 P.M. Summer School begins, 8:00 A.M.
August	15	Wednesday	Summer School ends, 5:30 P.M.
September		Saturday	Freshman program begins, Academic Convocation, 4:00 P.M.
Septembe	r 3	Monday	First Semester begins, 9:00 A.M.

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#### KEY TO THE CAMPUS

- 1. Pfahler Hall of Science, laboratories classrooms
- 2. Curtis Hall, dormitory for men
- 3. Wilkinson Hall, lounge and dormitory for men
- 4. Brodbeck Hall, dormitory for men
- 5. Myrin Library, computer center
- 6. Bomberger Memorial Hall, classrooms, chapel, faculty offices
- 7. College Store, Bear Pit
- 8. College Union, snack bar, lounges and game room
- Corson Hall, administration
- 10. Studio Cottage
- 11. Infirmary
- 12. Maintenance Building
- Paisley, Stauffer, Beardwood Halls, dormitories for women
- 14. Thompson-Gay Gymnasium
- 15. Heating and Power Plant
- 16. Wismer Hall, dining, theater, classrooms

- 17. Dormitory for women, 944 Main Street
- 18. Dormitory for women, 942 Main Street
- 19. Fircroft Hall, dormitory for men,
- 940 Main Street 20. Isenberg Hall, dormitory for men,
- 801 Main Street 21. Todd Hall, dormitory for women,
- 724 Main Street
- 22. Omwake Hall, dormitory for men, 701 Main Street
- 23. Schaff Hall, dormitory for women, 646 Main Street
- 24. Olevian Hall, dormitory for women, 640 Main Street
- 25. Zwingli Hall, U.C.C. Conference Hdq., 620 Main Street
- Duryea Hall, dormitory for women, 612 Main Street
- Shreiner Hall, dormitory for women, 6th Avenue and Main Street
- 28. South Hall, dormitory for women, 6th Avenue

- 29. Hobson Hall, dormitory for women, 568 Main Street
- 30. Fetterolf House, faculty offices, fine arts, 554 Main Street
- 31. Super House, faculty home, 542 Main Street
- 32. Trinity Church, United Church
- 33. The Parsonage, 522 Main Street
- 34. Maples Hall, dormitory for men, 520 Main Street
- 35. Keigwin Hall, dormitory for women, 513 Main Street
- 36. Clamer Hall, dormitory for women, 409 Main Street
- 37. Dormitory for men
- 37a. Reimert Hall, dormitory for men, lounge
- 38. Helfferich Hall of Health and Physical Education, Elliott Swimming Pool
- 39. 777 Main Street, dormitory for women
- 40. Life Science Building, biology, psychology